

**Realities of the Sustainable Planning Process
of Egyptian Industrial Zones**
The case of the Industrial Parks.

A thesis submitted in partial fulfilment of the requirements for the degree of
Doctor of Philosophy of Cardiff University, School of City and Regional
Planning

By
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February 2012

DECLARATION

This work has not previously been accepted in substance for any degree and is not concurrently submitted in candidature for any degree.

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Summary

It is widely agreed that the current industrial zones (IZs) in Egypt are not sustainable and face insurmountable environmental problems. This research is guided by an argument considering that the problem is in the founding process of the current IZs and, hence, future industrial development in Egypt is prone to the same destiny, if it is going to follow the current process, that lacks theorisation. This research, therefore, stemmed out of a concern to understand the process which gives shape to these IZs, and the factors which govern this process. This is the first crucial step, this research has contributed to, towards sustainability of the future industrial development. The importance of taking this step increased after the 25th of January Revolution that has put Egypt on the way towards democracy and progress after an authoritarian era of governing under which the country had been deteriorating.

Out of this concern, the research theoretically investigated the current position of the Egyptian industry from industrial ecology (IE) and governance for sustainable development (SD) perspective. Further, a pilot study was conducted, making use of a preliminary conceptual framework for sustainable IZs which the research developed from literature on IE and governance for SD. While the investigation fell short of providing a full understanding of the process, it was found that Egypt has recently made some legal and institutional arrangements to incorporate sustainability. However, the debate on the seriousness and effectiveness of these arrangements had been quite contradictory. It was also found that the whole founding process of IZs is complex and controlled by the government, where the planning phase is the best to allow for participation of partners, as highly called for by the international debate on IE. The importance of the role of planning in guiding the implementation of IE in communities is also internationally highlighted. Therefore, the research set out to, through empirical investigation, understand realities of only the current planning process and its governing factors.

To help do that, this research constructed an in-depth conceptual framework of the planning process through which IE could be normatively implemented. The framework guided the empirical qualitative study which depended on a multi-stage, multi-method approach with a case study design in its core. Three case studies, representing the Industrial Developer Program, the most recent program expected to influence the future industrial development and the most advanced case to adopt sympathetic approaches to IE and SD concepts, were chosen. Semi-structured interviews with involved key partners and experts, primary and secondary documentary data sources, and observations were utilised.

The official and actual planning processes, synthesized in this research, are found to be unsustainable. Despite the partial involvement, doubted in its purposes, of industrial developers in the process, the IZs planning is conducted through a top down process that suffers from centrality and government monopoly of decision-making in most of the steps. This top down process has been strengthened by diminishing the role of regional level, that is supposed to connect the national level to the local one back and forth to empower the participatory planning approach. Regarding the factors influencing the current process, it is found that the authoritarian nature of the previous regime has deeply/negatively influenced the context, shaping the planning process. Authoritarianism has created a set of other factors that has flawed the context making it chaotic and disabling for the implementation of SD/IE. The research concludes by reflecting on the international debate on IE, presenting, thereafter, a new list of barriers to IE implementation.

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To my beloved Dad

I dedicate this study

Abbreviations:

Al Tagamouat IP: “AL Tajamouat Industrial Park, a fully serviced and integrated industrial park”, one of the case studies of the IDP.

CPC: “CPC Egypt, the one stop shop towards building the future”, one of the case studies of the IDP

EEAA: Egyptian Environmental Affairs Agency

EIA: Environmental Impact Assessment

EIP(s): Eco-Industrial Park(s)

FSEEDIZ: Fund for Supporting the Establishment, Extending public utilities and Development of IZs

GAFI: General Authority for Investment

GAPUD: General Administrations of Planning and Urban Development

GAM: General Authority of Manufacturing

GATD: General Authority for Tourism Development

GOPP: General Organization for Physical Planning

IDA: Industrial Development Authority

IDP: The Industrial Developer Program

IE: Industrial Ecology

IP(s): Industrial Park(s) of the Industrial Developer Program

IP3: The third case study of the IDP, represent a company that its directors asked to hide their details and the company details as well.

IS: Industrial Symbiosis

IZ(s): industrial zone(s)

MED: Ministry of Economic Development

MHUUD: Ministry of Housing, Utilities and Urban Development.

MOD: Ministry of Defence

MSEA: Ministry of State for environmental affairs.

MTI: Ministry of Trade and Industry.

NCPSLU: The National Centre for Planning the State Lands Uses

NGO(s): Non-Governmental Organization(s)

NIES: National Industrial Ecology Strategy

NPIE: National Programs of Industrial Ecology

NUCA: New Urban Communities Authority

PEC: Provinces Executive Council

PLPC: Provinces local people's Council

REIP: Regional Eco-Industrial Plan

SCPUD: Supreme Council for Planning and Urban Development

SD: Sustainable Development

Ac-G-11: An indication for an interview/ee, it may contain some of the following abbreviations that mean: En = Environmental, In = Industrial, Ac = Academic, De = Industrial Developer or Development Officer in local administration units, Ju = Judge, G = Governmental position (it will appear if applicable), NGO = A member of environmental NGOs boards of directors, Numbers = Serial Number of the interview/ee

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1. CHAPTER ONE: INTRODUCTION

1.1. Introduction

“Cities are processes, not products” (Abu-Lughod, 1987, p.172). In this research, unsustainable Egyptian industrial zones (IZs) are looked at as processes through which the built environment of these IZs is founded. This research argues that the problem is in the process rather than the product, the ‘how come’ not the ‘know how’. Therefore, the questions that have been posed by this research are; what is the process through which the Egyptian IZs are planned, is it sustainable, and how and why has it been shaped? Answering these questions is seen in this research as the first significant step towards modifying the path of industrial development in Egypt towards applying sustainable development (SD) and industrial ecology (IE) principles. To answer these questions, this research empirically examines the extent to which the framework governing the planning process of IZs, involving different players, role of each one, and relationships among them, is ready to enable sustainability and IE. The planning process is specifically chosen after a critical theoretical investigation of IE and governance for SD that internationally spots a gap between the concept of IE and its implementation on one hand, and, more importantly, the need for the role of planning in guiding the implementation of IE in communities on the other. Also, the selection depended locally on initial results of a pilot study, conducted by this research, to investigate different phases of the IZs founding process. The study highlighted the importance of the planning phase in allowing a better possibility, compared to other phases, for applying participatory approaches. This in total emphasized the significance of examining the planning process through which IZs are planned in Egypt.

This chapter first outlines the background of the governing system in Egypt, the urban and industrial movement and its future plan, and the current status of Egyptian IZs. It, then, comes up with preconceptions to build up the research argument and focus. Secondly, it outlines the argument adopted in this research dealing with IZs as a process, and, hence, presents the initial focus of the research, namely; what the process through which Egyptian IZs are founded is, whether it is sustainable and applying IE, and how and why this process has been shaped. Thirdly, the chapter briefly shows how the research focus on the planning process evolved. It also poses the research questions, justifies asking them, and briefly summarizes the methodology followed to conduct the empirical study. Finally, this chapter outlines the thesis structure.

1.2. Background and preconceptions

1.2.1. Governing system in Egypt

Egypt has been controlled for many years by an authoritarian regime¹. This regime, according to the Democracy Index 2010, was ranked 138th among worldwide countries and 12th among Arab countries in the list of the most authoritarian regimes (EIU, 2010). It anchored on its security arm working on securing and insuring its interests and those of its followers. Therefore, the State was controlled by a group that was very connected to the ruling class where violations on civil liberties, absence of an independent judiciary, and suppression of opponents and criticism of the government, were all characteristics of this regime (BikyaMasr, 2010). It was also characterized by centralization of power and absence of the true role of the State apparatus where the individual will overwhelmed the social and objective requirements (Elbeshry, 2011). Scientific research was ignored (Almasalla, 2009) causing organized chaos (Ac-55) reflecting strongly and negatively on all aspects of life in Egypt (Elbeshry, 2011).

While the majority of Egyptians dealt negatively, a category of Egyptians remained coherent fighting images of repression, forgery, and corruption despite the harassment and persecution. They have been working for a long time to overcome this situation. The last of their trials and the strongest was the protest on the 25th of January 2011. The accumulation of internal anger, from the characteristics mentioned above, helped develop these protests to be wrapped and embraced by the vast majority of the Egyptian people. This led to the popular overwhelming revolution that has started toppling the regime in order to begin a new era in Egypt. That is a new era of the dominance of the people, activating people's participation in governing the country (Al-Turkey, 2011, Kamel, 2011, Lau, 2011).

Though there has been a revolution, by default many governing structures and processes remain in place or are, at least, not yet replaced in total. Indeed, there are always continuities as well as ruptures; therefore, understanding the processes before Jan 2011 is important for a better future.

1.2.2. The current situation of the Egyptian industrial zones

Egypt faces great threats to sustainability that could broadly harm the society economically and environmentally. The governing system and the lack of institutional and legislative reform are the most deficiencies that Egypt faces causing deterioration of the environmental

¹ 'Authoritarian regimes': regimes which do not apply political pluralism or fair and free elections. They violate civil liberties, control media, repress criticism and opposition of the government and lack independent judiciary (EIU, 2010).

capacity (Esty et al., 2003). The current status of IZs in Egypt is an example for this deterioration. It is widely agreed that the existing industrial zones (IZs) in Egypt are not sustainable (Shalaby, 2003b, Badr, 2008, Khalifa, 2006, Zahran, 2000, Baligh, 2006) for many reasons. Some of them could be briefly stated as follows (Shalaby, 2003b):

- Several planning schemes of many industrial zones in Egypt, like Badr and Sadat shown in next points, have been dramatically altered during implementation where land uses have been allocated in a chaotic distribution causing many environmental calamities.
- The adhesion between IZs and residential areas is common in many cases. For example, see Figure (1-1) for Badr city map including its IZ in dark blue. This contradicts environmental legislations in terms of keeping a protected unoccupied area (with at least 5km radius) surrounding the mass of IZs.

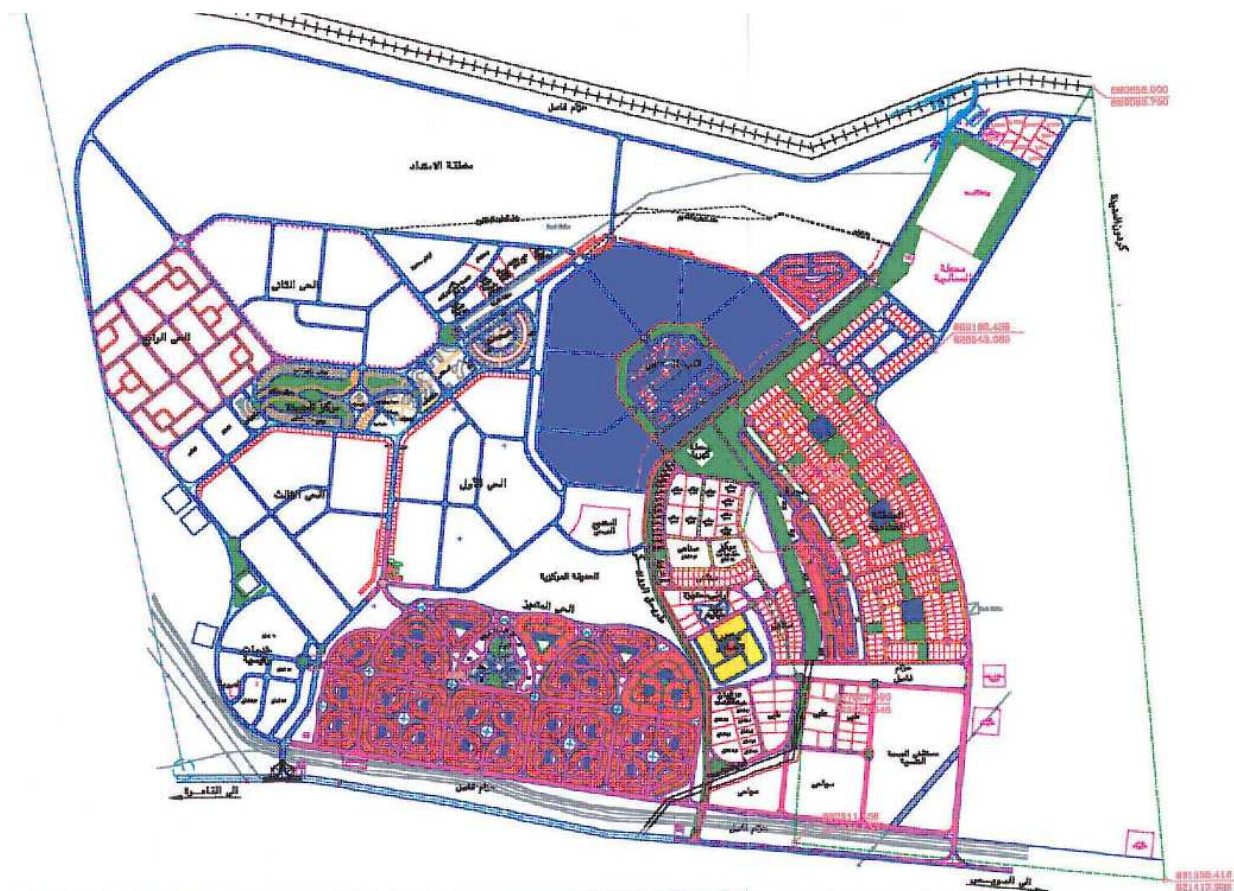
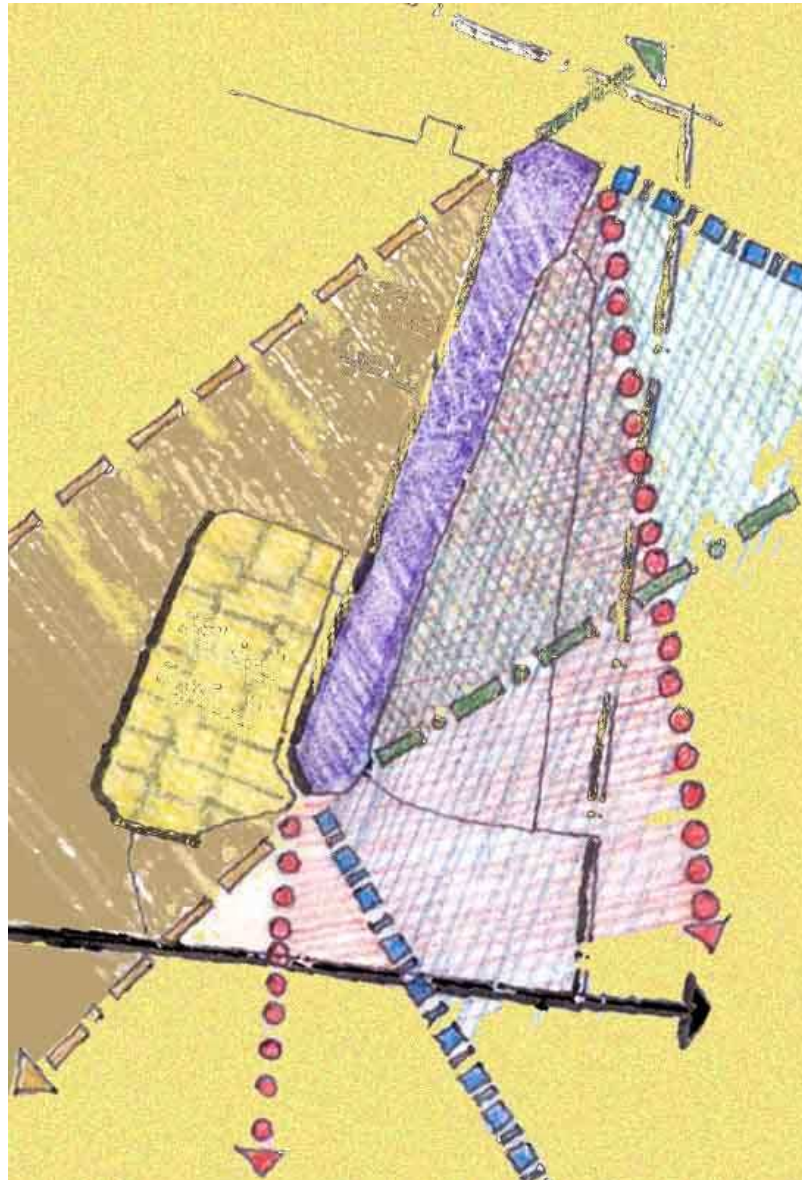


Figure 1-1: Badr city

Source: (Shalaby, 2003b)

- Respecting only the northern direction of wind in allocation of IZs without caring about its relationship with residential areas during seasonal changes of wind. Hence, residential areas are subjected to polluted winds during many intermittent periods along the year. Figure (1-2) shows the case of the residential areas of Sadat City polluted by the eastern northern wind from its IZs.



Residential Area



Industrial Area

Figure 1-2: Pattern of polluting winds from industrial zone, Sadat City

(Shalaby, 2003b)

- There is a dramatic decline in the percentage of total areas of green spaces inside IZs. The maximum percentage is around 7% of the total area of an IZ. Figure (1-3) shows the case of Sadat city: 0% in both original plan and current situation, and 7% in the new plan. This percentage is very low compared to cases from other countries where the average percentage is around 40% (see Figure (1-4)).

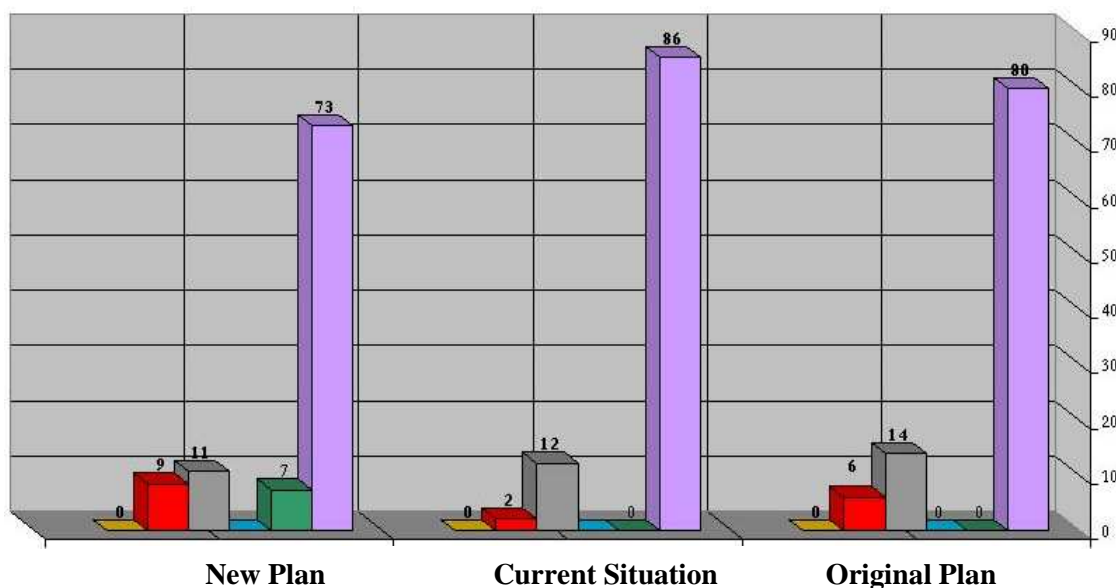


Figure 1-4: Percentage of green areas in Sadat City

(Shalaby, 2003b)

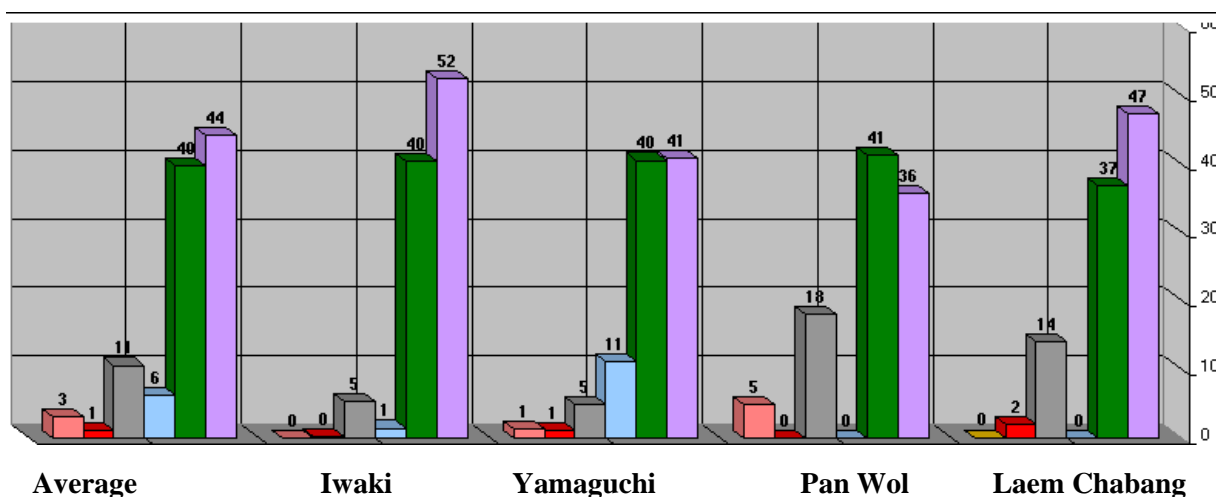


Figure 1-4: Percentage of green areas in international cases

(Shalaby, 2003b)

- Infrastructure, utilities networks and wastes disposal locations suffer from many problems, see Figure (1-5), such as:
 - Same network for sanitary and industrial sewage.
 - Lack of treatment stations for sanitary and industrial sewage in many cases.
 - Lack of secured disposal dump/burial for solid wastes.
 - Lack of secured disposal dump/burial for hazardous wastes.

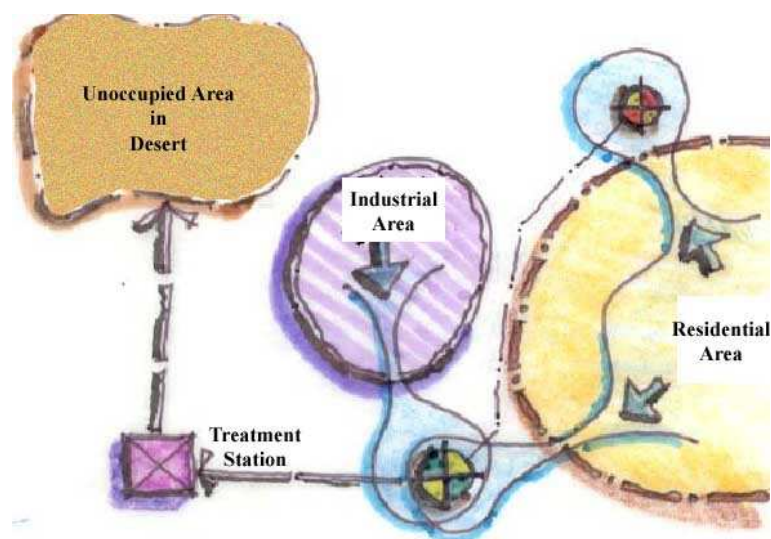


Figure 1-5: Model of current sewage network in many Egyptian cases

(Shalaby, 2003b)

- In respect to wasting water resources, all IZs water networks are served by drinking water for all uses that do not need the same degree of pureness (irrigation, water for human uses, industrial processing water and pure water for fine and medical industries); see Figure (1-6).

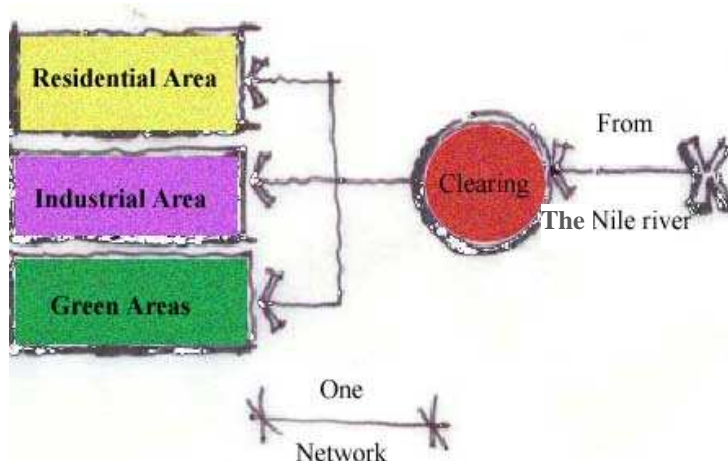


Figure 1-6: Model of current water supply network in many Egyptian cases

(Shalaby, 2003b)

1.2.3. Urban and industry evolution

Industrial movement has strongly progressed after the Revolution of 1952. The priority has been given to heavy industries such as: Chemicals, Spinning and Textiles, Metals especially Steel and Iron Industries in Helwan. These industries have been regionally concentrated in the urban area of The Nile Valley in Upper Egypt, Delta, Alexandria and Greater Cairo (see Figure (1-7)).

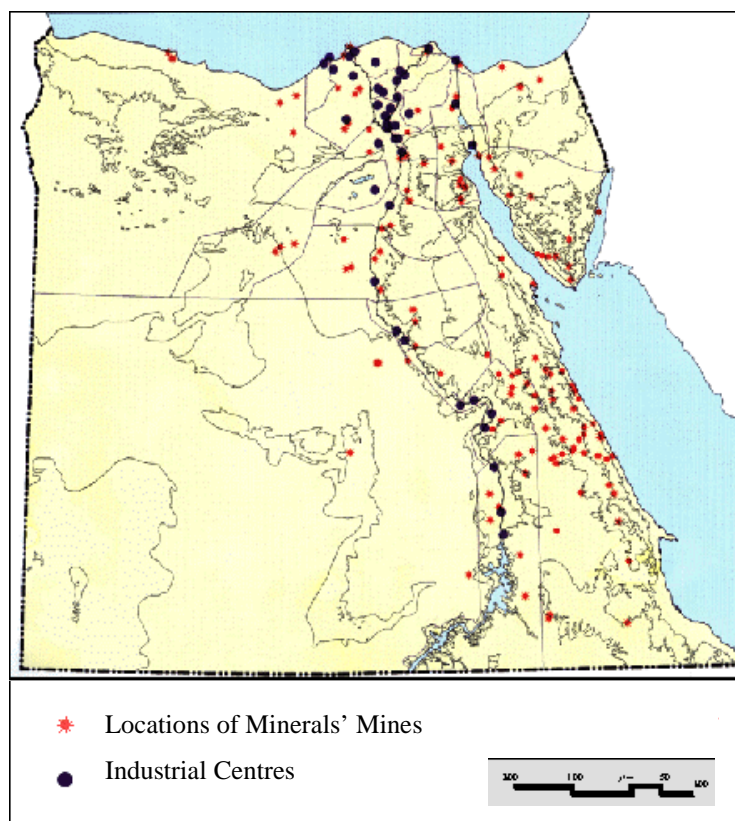


Figure 1-7: Distribution of industrial centres in Egypt, 1998

Source: (GOPP, 1998)

At the late 1970s, the Egyptian government has launched its program of founding new cities in its vast unoccupied desert. The number of these cities is currently 17 and is expected to rise up to 61. Egypt has recently set out to prepare a new national urban development map to accommodate double the current population for the year 2050. Within this intended national urban plan, industry is one of the main proposed economic bases (Madbouly, 2011). The same meaning was confirmed through, Dr. Sami Amer, a member of the multidisciplinary team assigned by the General Organisation of Physical Planning to develop the national urban development map. He clearly indicated that competitive projects of industry and commerce are going to be among the leading economic bases for the new proposed national urban plan (Elsaadawi, 2011). To relieve the urban development implications on the environment, the

Egyptian government has recently made institutional arrangements in favour of environmental protection, and announced taking steps to incorporate SD and good governance, see Chapter 2, Section (2.3.4).

1.2.4. Preconceptions

From the above mentioned background, some preconceptions could emerge. These are as follows:

- ‘Chaos’ could be the best word to describe the work system of the State after long years in which Egypt had been governed by an authoritarian regime. Industrial development system in Egypt is not an exception. However, hopes for change and improvement have highly increased. The 25th of January Revolution has opened the way to the realization of the Egyptians’ dreams of a modern and democratic State that is governed by the people, and is respecting science and considering it the way towards a better country. Though there has been a revolution, by default, many governance structures and processes remain in place or are at least not yet replaced in total. There are always continuities as well as ruptures; therefore understanding the processes before Jan 2011 is important. The industrial development processes come on top of such sectors for its importance in increasing the national income. In this context, analyzing and understanding how processes of industrial systems work and what are the factors shaping them, is a necessary step in order to improve the functionality of these systems.
- Existing Egyptian IZs suffer from insurmountable problems and they are not sustainable. Therefore, it is plausible to suggest that the process through which these IZs have been founded is not sustainable. Yet, Egypt has recently embarked upon preparing an ambitious national urban plan for the year 2050, with industry as one of its proposed economic bases. If the current IZs founding process is going to control the future development of IZs, these future industrial developments are prone to the same destiny of lacking sustainability.
- Though it is possible to speculate very plausibly that the previous regime was chaotic in parts, was not committed to sustainability, has deeply influenced all frameworks of the State in a negative way, there is a need to know precisely how this chaos and unsustainability were embedded in processes, if they are to be changed and improved. However, doing so is not easy. Understanding processes within authoritarian regimes

is very difficult because there is, by definition, a lack of transparency and democratic accountability, see Chapter (4), Section (4.5) for details.

1.3. Research argument

Literature on planning for industrial development in Egypt mainly focuses on IZs as products. Some literature investigates different urban and environmental problems that IZs physically face, see for example Shalaby (2003b), or the environmental dimension affecting urban development, see for example Badr (2008). Some other literature is interested in urban planning of IZs or specifying environmental or urban considerations to improve urban planning of IZs and new cities, see for example Effat (2001), Khalifa (2006) and Shalaby (2003b). Some literature also searches the environmental assessment for cities and different types of projects, see for example (Zahran, 2000, Baligh, 2006). Literature searching the processes of industrial development and IZs is lacking. IZs in Egypt are mainly looked at as mere products that need to be improved rather than processes that need to be understood and, then, redirected towards better products. This research stems out of a concern of how a product can be improved without understanding the process which gives shape to it, and the factors which govern this process. The importance of this concern increases when dealing with an entity that is produced through a complex socio-political process containing continuous interaction of human groups and institutions that is manifested in the social, economic, cultural, and indeed, urban life (Shalaby, 2003a). The urban built environment in general and specifically IZs, are produced by such complex processes. Indeed, considers that “[c]ities are processes, not products” (Abu-Lughod, 1987, p.172).

In light of this, this research argues that in order to make the future Egyptian IZs sustainable, they have to be looked at as processes not products.

1.4. Research initial focus

In light of the preconceptions stated earlier and the research argument dealing with IZs as complex socio-political processes, this research has reviewed available literature on governance for sustainable development to spot a gap.

Governance for SD: international discourse

Jordan (2008), in his review paper, finds that the step beyond grand theories and typologies of governance, towards undertaking detailed empirical testing to measure the shift from government to governance, is needed. These efforts need to be focused on governance in a more dynamic and interactive manner in order to know what forms of governing lead to what

sorts of outcomes (Jordan, 2008). Accordingly, there is a local need for an empirical test to measure the extent to which the industrial system in Egypt is moving towards governance for SD. The effort in this regard should be directed to study the governing form in Egypt and whether it has the potential of producing sustainable IZs.

Governance for SD in Egypt:

Review of literature about Egypt to cover the previous stated issue finds that the debate on whether the industrial system in Egypt is moving towards governance for SD is quite contradictory, discussed in Chapter (2), Section (2.3). On one hand, the governmental rhetoric argues that Egypt has planned for sustainability and has achieved a good level, in this regard, in industry generally, and regarding the environmental considerations specifically (Mobarak, 2001, EEAA and Danida-ESP-CEM, 2005, EEAA, 2005, EEAA, 2001). From such rhetoric, it could be concluded that the Egyptian Government has a good understanding of concepts and principles of governance for SD. Furthermore, the concepts/ideas included in the Government publications could theoretically form together a base for a conceptual framework for founding sustainable IZs. The question that poses itself is: to what extent are these ideas and concepts actually practiced in Egypt? On the other, the literature available to answer this question, up to the year 2005, state that the position of Egypt, being an authoritarian state, is still away from governance for SD (Hamza, 2005), (Esty et al., 2003), (ESCWA, 2003), Al-Deen and El-Kholy (2001) and UNEP (2003). A new SD strategy, which has the ability to improve this condition, has become a necessity (ESCWA, 2003). In response to this, the Egyptian government has recently made some institutional arrangements in favour of environmental protection, and has announced taking steps to incorporate SD and good governance, see Chapter (2), Section (2.3.4). Given that the country has been controlled by an authoritarian regime that was defied on the 25th of January 2011, it is therefore doubtful that the announced steps towards governance for SD are serious and effective.

Building the initial focus of the research:

To conclude, Egypt has recently embarked upon preparing an ambitious national urban plan for the period up to the year 2050, with industry as one of its proposed economic bases. Yet, it is widely agreed that the existing industrial zones (IZs) in Egypt are not sustainable. Therefore, it is plausible to suggest that the process through which these IZs have been founded is not sustainable. Future industrial developments are prone to the same destiny, if the current process is going to control the future development of IZs. In this regard, and in line with the international discourse on governance for SD, Egypt has recently taken some

steps to apply a governance system that could achieve SD. Yet, the existence of an authoritarian state where an inefficient and corrupt bureaucracy has grown causing deterioration of the country, led to a revolution on the 25th of January 2011 that has started bringing down the previous regime. It is, therefore, doubtful that the steps announced by the previous regime towards governance for SD are serious and effective. Given the lack of theorization on the founding process of the current IZs, the attempt to understand such a process, its governing factors, and the extent to which these factors have effectively influenced it towards sustainability constitutes the initial focus of this research.

1.4.1. Research focus and questions

The initial focus of looking at the founding process as a whole has been then narrowed down to a more specific point focusing on the planning process. Following is the justification of doing so. In this research, a preliminary comprehensive conceptual framework for founding sustainable IZs has been constructed from the literature reviewed on governance for SD, IE and sustainable management of IZs, see Chapter (2), Section (2.4.1) for details. This framework has been initially used in a pilot study to investigate the local context, and collect available data and literature. The pilot study has come up with some initial results, most important of which is that the whole process of founding IZs in Egypt seems to be complex² and controlled by the government. In this process, the planning phase stands as the best phase, among others, in allowing the intervention of partners other than the government, see Chapter (2), Section (2.4.1). It was also found that, according to the limitations of time and money, it will be hard to conduct an in-depth research into the comprehensive and complex process of founding IZs.

From an international perspective, an updated literature review on IE finds that IE lacks a grand theory/background/design (Agarwal and Strachan, 2006) or a comprehensive theoretical framework (Boons et al., 2011) and is subjected to ambiguity (Gibbs and Deutz, 2005). IE is still in its early stages facing many barriers (McManus and Gibbs, 2008) which make a gulf between the idea and its implementation (McManus and Gibbs, 2008, Gibbs and Deutz, 2007). This requires more social research regarding the role of planning in guiding the implementation of industrial ecology (Gibbs and Deutz, 2007, Vermeulen, 2007, Welford, 2004). One of the main reasons behind this gulf is that the developing process of IE faces a real obstacle in terms of achieving real cooperation between partners regarding waste interchanging. For that reason, many authors argue that planning has a key role in

² Especially for such type of research conducted by one researcher with time and money limitations.

encouraging new synergies and interchanging behaviour between partners towards advancing the implementation of IE in our societies (Roberts, 2004, Tudor et al., 2007, Elabras Veiga and Magrini, 2009). From this point of view, the role of planning emerges to guide the implementation of IE.

In light of the foregoing, this research attempts to understand the *planning* process of Egyptian IZs and its governing factors, and examine the degree to which this process represents an enabling context for sustainability and IE. Hence, this research attempts to answer the following questions:

1. Does the Egyptian government have an operational planning framework that could lead to sustainable industrial zones?
 - a. What is the official framework of the process under which the industrial zones in Egypt should be planned?
 - b. What is the actual process through which the industrial zones are planned?
 - c. Consequently, to what extent is the current planning process sustainable and applying industrial ecology?
2. What are the factors that influence/shape the current process through which the industrial zones are planned?

1.4.2. Significance of the research

As indicated earlier, a scholarly attempt to understand the IZs planning process and the factors shaping it in Egypt had not been made prior to this research. Such an attempt, however, seems crucial if industrial development in Egypt is to be directed towards sustainability. Also, such an attempt is importantly needed especially after the Egyptian context has started to head towards democracy and become more ready to apply scientific research after the 25th of January Revolution.

Further, Chapter (2) has spotted a gap in the contribution of the Arab countries, one of which is Egypt, to the international discourse on environmental sustainability processes (Esty et al., 2003). Similarly, it was also concluded in Chapter (2), derived from Jordan (2008), that there is an utmost need to undertake detailed empirical testing to measure the shift from government to governance, and know what forms of governing lead to what sorts of outcomes. In addition, directing the research to focus on planning, as this research does, is internationally needed in guiding the implementation of industrial ecology (Gibbs and Deutz, 2007, Vermeulen, 2007). It is also needed, according to McManus and Gibbs (2008), to know

how decisions are taken regarding industrial development, in reference to acceptance of IE and barriers to its implementation from the perspective of various decision-makers. In this regard, this research, stands as a contribution to the international discourse as it conducts an empirical testing to identify what sort of a planning process leads to the current industrial zones in Egypt. It also shows how planning decisions have been made, and the extent to which IE is accepted therein and the different barriers facing its implementation.

It is hoped that this research could potentially help the international discourse on developing more advanced theories on the implementation of IE.

1.5. Research Methodology

1.5.1. Case study and research sample

To answer the research questions, the research strategy depends mainly on a case study design. A case study design is considered to be appropriate as case studies can be especially useful in explanatory studies of social processes (Yin, 2009). The process of choosing a sample is selective and consists of two main steps. The first was to examine different types of IZs in Egypt to choose the suitable types for addressing the research questions of this study. The criteria used in this step were: the tendency to adopt sympathetic approaches to SD and IE, and the potential impact on future development of IZs in Egypt. Out of this step, the Industrial Developer Program (IDP) is chosen as the case study. The second step is concerned with choosing a representative sample of the chosen case study, the IDP. The criteria used in this step were: passing the planning stage and covering different phases of the IDP. Resulting from applying such criteria are the following three IPs:

- a. “AL Tagamouat Industrial Park, a fully serviced and integrated industrial park” (AL Tagamouat IP), 10th of Ramadan City.
- b. “CPC Egypt, the one stop shop towards building the future” (CPC), 6th of October City.
- c. The third IP (IP3)³

(More details, and justification, are provided in Section (4.3).

1.5.2. Research methods

To answer the research questions, the study sought data mainly on two broad issues; the process through which IZs in Egypt are planned and whether sustainable, and the factors

³ The researcher is not able to tell any details that could lead to identify this IP as requested by its executive director.

which shape this process. The study is qualitative and depended on a multi-stage, multi-method approach to collect the data needed as follows:

- *To answer the first research question, part a*, about the official version of the planning process of the IZs, documentary evidences from primary sources were used. The focus was on the establishing laws/decrees of the concerned bodies describing those bodies, their roles, and the institutional setup controlling the relationship among them. To identify how these legal resources are comprehended by those applying them, it was essential to interview a group of governmental top officials. This was also important to fill the gaps in the legal documents regarding the details of the process. As approaching governmental employees is likely to result in skewed data, it was important to triangulate their contribution from academic consultants of those governmental bodies along with collecting available data from secondary resources.
- *To answer the first research question, part b and c* about the actual planning process of IZs and its sustainability status, a case study design was used. To identify the whole actual process with its details from different angles; the study depended mainly on interviewing different partners involved in a chosen sample of the IPs. To triangulate the data expected to be skewed from officials, interviews with consultants of the concerned governmental bodies were conducted. To verify the data gained and fill its gaps, collecting documentary data, conducting informal discussions with a group of professionals, and performing field observations were helpful in this concern.
- *To answer the second question* about the shaping factors of the actual planning process, building upon the preconceptions that inescapably came out from the case studies, the study sought data from a group of key-experts with a broader knowledge on the planning process of IZs. The main objective from interviewing those experts was to identify the problems of the planning process and to understand why it takes its current shape. Given the fact that the researcher interviewed a satisfactory number of experts from different backgrounds and collected abundant secondary data, triangulating the data collected was possible.

To conclude, the study applied different methods to acquire different sets of data that satisfactorily offered answers to the research questions. Furthermore, this multiple methods approach helped triangulating the collected data.

1.6. Research structure

This thesis is constructed in 8 chapters, see Figure (1-8):

Chapter (1) outlines the background to Egypt's governing system, the current status of the Egyptian IZs, and the urban and industrial movement and its future plan. It also presents the argument dealing with IZs as process, and, thus, presents the initial focus of the research which is: what the process through which Egyptian IZs are founded is, whether it is sustainable and applying IE, and how and why this process has been formed. It then briefly shows how the research focus on the planning process evolved, poses the research questions, justifies asking them, and briefly summarizes the methodology followed to conduct the empirical study. Chapter one lastly outlines the thesis structure.

Chapter (2) contextualizes the Egyptian case study by briefly discussing the planning approaches and models, and Egypt's situation from them. It then deals with the theoretical background extrapolating the Egyptian industry and its position from sustainability and governance for SD, as well as the recent institutional/legal developments towards governance for SD. It then asks about the extent to which these developments influenced the founding process of Egyptian IZs. Further, Chapter (2) shows how the initial comprehensive conceptual framework of founding IZs was constructed to investigate the Egyptian context and update the relevant literature. It then shows how the pilot study was conducted and how the initial outcomes were used with the literature review on IE to narrow down the initial focus of research: the founding process, to the main focus of research: the planning process of IZs. Thus, the chapter ends with the redefinition of the research questions.

Chapter (3) presents the conceptual framework of the process through which planning for IE could be normatively developed. At first, it justifies the need for such framework to initially help in collecting/organizing the data needed to answer the research questions. It then addresses the overarching concepts that normatively have to govern the formation of the enabling context for the implementation of IE, and the planning process. It also outlines the setup of the context in relation to its different components such as education and research, institutional and regulatory frameworks, networking, and funding. Furthermore, it lays down the planning process nationally, regionally and locally. Chapter (3) lastly uses the materials reviewed in the previous three sections to logically build on them towards the construction of the framework as a 'whole' in the concluding section.

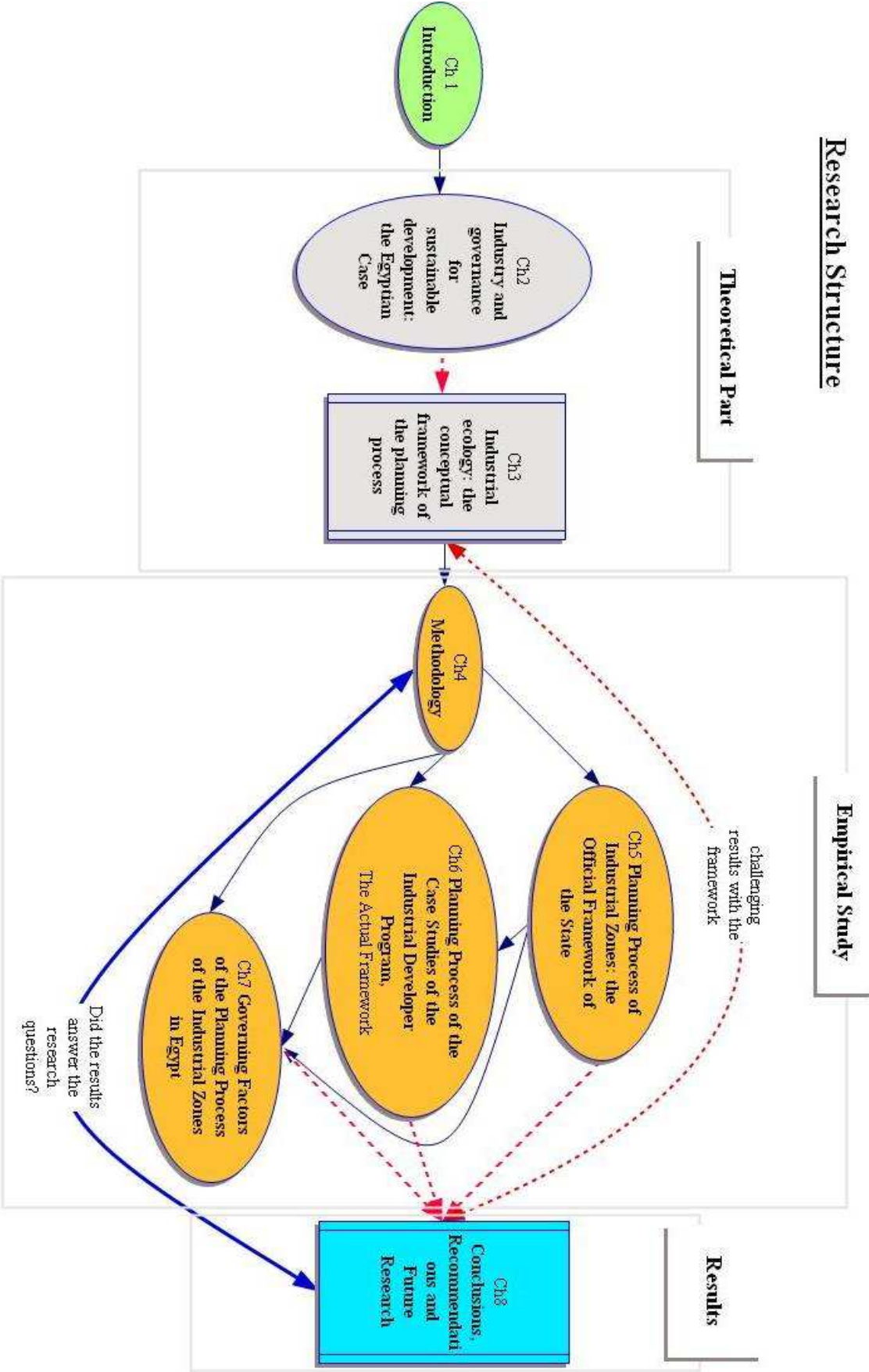


Figure 1-8: Research structure

Chapter (4) discusses how the study, needed to answer the research questions, is carried out. It discusses the research strategy and explains how and why the case studies were chosen. It also justifies how the needed data is derived from primary and secondary resources, and the research methods are utilised therein. It then discusses the settings in which the field study was carried out. Finally, it shows how ethics are considerably respected, and how the data was analysed and reported, along with addressing the instruments used.

Chapter (5) answers the first part and partially the third one of the first research question. It synthesizes the official framework of the State through concluding phases and steps that are supposed to be officially followed, as well as main official roles and relationships among the relevant bodies in Egypt concerned with the planning process of IZs. It, then, concludes the most important characteristics and problems of the State official framework for the planning process of IZs.

Chapter (6) answers the second and third part of the first research question and gives preconceptions for the second one. It discusses in details the process through which three industrial parks are planned, and the developers' thoughts on the process they followed as well as the problems they faced during the process. It then synthesizes the actual framework of the process through which the IPs are planned and gives a discussion that challenges this actual framework to the official one. At the end, it concludes a group of preconceptions regarding the governing factors shaping the process.

Chapter (7) answers the second research question. It discusses the factors shaping the process through which the IZs are planned. It is divided into six sections addressing: autocratic governance and centrality, chaos of the regulatory framework, marginalizing science, corrupting the society and marginalizing its will and role, corruption and lack of transparency, and conflicts and lacking coordination. At last it concludes and summarizes how and why the environmental role and its tools were weakened and marginalized.

Chapter (8) first synthesizes all together the answers for the research questions that have been extensively discussed in the previous three chapters. It provides a simplified construct of the current actual framework of the process through which the Egyptian IZs are planned, and, more importantly, highlights its governing factors. Secondly, it shows the research's contribution to knowledge and reflections of the Egyptian case on the international discourse. It finally gives recommendations and avenues for future research.

2. CHAPTER TWO: INDUSTRY AND GOVERNANCE FOR SUSTAINABLE DEVELOPMENT: THE EGYPTIAN CASE

2.1. Introduction

Egypt has recently embarked upon preparing an ambitious national urban plan for the period up to the year 2050, with industry as one of its proposed economic bases. Yet, it is widely agreed that the existing industrial zones (IZs) in Egypt are not sustainable (Shalaby, 2003). Therefore, it is plausible to suggest that the process through which these IZs have been founded is not sustainable. Future industrial developments are prone to the same destiny, if the current process is going to control the future development of IZs. In this regard, and in line with the international discourse on governance for sustainable development (SD), Egypt has recently taken some steps to apply a governance system that achieves SD. Yet, the persistence of an authoritarian state where an inefficient and corrupt bureaucracy has grown causing deterioration of the country, led to a revolution on the 25th of January 2011 that has brought down the previous regime. It is therefore doubtful that the steps announced by the previous regime towards governance for SD are serious and effective. Given that theorizing on the process through which the current IZs have been founded is lacking, theorizing on such process and its governing factors, and examining the extent to which these steps have effectively influenced it towards sustainability is the initial focus of this research.

This chapter, first, contextualizes the Egyptian case study. It starts with a brief discussion of planning approaches and models, and Egypt's situation in relation to them. It then provides an overview of the political, economic and industrial structure of the country. The chapter then discusses governance for SD. It highlights the gap in the international debate on governance for SD then discusses Egyptian industrial development, whether it is sustainable and its position in relation to governance for SD in detail. In addition, this chapter illustrates the most important legal/institutional arrangements and developments made by Egypt to get closer to governance for SD. Finally, the chapter presents a pilot study that the researcher conducted to narrow down the initial focus of research towards the main focus of research. The pilot study made use of a preliminary comprehensive conceptual framework for founding sustainable IZs that the researcher constructed to help investigate the local context and collect available data and literature. The pilot study came up with some initial results that were used with conclusions from the literature reviewed to narrow down the research focus from **the founding** process to **the planning** process of IZs. Hence, this chapter presents the initial comprehensive conceptual framework of founding IZs, and, then, describes the pilot study

steps and the initial outcomes, concluding with the redefinition of the main research questions.

2.2. Egyptian planning approaches

This section aims to theoretically understand the planning approaches accepted and adopted in Egypt. To do so, this section, at first, briefly addresses the evolution of planning approaches and models in general as a necessary background to understand the Egyptian situation. It then discusses the Egyptian situation from this evolution concluding with the most well known and applied approaches and models especially in planning new urban communities (including the case studies of this research). By doing so, this section gives an important background to understand the prevailing planning thought through which the planning process of the current industrial zones has been formulated. It also contextualizes the thinking related to governance for sustainable development and industrial ecology planning process, as well as the ideas discussed later in this chapter and the one after.

2.2.1. Evolution of planning approaches and models internationally:

Spatial planning thought has developed remarkably since the beginning of the twentieth century. The evolution of this thought can be divided into four stages. First, the stage before the sixties during which comprehensive thought controlled planning focusing only on the spatial dimension and with the dependence on the government as the only player. This was followed by the sixties stage witnessing the beginning of the concept of public participation. Then, there was the stage of the late sixties and early seventies which has seen the deep involvement of society in the planning process. Finally the eighties stage with the emergence of strategic thinking in dealing with planning and the integration of the various dimensions of development; economically, socially and environmentally. The following subsections address these different stages.

2.2.1.1. Pre-sixties

Since the beginning of the century until the late fifties comprehensive thought controlled planning depending on the governments' role in addressing the consequences of the first and second world wars' destruction (Friedmann, 1987). Therefore, this thought has been interested in the spatial dimension of development (Healey et al., 1982) through setting urban plans to connect city parts to each other. These plans relied on social and economic predictions set for long periods of time (Cresswell, 1984). This thought has been adopted by a set of traditional planning approaches that consider only the spatial dimension in planning where the planning process is controlled by the State planning institutions. In these

approaches, a comprehensive solution to all problems is provided along with assuming complete control of all inputs and outputs of urbanism (Ahmed, 2007). These approaches could be summarized as follows:

- **Physical Planning Approach:** it is the gateway affecting planning applications since the beginning of the century until the late fifties (Greed, 1999). Planning is considered as a process exploiting resources (which are rare in most cases) to improve the physical environment (built environment) (urban structure - roads - network infrastructure etc.). Despite the scarcity of resources, the expected outcomes of planning must be substantial (Healey et al., 1982).
- **Rational planning approach:** considers planning as a process that needs for its completion the availability of all information, facts, theories and ideas about the problems requiring solutions. This is in order to generate a large number of comprehensive alternatives and evaluating them in light of the criteria related to the objectives. The comprehensive rational planning approach is often associated with planning activities related to the governmental public sector (Ahmed, 2007).
- Finally, the most famous of these approaches is the top-down planning approach adopting the State's full control of the planning process through its planning institutions that have the upper hand in decision-making to achieve the supreme goals and policies of the State (Greed, 1999).

As for the planning models adopting these approaches they are:

- 1- **Central Planning Paradigm:** this model was put by Person in 1934 (Friedmann, 1987). It adopts the institutional thought of planning demonstrating the comprehensive role played by State planning institutions in the planning process. It considers that these institutions in coordination with each other are able to produce successful and effective planning. This model is applied in communities where planning institutions of the State have the sole decision-making authority and control of the planning process. A society in which this approach is applied is; one where its members lack the understanding of the importance of participation in decision-making (Ahmed, 2007).
- 2- **Rational comprehensive planning model:** this model dominated the theories of urban planning in the fifties and early sixties (Breheny et al., 1985). It seeks to provide comprehensive solutions known as master plans. These are plans that determine the future land uses distribution in the targeted urban space (Greed, 1999). The planning

process within this model seems to be a multifaceted process where it involves several concurrent trends that are considered at the same time (urban, social, economic, available resources and environmental dimensions). The planning process is theoretically a dynamic process (Levy, 1988). However, in reality, the comprehensive planning product, a master plan, is a rigid product making a picture of the future difficult to change as it depends on calculations of predictions of social and economic conditions for time periods of up to 25 years. Thus, this model is to be followed when the planning context is a semi-constant context characterized by slow change. This context may not be available in practice due to the correlation between urbanism and society characterized by complexity and rapid change (Abu-Lughod, 1987). Moreover it is related to the existence of some kind of centrality, where because of its comprehensiveness its application requires an organizational structure involving all relevant bodies and organizations of the State (Ahmed, 2007). This model follows a series of procedural steps as follows: clarification and goal setting, systematic analysis, logical generation of rational alternatives, systematic evaluation for these alternatives, and monitoring performance (Healey et al., 1982).

2.2.1.2. *Sixties*

Planning thought started to change gradually by the late fifties and sixties through criticizing physical planning theory. A new thought that adopts a view that as long as planning is for people so it must come from the people and their needs in parallel with the physical design of cities, has emerged (Greed, 1999). Planning has also become more interested in identifying the potential of sites and working on optimizing and taking advantage of them. This is carried out along with a focus on social issues and promoting economic development without harming the surrounding environment (Hughes, 1984). Therefore, the sixties witnessed the emergence of the principle of public participation in the planning process (Greed, 1999). Consequently, a set of approaches that interacted with this thought emerged as follows:

- **Choice Planning Approach:** it was concerned with the procedure followed to achieve the technical product (plans) more than its interest with the product itself, to ensure the integration of the people's needs in planning. Therefore, it focused on how to identify different views of the community members and their needs through a set of choices and planning perceptions. These are reconciled with each other to choose the closest view to the community needs as much as possible (Breheny et al., 1985). As for the methods that fall under this approach, they are:

1. **Advocacy Planning Model:** it appeared in the sixties, promoted by Paul Davidoff. This was in an attempt to compensate for the inability of the traditional comprehensive approaches to consider the needs and interests of the poor in planning. So, he tended to consider the community as an entity where powers and authority are to be distributed without the control of one group on the society as a whole. Through this understanding he considered that planning must take into account the desires and needs of all segments of society. Advocacy planning relies on the presence of a planning perception or alternative for each group of people to achieve their objectives and address their problems through the provision of alternative satisfactory solutions to them. This is followed by reconciling different scenarios and alternatives for all groups to reach an urban plan taking into account the public interest (Ahmed, 2007).
 2. The emergence of Advocacy Planning was accompanied by Etzioni's writings on interwoven planning. It presents a combination of the authority's views and society's categories. As Etzioni mentioned, such planning takes place in societies which can express their goals and views. Accordingly, the consensual planning model emerged. In this model all categories of society contribute along with interest groups and planners in the formulation of the planning objectives. Planning, considering these objectives, is to be developed and its implementation is to be controlled, by the higher State levels (Friedmann, 1987). Therefore this model is considered as a transit point between the State's full control of the planning process, what happened in the first period of the twentieth century, and between what is proclaimed in the second half of the twentieth century through the need to include the community and its needs in the planning process (Ahmed, 2007).
- One of the most famous planning approaches expressing urban planning thought in this period is the Incremental Planning Approach. It promotes the idea of society's involvement in the planning process and makes it achievable. This is because developing comprehensive planning solutions is performed by planning institutions where citizens are not able to understand or participate in them realistically. This approach focuses on solving some urgent problems of the current situation without changing the urban framework involving these problems (Friedmann, 1987), making it easier for citizens' participation in decision-making about them. The planning models falling under this approach are:

- 1- Incremental Planning Model (1963) evolved by Charles Lindblom, in an attempt to address the criticisms made against the comprehensive model (Friedmann, 1987). The criticism made of the comprehensive planning model, by Herbert Simon and others based on two important elements: the difficulty of dealing with the tremendous amount of information required by the comprehensive planning model, as well as the difficulty of drafting a large number of comprehensive alternatives including solutions to all problems or a faithful reflection of the reality. One of the most important criticisms made against the incremental planning model is that it provides partial solutions to the problems in the form of projects that cannot be aggregated together into a plan or a collective vision (Ahmed, 2007). Therefore, the incremental model deals with urban problems by providing gradual solutions to them according to the priorities of those problems to the society being planned for (Friedmann, 1987). This model can be applied in rapidly changing planning contexts that fit the cumulative steps method in decision-making which is a characteristic of incremental planning. It requires the existence of a decentralized system in decisions making that enables actors make their decisions without referring to central authorities. It is also preferred when there are limited time and resources available for the study (Ahmed, 2007).
- 2- Mixed scanning planning model (1968) developed by Etzioni as a solution or compromise between the comprehensive and incremental planning models. It is applied through the division of decision making into two levels: a higher level involving decision-making regarding integrated planning visions for long periods of time and the lower level, where decisions related to detailed areas (Levy, 1988). It can be applied in changing planning contexts, where through this model detailed plans for smaller areas are progressively placed (depending on their vulnerability to changes in the society or depending on the emergence of a certain problem in those areas). It can also make adjustments quickly and easily on the plans of those small areas and what results from the modification of the action plan at the level of the larger domains. This model depends on the presence of the central system for coordination (Ahmed, 2007).

2.2.1.3. *Late sixties and early seventies:*

It was realized that the previously discussed models were not effective in involving the public and considering their needs and interests in the planning process. Planners began, by the late

1960s and early 1970s, to seek new approaches that instead of considering public participation as a complementary method to the normal traditional planning process, suggested that effective participation has to be a central goal. The public was encouraged to have an active role in setting up the policy process. Planners, therefore, acted as managers who distribute information and as feedback sources.

Accordingly, the radical planning approach emerged in application of this thought (Lane, 2005). Also the bottom-up planning approach appeared which considered planning as an activity starting from the society that does not require to be managed by the State alone. It may start from the society and be managed by either society or in partnership between the State and the society (Ahmed, 2007). The following planning models are an expression of these approaches:

- 1- Participatory Planning Model (1969): it emerged through several scholars; two of the best known of whom are Lichfield and Travis. It is based on the idea of partial or total embedding of the society in the planning process and specifically in policy-formulation and decision-making. Thus, solutions resulting from this model are not decisions taken from the upper levels of the State. However, they reflect the desired conditions by the society as well as its needs and interests. This is due to these solutions being deduced by the members of the society in collaboration with the planning teams (Ahmed, 2007).
- 2- The idea of involving societies in the planning process was followed by the need for a curriculum to teach the members of society how to participate in planning and how to express their views and needs. Therefore, the Social Learning Planning Model emerged from many, among them Dunn and Schon. This model aims at training the community members to change from not participating in the planning process to effective positive participation (Healey et al., 1982). The application of this model requires a kind of change in the State planning institutions to guide and direct the members of society on how to identify their goals and express them. This model is followed in societies that are in the process of transition from central to decentralized decision-making. Therefore, the State becomes aware of the importance of preparing members of society to actively participate in the planning process. All of this is in light of the availability of community financial resources for requirements of the social learning model from tools and teaching aids (Ahmed, 2007).

2.2.1.4. *Eighties onwards:*

In 1982 the Strategic Planning Model appeared in an attempt to avoid the disadvantages of the previous approaches and ideas, as a compromise between their models and in particular between the comprehensive and incremental ones, and also for more activation of the concept of public participation. Although the roots of this model date back to the twenties of the last century, it was not used in urban planning until the early eighties. It puts forward a future vision for urban communities through analysing the relationship with the external environment, and exploiting resources of these communities' sites along with involving the public in taking decisions in the planning process. Accordingly, appropriate strategies to reach that vision (long-range strategies) are then developed. The next step is to prepare urban plans, followed by action programs. These are not long-range plans, but rather incremental ones to measure reactions of the economic, social and urban systems to gradually develop the vision and thus adjust next stage plans based on extrapolations of such reactions. Therefore, this model is characterized by being holistic in developing strategic issues and forming the future vision (which is reflected on the formulation of strategies) on one hand. On the other, it is characterized by interim decision-making to achieve this vision. This model is considered as the most appropriate model dealing with changing planning contexts, because of its reliance on the provision of interim planning solutions fitting the change in those contexts. It can also be applied in central and decentralized communities, but better results arise when applied in decentralized contexts, where incremental goals in each stage are more easily applied without being restricted to the routine imposed by central system in decision-making (Ahmed, 2007).

2.2.2. The planning approaches: the Egyptian situation¹

After presenting thoughts, approaches and models of planning in general from a global perspective, this section deals with the application of urban planning models used in Egypt in planning new urban communities (where the case studies of this research locate), their extensions, or updating their plans. This section also addresses the circumstances accompanying the application in each of these models. Those models are the comprehensive, central, strategic and incremental planning models.

2.2.2.1. *Comprehensive Planning model:*

The Comprehensive Planning Model is the most popular model. Moreover, until recently it was the only model applied in planning new urban communities in Egypt or their extensions

¹ (Ahmed, 2007) is the main reference for this sub-section unless stating other references.

as well as in updating their plans. Regarding the appropriateness of this model to the circumstances surrounding the planning process, it was noted that it was inadequate to some objectives' levels being applied in Egypt, causing a waste of time and resources. This is because this model puts overarching objectives and then tries to achieve them through the planning process in order to provide comprehensive solutions. Whereas planning new urban communities, updating their plans and planning their extensions cannot be considered altogether by putting comprehensive objectives and solutions as in the Egyptian case. For example, planning new urban communities starts with developing general objectives that reflect the targeted situation for urban communities. However, it is difficult to resolve a comprehensive solution to achieve all such objectives at once as it will become illogical and difficult to achieve. This is what actually happened in the vast majority of constructed communities where they encountered great difficulties in the implementation of their plans or in reaching the targeted population. They were developed to accommodate a range of between 500 thousand to one million in population while the numbers settled is much lower (Shalaby, 2003). The importance of such general objectives is to guide planners preparing for the future vision in drawing the picture of the relationship between the new urban community and the surrounding urban communities and how to exploit the city resources to achieve its objectives in the long run. Upon dealing with the urban expansions of new cities, or when updating their plans, it is necessary to develop benchmarks/intermediate objectives. It is also important to gather information gives a general picture of the relationship of the new entity with its surrounding area and the target of this expansion or updating. Therefore, the use of the comprehensive planning model therein is a kind of wasting of resources and effort in gathering information about the community as a whole and in formulating planning solutions for it. Thus it does not require the development of comprehensive goals and solutions, but rather needs incremental targets easily accessed for the development of a real effective and urgent development.

As for degree of change of the planning context and its fitness with the model; the theoretical case for applying the comprehensive planning model is in semi-fixed planning contexts as previously noted. And where the planning environment in Egypt is characterized by being changing and it can even be described as rapidly-changing in some cases, so the application of the comprehensive planning model in Egypt was not suitable for such planning context. This is due to the difficulty of applying the comprehensive planning model thought for its dependence on the socio-economic studies results (difficult to be stable for long periods of

time), which are usually built on specific numerical equations for long periods of time reaching up to twenty-five years. Then results are translated into housing, activities and services programs. Therefore, land use plan (the general plan) is difficult to implement due to the difficulty of achieving economic and social indicators found in this plan. This is because the Egyptian context is actually erratic due to change of time, decision-makers and planners as well as social and economic data. This is what makes the technical product of the comprehensive planning model; the master plan, is a static product, unable to keep up with the changes occurring in the planning context. Later on, it becomes different to the reality on the ground.

Regarding participation of the concerned parties: it was found that the State remains the party in control of the planning process in Egypt in line with what mentioned before that this model is theoretically linked to the State control and the centralized decision-making. The State in this concern was adopting the Central Planning Model discussed in the next section.

2.2.2.2. Central Planning Model:

The Central Planning Model was found by Person in 1934 (Friedmann, 1987) to be in control² in managing participation of concerned parties and their roles in the planning process. In this model, the central authority was determined in planning new urban communities, by itself or through contracting consultancy offices. This is to control the planning work and technical product of the planning process achieving the government objectives in line with the high State policies. Regarding the adequacy of this model to the planning context, it was found that; at the goals level the model has been used with all holistic goals levels as well as the incremental goals emphasizing the State control. Regarding the degree of change in the planning context, as in the comprehensive planning case, inadequacy of the central planning model was observed. Whereas it is theoretically possible to apply the central planning model in traditional semi-fixed contexts, it is noted that the planning context in Egypt is erratic but with the availability of multiple groups ready and even having the desire to participate. Thus, the application of this model in Egypt was not suitable for the planning context. Intervention of the central authority in the specialists' work was also noted in site selection and preparation of the comprehensive plans of new urban communities. Therefore, local planning (new city plan) becomes just plans controlled by the general State policy rather than being plans resulting from the potential and requirements of

² With the exception of only one case which is the attempt to apply the social learning planning method/model in case of planning Eltagamoe Elawal to activate the role of the society members in the planning process.

the planned region of each of these urban communities. Neither is it resulting from development potentials of sites of the urban communities. Furthermore, central planning results in insufficiency in the development plans due to blocking the views of specialists by the central authority. In addition, centrality and the State control of decision-making eliminate participation of citizens in development and in taking fateful decisions.

2.2.2.3. Strategic Planning and Incremental models

Strategic and incremental planning models have been used respectively in one case which is; the new Heliopolis city, a business sector-owned city. This has been a good start to use models that are commensurate with the nature of the planning context in Egypt characterized by continuous change (Ahmed, 2007). This is considered as the only case for the use of models outside the central and comprehensive planning frameworks before issuing the Unified Building Code recently in 2008. This law involved obliging the State bodies with carrying out strategic planning for the Egyptian cities and villages (Mubarak, 2008b). Since then the State has swept in making strategic plans for the Egyptian villages and cities whether existing or new ones applying the strategic planning model accompanied by public participation in planning decision-making (Ac-G-11)³. However, the conditions associating the application represented in; the State control and centralized decision-making have prevented the effective application of this model or the public participation principle. The implementation has been characterized by procedural steps without effective achievement of the targeted job or benefit from the strategic planning model or planning by participation. This is in addition to the legislative and procedural flaws that accompanied the implementation and failed planning projects of cities and villages (De-G-37, En-25)⁴.

To conclude, Egypt until now experiences the application of planning thoughts, approaches and models of the sixties era. The nature of the ruling regime in Egypt is based on centrality in decision-making and State control of the planning process created a context where adopting the comprehensive and central planning models was regarded as being appropriate to the nature of thought and desires of the successive governments in Egypt. This is done to ensure the governments' control over the planning process as is the case in the other areas of the State. This context also had a strong influence on the delayed adoption of strategic

³ An indication for an interview/ee, it may contain some of the following abbreviations that mean: En = Environmental, In = Industrial, Ac = Academic, De = Industrial Developer or Development Officer in local administration units, Ju = Judge, G = Governmental position (it will appear if applicable), NGO = A member of environmental NGOs boards of directors, Numbers = Serial Number of the interview/ee

⁴ Chapters from the fifth to the seventh deal with this subject in detail.

planning approaches and public participation until 2008 despite their knowledge to the world since the sixties to the eighties of the last century. In addition to the delay in application, this context has deprived the application of its meaning and limited it to procedural forms preventing any tangible benefit from its implementation.

The empirical part of this research examines in detail the impact of the State regime on the planning process and in particular the planning of industrial zones in Egypt. Furthermore, because of the clear influence of the regime on the planning process, the next sections of this chapter address the literature discussing governance for sustainable development. This is from a global perspective first and then locally in Egypt searching for gaps in both perspectives that this research can work to contribute for filling. It is also in order to identify lessons that can be used in analyzing and then understanding the process through which industrial zones in Egypt are planned.

2.3. Industrial development in Egypt: the relationship with SD and good governance

This section, seeks to contextualize the Egyptian case study, and provides a brief overview of the political, economic and industrial structures of the country. It then discusses governance for SD internationally, at first, then in the Egyptian case. It discusses the industrial development policies and foundations showing that the Government acceptably understands SD. This section then reviews available literature to examine the practice of this understanding, concluding the faraway position of Egypt from the application of SD and GG. It then addresses different recent arrangements and steps that Egypt has made targeting effective application of sustainability.

2.3.1. Industry in Egypt

2.3.1.1. Politics, economy and industrial structures in Egypt: background

The modern era in Egypt started by Mohammad Ali taking over to rule in the year 1805, where he sought to build a strong state based on organized modern industry to make Egypt self-sufficient. The industry at his time has significantly evolved whereby a major industrial base was established including textile, sugar, extraction of oils, chemicals, rice mills industries and military industry (SIS, 2011a). Through Mohammad Ali's attempt to break away from the Ottoman Empire, foreign countries and notably Britain intervened and threatened Mohammad Ali. Accordingly, the Treaty of London in 1840 was imposed giving him the hereditary rule of Egypt but as a part of the Ottoman Empire properties. Since that time, foreign financial and political control of Egypt made it a colony without the need of

military battles. Egypt then in 1882 has been occupied by Britain (SIS, 2011b). Despite all of this, the Egyptians attempts to establish an industrial base continued. Banque Misr founded in 1920 with Egyptian capital has led a campaign for the advancement of the Egyptian industry. The bank succeeded in establishing an industrial base including a series of big companies and factories (SIS, 2011a).

With the continued occupation, the general atmosphere in Egypt deteriorated and peaked with Arab defeat in the War of Palestine 1948, paving the conditions for the 23rd of July 1952 revolution (SIS, 2011b). Accordingly, the monarchy was ended and the republic was proclaimed leading to the independence and evacuation of British colonialism from Egypt in 1956. Egypt in this period tended to ally with the Soviet Union and apply the socialist economy. The most important features of this period was the national comprehensive planning, discussed in the previous section (LAS and AU, 2011). Thus, Egypt faced a new wave of industrialization based mainly on governmental efforts where this period saw the emergence of numerous strong national industries aiming at achieving self-sufficiency and building a strong industrial base (Mobarak, 2001). This was based mainly on heavy industries such as iron and steel, mining, petroleum and chemical industries in addition to spinning and textiles and food industries (SIS, 2011a).

Egypt then entered many wars where the concept of a war economy dominated. The economy suffered from a problem of financing the State plan and policies that were serving the liberation of the Egyptian territory. This had a negative impact on the industrial sector. This period ended by Egypt's victory in October war 1973 which paved the way to the peace treaty in 1979 and the evacuation of the Israeli occupation of Sinai. On the peace road, a new phase in the industrial development has started and the slogan of "Made in Egypt" has become a national objective (SIS, 2011a). Egypt has witnessed the application of the 'economic openness' and the start to involve the private sector in development (Mobarak, 2001). After ex-President Mubarak had come to power in 1982, Egypt returned to the comprehensive national planning while maintaining the policy of economic openness and encouraging investment. This period was marked by the attention to the implementation of infrastructure and scheduling debt. There was also an interest in a transition to a market economy and the application of privatization while maintaining the State role in macroeconomic management to ensure price stability, justice in distribution and antitrust rules (LAS and AU, 2011).

Since 1990 until now, Egypt is officially (according to the governmental rhetoric) in the reform stage. According to the Government, the reform is a shift to market mechanisms and the adoption of policies to address cash and structural deficiencies, the implementation of privatization programs, and liberating the public sector (SIS, 2011a). This period witnessed governmental rhetoric on advancing the Egyptian industry to move from manufacturing phase for the replacement of imports to the phase of manufacturing for export (LAS and AU, 2011). Accordingly, The Egyptian Government, by the beginning of the 21st century, has linked industry with the external and internal trade under one ministry to undertake tasks of improving the Egyptian economy and raising competitiveness of the Egyptian product. It was also tasked with updating Egyptian industry and increasing exports to join effectively the global economy. Furthermore, the new ministry sought to improve the investment atmosphere institutionally and legislatively to encourage private sector to participate in economic development (SIS, 2011a). For the application of these policies, the year 2007 witnessed the introduction of the 2007/2012 five year plan aiming at achieving an annual growth rate of 8% and reduction of the inflation rate to 5% by the end of the plan (LAS and AU, 2011). The plan in the sector of industry depended mainly on a project, known as 1000 factories project⁵ (SIS, 2011a), and the initiation of the Industrial Developer Program that involves the private sector as a partner in developing industrial zones for the first time (discussed in detail in Chapter (6)).

There are a wide range of political and economic debates on the seriousness and credibility of the performance of successive governments specially during the last 5 years after the complete association between money and power in ruling the country. This resulted in increasing of poverty of the poor class at the expense of the middle one. The previous regime was characterized with monopoly, corruption, election fraud crudely at all levels and the repression of opponents. All of this led to the revolution of January 25, 2011⁶, discussed in Section (1.2.1).

2.3.1.2. *Properties, supporting factors and importance of industry:*

Industry in Egypt is based on seven industries constituting more than 80% of industrial establishments. Engineering, electronic and electric industries ranked first with 30% of the

⁵ It is proved in Chapter (6 and 7) that the Government used this project for propaganda purposes without real implementation as announced.

⁶ Egypt entered after this revolution in a provisional reign synchronized with the time of writing these lines and expected to last until end of 2013 according to the announced timetable. Therefore, as the research is expected to be completed early in 2012, it is hard to expect the views of the incoming regime especially economically, environmentally and the impacts of this on the development of the Egyptian industrial zones.

total industrial production. Food, beverages and tobacco industries came next with 23% followed by chemical industries with 15% and spinning, textile, clothes and leather industries around 10%. These four sectors are important sectors in the Egyptian economy in contribution to the overall industrial production and their ability to absorb labour and wage level. In 2005 these sectors possessed about 78% of the industrial production and 58% of the total industrial investments with approximately 79% of total employees (IDA, 2011b). As regarding geographical distribution of industrial enterprises, see Figure (1-7), it is found that 89% of the industrial production is concentrated in Cairo and northern regions while the remainder, about 11%, is concentrated in Upper Egypt. This led the Egyptian government to recently give more attention to Upper Egypt. Industrialization in Egypt depends on natural resources and labour. It also relies on the use of technology, although most of it is imported (Mobarak, 2001) but this has helped the Egyptian industry to enter the areas of hi-tech and software industries and micro-electronics industries (IDA, 2011b).

Egypt has many factors supporting the development of industry. Egypt lies on the crossroad of the ancient continents, bordered by two seas, overseeing two gulfs and on its land runs the Suez Canal (IDA, 2011e). Labour is cheap and abundant (IDA, 2011d). There is a large diversity in resources ranging from agriculture production and livestock, a wealth of important minerals and quarry products, and petrol and natural gas. Though having 55.5 billion cubic meters yearly from the Nile River, in addition to rains and ground water, water resources are considered somewhat limited as compared to increasing demand and needs. Means of transportation are available including a network of highways, airports and harbours (IDA, 2011a). There is a diversity of energy sources from electricity, petrol (oil), natural gas to renewable sources such as solar and wind energies (Mobarak, 2001). According to the governmental rhetoric, Egypt also seeks to improve the investment atmosphere by simplifying procedures, offering incentives to investors, holding international trade agreements that allowing Egypt to enter new markets (IDA, 2011c). The Government provide technical/training support services beside the system of specialized international exhibitions (NDP, 2009).

With the growing population in Egypt, the importance of industry increases due to many factors, on top of which come creating jobs and raising living standards of citizens. Industry is considered as the cornerstone of economic development (Mobarak, 2001). That is why it occupies a leading position in the Egyptian economy and comes in the forefront of economic sectors in terms of its contribution to the GDP (about 17.5% in 2005 to 2006). The

contribution of the industrial sector in the GDP was by 275.3 billion pounds of which the private sector contributed by 81.3% while the public sector contributed the remaining 18.7% (SIS, 2011a).

To conclude, the difficult political life in the modern era in Egypt due to occupation, wars and corrupt regimes over the past two centuries did not qualify or help Egypt to achieve a substantial and continuous development in programs directed to the creation of a stable and modern industrial base⁷, despite multiple promotion waves. The Industrial development in this context has passed through different stages starting from social economy till the transformation to the free market economy where privatization programs took place. This difficult life has affected the administration system and the successive governments in Egypt especially during the last three decades. This governing system has been led to focusing on the economic element in successive plans regardless of any other considerations. The existing industrial base therefore, has been formed mostly from polluting industries that are concentrated in the populated areas causing harm to people and the environment (Hamza, 2005). However, industry is very important for Egypt to increase the production and raise the living standards of the Egyptian people. Reforming the governing system to adopt sustainability principles in industrial development is crucial. The next section, therefore, discusses governance for SD: first, the international discourse and, second, the debate on whether industrial development in Egypt approaches sustainability.

2.3.2. Governance for SD: the international discourse⁸

This section addresses briefly the meanings of ‘governance’ and ‘sustainable development’ (SD) to assess the cumulative knowledge they built through and the attempts that have been made to build empirical and/or theoretical bridges between the two terms. This section then synthesizes a conclusion from revision of both terms identifying the gaps in knowledge regarding them.

⁷ In support, UNEP, (2003) reads: “Data released in 2003 indicate that economic growth in the [Arab] region was affected by war and instability and is lagging behind the world average.” P.1.

⁸ In late 2007, Andrew Jordan reviewed a wide range of literature published over the last decade or so on 'sustainable development' and 'governance' in a paper entitled: “The governance of sustainable development: taking stock and looking forwards” (Jordan, 2008). The purpose is to explore the meanings of these two terms and to assess the cumulative knowledge built through the attempts that have been made to form empirical and/or theoretical bridges between the two terms. In late 2009, he revisited his paper to examine any changes that could contribute to the international debate on this regard (Jordan, 2009). This section depends mainly on these papers unless stating other references.

2.3.2.1. *The debate on and meanings of the terms*

1. Sustainable Development

The UN Brundtland Commission has presented a definition which has become the most quoted definition of SD that meets “the needs of the present without compromising the ability of future generations to meet their own needs” (UN, 1987). SD is still a set of guiding and, in practice, highly contradictory concept than a precisely defined scheme. However, most scholars now accept that SD would fall down if it was defined precisely and defining SD is not even possible. SD with its two contradictory themes and the creative tension between different social and ecological contexts, is what has given SD its staying power. Therefore, the need for governance systems that resolve such conflicts reaching coordinated policies is crucial (Jordan, 2008).

2. Governance

Governance differs from governing or government. Governing refers to social activities which make effort to guide or manage societies. On the other hand, governance describes the emerging patterns from the governing activities of social, political and administrative actors. From another side, while government focuses on institutions and actions of the state, governance involves nongovernmental organisation/actors into all societal steering/management. The debate about governance and what achievements the term reached is still a mess. While Jordan (2008) considers that some agenda like the UN Agenda 21 barely constructed a precise blueprint, others say that governance lacks the consensus on which group of phenomena can be grouped under the term. Therefore, the debate continues to find this consensus and address how to govern for SD (Jordan, 2008).

3. Governance for Sustainable Development

It could be from the foregoing that the debate on both terms is a mess where the two terms are highly ambiguous terms which if dealt with in a loose way, may slow up rather than make a cumulative research. The relationship between governance and SD in this context can be approached from three disciplinary perspectives. The first is concerned with building a theory; namely ‘governance as theory’, for different purposes. For some authors like Biermann (2006) and Richards and Smith (2002), governance is a ‘descriptive label’ and will forever remain like this. Others have sought to use it in a more theoretical approach to illustrate some of the empirical patterns of governance. Flinders (2002), as an example, has sought to advance a ‘governance theory, to raise issues of control, coordination, accountability and political power. Jordan (2008) states that exponents of ‘governance as

theory' are relatively modest in their claims and Young (2005), in support, mentioned that there is not and never will be a grand 'theory of governance' (Jordan, 2008).

The second is 'governance as an empirical phenomenon' that describes what has been done to put SD into action. The literature here remained in the area of discursive 'smoke' but with small empirical 'fire'. In this context, the majority of countries, through their national environment ministries, are still elaborating the first SD strategy over a decade after Rio. After, adopting new environmental policy instruments increased massively, but too little is known about their performance to make definitive judgments about their effectiveness (Jordan, 2008).

The third is 'governance as a normative prescription' that illustrates what should possibly be done to apply SD. In this context, 'good governance' is one of the most well-known constructions⁹ which strongly associated with the work of development organisations such as the World Bank. Governance therein is associated with an efficient public service, an independent judiciary, a publicly accountable system for collecting and allocating funds, a respect for law, order, and human rights (Jordan, 2008).

Finally, the vast majority of contributions in such a debate are either empirical or normative, or some combination of the two with a limited dialogue between them. Very few attempts have been made to produce a dedicated 'theory of sustainable development governance' (Jordan, 2008).

2.3.2.2. *What efforts is required and in which direction?*

Scholars, like Kooiman (2003), and Van Kersbergen and van Waarden (2004), mentioned that there is certainly a need to move beyond grand theories and typologies of governance, and to undertake more detailed empirical testing better to measure the extent to which we are in fact witnessing a shift from government to governance. Analysts, according to Jordan (2008), need to go beyond this and conduct work that explores the relationship between governance and sustainable development in a more dynamic/interactive manner and to explore the causal relationship between governance intervention and real outcomes on the ground. In this context, there is a need, according to Bache and Flinders (2004) and van Kersbergen and van Waarden (2004), to know what forms of governing lead to what sorts of outcomes, whilst ensuring that they remain legitimate and publicly accountable. In addition, Jordan (2008) states that there is a danger that research on governance and/or SD ends up

⁹ OECD is one of the most important prescriptions among the international efforts which can policy makers have a look no further than to its checklist produced in 2002.

being a rather technical exercise in counting and cataloguing different governing instruments or, normatively, trying to recognize the exact governing tool for the job (Jordan, 2008).

To conclude, although the international debate about governance and/or sustainable development has run and run, it is a mess where the two terms are highly ambiguous terms. The available literature in this context is mainly either normative or empirical whilst the dialogue between the two is limited. The step beyond grand theories and typologies of governance towards *undertaking detailed empirical testing to measure the shift from government to governance is needed*. These efforts are needed to be focused on governance in a more dynamic and interactive manner in order to know *what forms of governing lead to what sorts of outcomes*. It is also important while doing so to ensure that the forms remain legitimate and publicly accountable.

Reflecting from the international need regarding governance for SD on the Egyptian case, it could be concluded that there is a need for an empirical test to measure the extent to which the industrial system in Egypt is moving towards governance for SD. The effort in this regard should be directed to study the governing form in Egypt and whether it has the potential of producing sustainable IZs. Doing so will not only contribute to the local debate but also to the international one by filling the gap from the developing countries' side. The question posed here is to what extent does Egypt practice governance for SD in general and in the industrial system specifically?

2.3.3. Governance for sustainable development: the Egyptian case

2.3.3.1. Industrial Development: Policies and Foundations

According to the governmental rhetoric, the Government through its successive plans and strategies targeted a number of themes where the following come on top (MOP, 2002):

1. Improve the quality life of the Egyptian citizens, especially in terms of income and education.
2. The development of the institutional structure towards GG especially public participation, deepening democracy, improving the mechanisms of control, accountability, and transparency, and reform of the legislation base.
3. The development of the production base, natural and economic resources, with emphasis on the rational use of water, energy, and development of alternative resources for them.

In light of these major themes, industrial development in Egypt is characterized by two main trends. The first is the creation of new industries capable of competition in terms of technology. The second is the expansion and renovation of existing industries aiming at increasing their productivity (Mobarak, 2001). In this context, the Government announced that its strategy was anchored on a package of policies as follows:

- To continue providing the necessary circumstances for improving the investment atmosphere to encourage Egyptian, Arab and foreign capital investment in industrial activities (Mobarak, 2001, MOP, 2002).
- To improve productivity and quality standards of goods through:
 - strengthening the institutional and regulatory setup to ease the burden of the production process,
 - using standard specifications of industry (MOP, 2002),
 - paying attention to non-traditional areas of industrial production such as “cleaner production”¹⁰,
 - establishing new industrial zones in line with the recent international scientific approaches (MOP, 2002),
 - adopting new technologies and learning to international experiences,
 - mobilizing and inviting Egyptian experts abroad to share their knowledge with local counterparts,
 - continuous and specialised training for industry workers at all levels (Mobarak, 2001), and
 - establishing applied scientific research units in production sites in collaboration with academic and scientific institutions, specialised centres and the Academy of Scientific Research to raise the level of production processes through scientific and modern technological applications (Mobarak, 2001, MOP, 2002).
- To pay attention to exporting through the expansion of export-oriented and basic industries, and the study of the needs of foreign markets for new goods (Mobarak, 2001). This was confirmed by Engineer Rasheed Mohamed Rasheed, ex-minister of trade and industry, highlighting the importance of the national plan efforts to double the exports due

¹⁰ The term ‘cleaner Production’ was first coined in September 1990, by the UN Environment Program. The formal UNEP definition of ‘cleaner production’ says that: “Cleaner Production is the continuous application of an integrated, preventive strategy to processes, products and services to increase efficiency and reduce risks to humans and the environment.” (Eionet, 2009).

to its important implications on community development and economic growth, as well as the importance of creating the appropriate circumstances to achieve that (NDP, 2009). The plan includes protection of Egyptian industry from unfair competition caused by subsidies granted by some countries for certain products or policies of dumping in markets. This could be achieved through the expansion of integrated industrial complexes as well as expanding the provision of technical and administrative assistance, and marketing assistance for small and medium-sized projects (Mobarak, 2001, MOP, 2002).

- To redistribute production and industrial activities according to priorities in order to achieve balanced growth geographically on the national level (Mobarak, 2001, MOP, 2002) with particular attention to the expansion of industrial development in Upper Egypt and also accelerating the extension of utilities and gas to current IZs (NDP, 2009). Add to this the promotion of small and medium-sized industries and their spread in all provinces as well as supporting their role as sources for final products, feeders or supplements of large scale industries (Mobarak, 2001).
- To develop and update databases, (MOP, 2002) particularly with regard to the geographical distribution of the potential existing manufacturing and design capabilities as well as architectural design offices data, their development and involvement in the process of making the first model; and provide the necessary funding for this process from national development budgets (Mobarak, 2001).
- To draw basic rules and criteria to evaluate the policies through periodic measurements of sustainable growth rate in terms of productivity, profitability, development, innovation and provision of new job opportunities (Mobarak, 2001).
- To pay attention to respecting the principles of SD in industry. Therefore the Egyptian government strategy regarding SD in industry is focused on directing investments to new areas and granting incentives and comparative advantages to remote areas (MOP, 2002).

This strategy depends on the following themes:

- any new project must be subject to environmental impact assessment prior to final approval,
- all polluting activities have to be transferred from residential areas to other more appropriate locations,
- IZs for new investments have to be created in all provinces,

- energy consumption using new energy saving production techniques have to be rationalised with the emphasis on the introduction of new and renewable energy¹¹,
- pollution prevention measures have to be used such as clean technologies, cleaner production programs and periodic maintenance to minimize waste,
- quality production technologies have to be adopted through applying the ISO 9000 series and ecosystem 14000 series whenever possible (Mobarak, 2001), and
- cooperation between industry and scientific research centres, universities, programs and international organizations have to be enabled (MOP, 2002) in the field of environment and SD (Mobarak, 2001).

2.3.3.2. Sustainable development arrangements for founding IZs in Egypt up to 2005

Since the 1990s, the Egyptian government has made some institutional arrangements in favour of environmental protection, the most important of which are:

- Establishing Ministry of State for Environmental Affairs (MSEA) and its executive arm the Egyptian Environmental Affairs Agency (EEAA). the tasks of which are (EEAA, 2011):
 - Preparing national plans for environmental protection, and emergency plans for natural disasters.
 - Implementing pilot projects.
 - Formulating principles and procedures of environmental impact assessment.
 - Drafting environmental laws, regulations, standards and safe pollution rates.
 - Supervising the Environmental Protection and Development Fund.
- Raising awareness and preparing environmental capacity building programs (EEAA, 2011).
- Setting up the environmental law No. 4/1994 to organize the environmental bodies responsibilities and to enforce the balance between development and environment. This law requires new projects to environmentally assess its impacts by doing an environmental impact assessment study (EIA) (Mobarak, 2001).
- The State through its environmental bodies has prepared a number of environmental national plans and strategies¹² since the beginning of the last decade that show that the

¹¹ Prime minister decree no. 1560 issued in 2004 for the composition of the Board of Directors of the agency of the development of new and renewable energy use 12 September 2004. This reflects the State 's attention to new and renewable energy and establishing a formal body for the development of its uses.

¹² Most important publications of them are as follows:

- The National Environmental Action Plan of Egypt 2002/17 (EEAA, 2001).

Egyptian government has good understandings of SD (EEAA, 2001, EEAA and Danida-ESP-CEM, 2005, EEAA, 2005, EEAA et al., 2006, EEAA et al., 2005).

- Forming an inter-ministerial council to encourage institutional coordination, and establishing environmental units in some line-ministries (like the Ministry for Industry) to achieve and maintain inter-sectoral coordination (ESCWA, 2003).
- Initiating the Program of Eco-friendly Industrial Cities (Shalaby, 2003), targeting the cleaner production in the factories of these cities (Rasheed, 2010c, Mobarak, 2001).

It could be noted from this section and the one before, indicating the State policies/procedures regarding industrial development and SD arrangements as well as concepts adopted in its publications, that the Government in Egypt has a good understanding of SD and GG concepts and principles. It could also be concluded that the concepts/ideas included in the Government's publications could theoretically together form a base for a conceptual framework for founding sustainable IZs. The question that poses itself now is: to what extent was this framework actually practiced in Egypt? The next section discusses the actual practice of governance for SD in Egypt until 2005 answering this question.

2.3.3.3. Governance for sustainable development in Egypt: literature on the actual practice updated until 2005¹³

This section discusses governance for sustainable development in Egypt and synthesizes Egypt's situation in the practice of governance for sustainable development. It was found that most publication efforts in this regard were done by regional and international organizations like the League of Arab States (LAS), and the United Nations (UN) and its regional organizations like Economic and Social Commission for Western Asia (ESCWA) (see for example: Hamza (2005), ESCWA (2003), and UNEP (2003)). The remaining literature was mainly prepared for the UN forums held in the preparation for the World Summit on Sustainable Development (WSSD) (see for example: Al-Deen and El-Kholy (2001)), or were academic literature that discussed and built upon the previously mentioned literature of international/regional organizations (see for example: (Esty et al., 2003)). In support, Esty et al. (2003) stated that their analysis depended greatly on the 2002 Environmental Sustainability Index (ESI) and the data collected for it. The dominance of international and

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- The National Strategy for Environmental Communication (NSEC) (EEAA and Danida-ESP-CEM, 2005).
 - The National Strategy for Cleaner Production in Egyptian Industry (EEAA, 2005).
 - The Environmental Responsible Guide (EEAA et al., 2006).
 - The Industrial Areas Management Guideline (EEAA et al., 2005).

¹³ This year is chosen only because there appear to be little literature available for the period after 2005 on governance for SD in Egypt.

regional organizations literature over the other sources is due to the fact that governments are committed not only to protect the environment but also to disseminate the environmental data to those organizations when they ask for. However, other sources, even like the World Bank, mentioned that they faced many constrains when collecting environmental data in Egypt (World-Bank, 2002). Therefore, the literatures available to the researcher mainly discuss the state of the Arab or the Middle East region containing Egypt. While studying the commonalties in the region, the literature from time to time shows differences between different countries of the region. The literature therefore, gives a generic picture of the Egyptian situation. It is worth mentioning here that a gap has been spotted regarding the contribution by the Arab countries to the international discourse on environmental sustainability processes (Esty et al., 2003).

This section reviews the most comprehensive literature available and briefly synthesizes relevant parts on Egypt. It then concludes with thoughts on Egypt's situation in the practice of governance for SD.

A. Introduction

The Arab countries, one of which is Egypt, face great threats to sustainability that could broadly harm the society economically and environmentally. Such threats are related to water scarcity, climatic change, high rates of pollution and unbalanced population growth in systems that lack institutional reform (Esty et al., 2003). Despite the commitment that Egypt has performed towards environment, as shown previously, the bodies established to manage SD process remain, to a great extent, insufficient. While these environmental institutions have taken steps to protect the environment, an important gap remains with regard to the ability of such bodies and the institutional setup to manage effectively SD process (ESCWA, 2003, Al-Deen and El-Kholy, 2001). This has been widely noticed from the environmental degradation caused by urbanization in general and from industrial development particularly. It depends on a rapid pattern of industrialization that causes increased pollution by the use of improper waste treatment depending on the end of pipe pattern¹⁴ (Hamza, 2005, Al-Deen and El-Kholy, 2001). Regarding the reasons for this behaviour, they are: the systems of governance and the environmental capacity (Esty et al., 2003). In such a way of governing, a top down governmental administration process is in control (Hamza, 2005). It adopts a culture of

¹⁴ In support, UNEP (2003) states: "In spite of the noticeable increase of awareness and interest in changing towards more sustainable forms of industrial production, the rates of release of emissions, liquid effluents and solid (including hazardous) wastes remain a major challenge for the rapidly growing industrial sector in the Arab region." P.2.

environmental management that depends on a sector-based approach that controls the institutional setup (ESCWA, 2003). Environmental degradation is exacerbated because the regulatory setup to protect the environment is inadequate (Hamza, 2005).

In light of this introduction outlining governance for SD in Egypt, the next sections discuss how governance for SD is understood by the State and how this understanding has affected the institutional and regulatory setup of the State.

B. Governance for sustainable development as understood by the State

Egypt's understandings of governance for SD have passed through three phases: (a) support for sanitary engineering and public health (1920s-1960s), (b) the shift from public health to environmental management (1970s-1980s), and (c) the gradual move from environmental management towards sustainable development (1980s-till present) (ESCWA, 2003). In such a move, environmental institutions lack appropriate authorities to address all issues of SD. Despite the multi-sectoral perspective of SD, SD is still considered an environmental matter. In other words, a culture of environmental management dominates the institutional setup that adopts a sector-based approach (ESCWA, 2003, Al-Deen and El-Kholy, 2001, UNEP, 2003), causing the inadequacy of the arrangements and instruments to apply integrated and participatory SD (ESCWA, 2003). This is partly due to financial limitations due to the erratic economic growth that results in inadequate budgets for environmental protection and incorporating SD into the State framework (Hamza, 2005). It is also due to the lack of desire of environmental bodies to extend the mandate for SD to other bodies to avoid their role to be marginalized (ESCWA, 2003, Al-Deen and El-Kholy, 2001).

C. Governance for sustainable development: the institutional and regulatory setup of the State

The institutional setup in Egypt is the most important obstacle standing against the practice of governance for SD. In such a setup, environmental institutions tend to be politically weak with limited roles as advisors or coordinators and with steady mandate despite the widening of the SD paradigm. This could be a result of the recent restructuring power politics, limited budgets and overlap between bodies jurisdictions (ESCWA, 2003). Behind these factors is the nature of the authoritarian regime (Esty et al., 2003), that was in control of the country with the following traits: dictatorship, centralized governing system, top-down political culture and limited public accountability, and resistance to institutional change (ESCWA, 2003). While the policy platform supports the establishment of an effective system of governance, SD therefore, under such regime, could not be achieved due to the absence of

operational mechanisms. In details, the institutional setup lacks operational mechanisms and instruments for planning, implementing, budgeting and finance, monitoring, reporting, assessment and enforcement, and public participation (ESCWA, 2003, Al-Deen and El-Kholy, 2001). With more focus on planning for industry, it does not prompt sustainability concepts and principles. Planning also lacks the mechanisms for strategic planning for waste minimization and integration of cleaner production in industrial processes (Hamza, 2005, Al-Deen and El-Kholy, 2001).

In relation to the regulatory setup; it lacks economic incentives and appropriate environmental regulations and standards. Pollution loads and assimilative capacity of the environment are not considered, for example, when setting regulations of the pollution prevention as well as emission standards. Additionally, there are difficulties in enforcing the current environmental regulations and monitoring emissions. Environmental awareness and commitment of decision-makers towards SD is still low (Hamza, 2005).

After all, the local institutions that make basic governance for environmental sustainability possible are lacking in Egypt. Therefore, there is no base for Egypt to deal with incorporating sustainability within the current institutional and regulatory setup (Esty et al., 2003). Yet, the main challenge ahead for Egypt is to develop an appropriate setup that can adopt a governance system for SD while being culturally sensitive to the country (ESCWA, 2003).

To conclude, Egypt suffers from environmental degradation due to erratic economic growth with rapid industrialization adopting a planning trend that does not prompt sustainability concepts and principles. This happened due to the lack of environmental awareness and commitment of decision-makers towards SD and GG. Despite the formal commitment that Egypt made to improve environmental governance, an SD platform remained politically weak and insufficient due to the nature of the authoritarian regime was in control. Dictatorship, centralized governance, top-down political culture and resistance to institutional change resulted in a culture of environmental management which controlled the institutional setup. It adopted a sector-based approach lacking operational mechanisms that could incorporate SD into the work system of the State. Furthermore, the regulatory setup lacks the appropriate environmental incentives and regulations, and even suffers from difficulties in enforcing current environmental regulations, (see (Hamza, 2005), (Esty et al., 2003), (ESCWA, 2003) Al-Deen and El-Kholy (2001) and UNEP (2003))

The inability of the institutional and regulatory setup to manage effectively SD process means that an important challenge for Egypt is to develop an appropriate setup that can adopt a

governance system for SD while being culturally sensitive to the country. In light of this, Egypt has recently made some institutional and regulatory arrangements towards improving the governance system for SD. The following section presents these arrangements.

2.3.4. Recent arrangements towards governance for sustainable development: from 2005 onwards

This section discusses recent developments and arrangements in the regulatory and institutional frameworks that the State made towards achieving a governance system for SD. In particular, these arrangements could be categorized under three sections: incorporating sustainability into development, incorporating public participation into planning, and reformation of the administrative framework.

2.3.4.1. Incorporating sustainability into development

Recently, Government talk about sustainability and incorporating it into various development branches, especially sustainable urban development and planning has increased. The most recent law passed in this regard is the Unified Building Law No. 119 of 2008, where the term sustainable urban development is defined therein as:

Managing urban development process through the optimized exploitation of natural resources available to meet the needs of the present generation without compromising the opportunities of future generations. (Mubarak, 2008b, Article 2)

The Law also obligates those working on the preparation of strategic planning to apply SD therein. This is mentioned clearly through the law definition of strategic planning as follows:

It is the schema defining the future vision for urban development and may be at the level of national, regional, governorate, city or village. It describes the goals, policies and economic and social development plans as well as the built environment plans for applying SD. It also identifies future needs for urbanization, different land uses, programs, priorities, implementation mechanisms and funding sources at the schematic level. (Mubarak, 2008b, Article 2)

The same Law also confirmed its respect to sustainable urban development by describing it as a base and assigning the GOPP¹⁵ responsible of its application, stipulating in its fifth Article:

The GOPP is the State's entity in charge of laying down the general policy for planning and sustainable urban development, preparing the plans and programs for this development at national, regional and urban levels. It is in charge of reviewing and approving the urban schemes at the local level in the framework of national, regional and local goals, policies for planning and sustainable urban development. (Mubarak, 2008b, Article 5)

¹⁵ General Organization of Physical Planning.

From another side, the Environmental Law No. 4/1994 was amended by the Law No. 9/2009 that included a series of amendments containing in depth and clearer definitions of environmental concepts¹⁶. It also created a fund for environmental protection (EPF)¹⁷ and gave more powers to the EEAA¹⁸ to govern protecting the natural environment, and reducing pollution and depletion of natural resources, leading to SD (Mubarak, 1994, Mubarak, 2009).

In addition to the foregoing, the State has taken a number of important steps aimed at incorporating sustainability into development, on top of which is establishing the National Commission for SD (NCSD) by the Prime Ministerial decree No. 47 of 2006. The NCSD is to be headed by State Minister of the MSEA and membership of all ministries and agencies concerned with development issues in Egypt (Nazeif, 2006). In this regard, Eng. Majed George, State Minister of the MSEA illustrated that this decree was issued to authorize the NCSD to prepare policies, plans, methodologies and legislative reforms required to lay the foundations of SD in Egypt (George, 2010).

International conventions connecting Egypt to the international community are considered to be one of the important steps taken towards SD realisation. This was confirmed by Eng. Maged George giving an example of the agreement between MSEA and the UN Environment Program to prepare a plan for sustainable consumption and production for the Cairo Governorate. According to him, this agreement accomplished in 2008 was to be the first step of preparing a national plan for the sustainable consumption and production within the national SD strategy (George, 2010).

At the level of concepts and attitudes of officials of the ministries involved in SD, the frequency of statements showing understanding and incorporation of SD has increased. These are made by a number of ministries but the research focuses basically on MSEA and Ministry of Trade and Industry (MTI). Many statements from both ministries show their understanding

¹⁶ Law no. 9/2009 involves a better understanding for the environmental definitions which is in harmony with the development of the new international ideas and approaches in this concern. Especially the serious development in the environmental pollution definitions where it included harming natural habitats and biological diversity. In addition, the law did not limit itself with what was decided in the old one in caring just about pollution levels but added to that, respecting the kinds of carrying capacity of pollution in several points of the law (Mubarak, 1994, Mubarak, 2009).

¹⁷ The legal personality has been given to EPF. A board of directors has been established with the presidency of the MSEA's Minister and with the EEAA's president as a deputy president. Representatives from the relevant ministries to facilitate the sectoral cooperation. NGOs are represented in the board of directors. Also, experts, if needed, must be entitled to join the board of directors (Mubarak, 2009, Article 15).

¹⁸ Particularly regarding the EIAs, in the commitment of all parties and individuals to submit the study, as well as making it available to the EEAA to request modifications on the study or completion of incomplete data (Mubarak, 2009, Article 19 and 20). Most important is the authority granted by law for the EEAA to intervene as it deems appropriate towards the offender if he/she does not respond within two months to rectify the environmental violation (Mubarak, 2009, Article 22)

and quest for SD¹⁹. Beginning with the MSEA, during his speech at the sixth international conference on sustainable production and consumption of Africa entitled "Towards eco-friendly economic development in Africa"²⁰, Eng. Maged George confirmed that the sustainable consumption and production is an engine of SD in all productive and service sectors, saying:

This in fact is aimed at the use of eco-friendly materials, technologies and tools to produce non-harmful components to the environment, as well as rationalizing the consumption of natural resources and products achieving thereafter the highest rates to maximize the available natural resources, and reduce generated waste amounts with their pressure on and damage to the environment. The Conference aims at supporting green economic development initiatives in Africa and spreading environmentally friendly use of clean technology. (George, 2010, Para.7)

Adding to the above, he also stressed the importance of establishing an institutional structure for SD in all ministries with the preparation of sectoral action plans for all institutions to help achieve SD, saying:

What has been achieved from national accomplishments of applying SD whether on the planning or executive side calls us over the next period to focus on establishing a national institutional structure of SD within all the ministries and bodies concerned with building capacity and providing the necessary tools to achieve the required work.... It also requires the preparation of the national strategy for SD, finalizing the set up of SD indicators and the preparation of sectoral and geographical action plans for all institutions at all levels. This is to work together towards achieving SD and increasing public awareness of the concept, importance and value of SD. (George, 2010, Para.6)

The understanding of the importance of SD and the call for its incorporation have been expressed by the ex-Minister of MTI. Eng. Rasheed Mohamed Rasheed said at the opening of the conference on the Egyptian version of the seventh annual competitiveness report entitled "Green Egypt: a vision for the future":

The conditions affecting the world today; water, energy and natural resources shortages make it necessary to reconsider the practice of better use of resources to help rationalize consumption. This entails dealing with a different performance at the level of individuals, companies and the Government to achieve maximum benefit for society and future generations.... Green Egypt can be the real portal to better handling of our resources and all problems such as pollution and wastes of all kinds which, if treated properly, can provide employment opportunities and big earnings. (Rasheed 2010b, Para.1)

¹⁹ The examples of statements of the two ministers stated afterwards are just sample from a multiple and large number of the ministers' statements in this regard. It is also important to mention here that evaluation of seriousness of such kind of statement is discussed in details in Chapters (6 and 7).

²⁰ Held on 14/06/2010 for the first time in Cairo with the participation of more than 40 African and Arab countries and organized by the Centre for Cleaner Production Technology following the Ministry of Trade and Industry in cooperation with the United Nations Industrial Development Program.

The Ex-Minister of trade and industry also declared, at the end of the seventh Conference²¹ of Industry Ministers of Euro-Mediterranean Conference, approving the Egyptian initiative concerned with meeting the challenges imposed by the global financial crisis on sustainable industrial development opportunities. This emphasized the need to exploit natural resources and provide the right atmosphere for continued funding of industry, as well as establishing joint ventures between Euro-Mediterranean countries in the areas of optimizing the use of renewable energy, cooperation in human resources development, and establishing a network of cleaner production centres in the Mediterranean region (Rasheed, 2010a).

In practice, Eng. Rasheed confirmed that the MTI began a new policy committed to industry and its relationship with the environment through which a balance between environmental considerations and developmental needs could be reached. He explained that the MTI is working in collaboration with the MSEA and other ministries to help manufacturers comply with environmental standards and regulations, and convert their establishments into eco-friendly plants. To implement this plan, The Cleaner Production Technology Centre started to encourage 900 factories in sectors of chemical industries, cement, iron, food industry, agricultural, and other sectors to implement cleaner production methods (Rasheed, 2010c).

2.3.4.2. Incorporating public participation into planning

Considering that the unified Building Law No. 119/2008 is the regulator of the urban planning affairs, the law and its executive regulations have emphasized public participation and its importance in determining needs and priorities for urban development and proposing the necessary projects and its implementation (Mubarak, 2008b, Mubarak, 2008a). Articles 9 and 11 mention this concept while Article 11 stipulates participation in detail as follows:

Public administrations for planning and urban development specify, according to the guidebooks of urban schemes prepared by the GOPP with the participation of competent local units, local people's assemblies, competent executive bodies and representatives of civil society, the needs and priorities of urban development at the local level within the framework of objectives and regional and local policies, proposing the necessary projects, and the action plans for achieving them. (Mubarak, 2008b, Article 11)

In a question to Ac-G-11²², a consultant of the GOPP, on the extent to which development partners are involved in the planning process, he confirmed the previous article, saying: "of course this is true, all development partners' opinions must be taken into consideration and

²¹ Held in Nice, France, headed by Rasheed Mohamed Rasheed, Minister of Trade and Industry in Egypt, and Mr. Luc Chatel, French Minister of State for Industry.

²² An indication for an informal discussions made with a group of industrial officials during a pilot study, see Chapter (4) for full details on the research methodology. The code contains the following abbreviations that mean: **In** = Industrial, **G** = Governmental position, and **Numbers** = Serial Number of the interview/ee

they must participate with documentation of this process” (Ac-G-11). In support, Article 12 (Mubarak, 2008b), dealing with the strategic plan that should be presented to citizens for their comments therein, reads:

The General Directorates of Planning and Urban Development within local units offer the master plan drafts and receive comments from citizens, relevant agencies and local people's councils. The Executive Regulations of this law illustrate the rules and procedures of this offer and stakeholders’ feedback on it. (Mubarak, 2008b, Article 12)

This has been confirmed by Eng. In-G-06, Head of the Central Administration of IZs in the IDA²³, giving an example on planning and accrediting sites of IZs by governors, saying:

Through the process he [the Governor] conducts to prepare the strategic scheme. He listens to the local council and takes the opinion of the relevant bodies to this subject. We then approve the concept that: yes we can establish an IZ here. The Supreme Council for Urban Planning (SCPUD) approves the project. Hence, an IZ in a governorate is now accredited. (In-G-06)

2.3.4.3. Reforming the institutional setup: overcoming bureaucracy and improving investment atmosphere

The Government has lately been working to reform the institutional setup, overcome the bureaucracy and improve the investment atmosphere to attract investments, increase work opportunities and improve the quality of life for the Egyptian citizens. This is in addition to governmental actions²⁴ the purpose of which is to reform administrative bodies and improve the investment atmosphere, examples of these actions include: converting the GAM²⁵ to the IDA, establishing the FSEEDIZ²⁶, the SCPUD²⁷ and the NCPSLU²⁸, and issuance of unified laws for various activities that unify the rules and terms, and disengage the overlap and conflict between the various laws regarding a particular activity such as the Unified Building Law. In addition to these actions, this section presents the most recent actions made or sponsored by the Government in favour of overcoming bureaucracy and improving the investment atmosphere.

Booz-Allen and Guillotine contracts

Government has made contracts with a number of global advisory bodies specialized in management with a view of analyzing the existing institutional setup, identifying its problems and then formulating the necessary steps for administrative reform to overcome bureaucracy

²³ Industrial Development Authority

²⁴ Addressed in details in Appendix (VI) detailing the different governmental bodies involved in the process through which the Egyptian IZs are planned and related laws and regulation.

²⁵ General Authority of Manufacturing.

²⁶ Fund for Supporting the Establishment, Extending public utilities and Development of IZs.

²⁷ Supreme Council for Planning and Urban Development.

²⁸ National Centre for Planning the State Lands Uses.

and improve the investment atmosphere. Perhaps the most significant of these engagements is the so-called Guillotine Contract (In-G-58) and the contract with the consultancy office Booz-Allen that worked on the so-called One Window Policy (In-G-41). It (the One Window Policy) is supposed to help improve and facilitate licensing procedures for industrial projects. After the investor was dealing with 18 various ministries and bodies, according to In-G-58, he/she would deal only with a single window in the IDA. Accordingly, the timeline for issuing licenses has been reduced from several months as confirmed by In-G-58 to a maximum of two weeks as also stated by the ministerial decree (Rasheed, 2008a).

In an interpretation of the nature of licensing procedures of this new policy and after the issuance of the Unified Building Law No. 119/2009, In-G-58, Assistant Executive Director of the FSEEDIZ, explained that investors, at first, shall ask for a land booking application form for an industrial project. This form must be filled and supplemented with the necessary papers and official documents. No later than two weeks, the examination committee of the IDA shall study this form and give an initial approval on the project, also give the investor a formal letter to receive the land from the competent administration authority, and then the licensing process starts (In-G-58, Rasheed, 2008a). Drawings of the project shall be prepared by a planner who has been contracted by an investor. This planner is responsible alone for the validity of his/her drawings and its harmony with the planning and design codes therein. Therefore, the competent administrative authority shall ensure the fulfilment of drawings without reviewing the technicality of these drawings (Mubarak, 2008b).

In addition to the One Window Policy, the contract with Guillotine came up with the cancellation of 80 ministerial decrees, contrary to the basic industry law, and a number of resolutions and other laws (In-G-41, Rasheed, 2008a). This is in addition to the disengagement between different resolutions and laws related to specifying industrial activities and their classification, and the endorsement of the Industry Law No. 21/1958 as the only reference in this concern (Rasheed, 2008a).

In-G-58 criticizes the above mentioned attempts blaming the choice of the team members of the Egyptian officials accompanying the international consultants. It was based on loyalty rather than efficiency and thus such a team works as a barrier against the effective transfer of experience, thoughts and ideas from top to bottom. Therefore, he sees that there will not be the desired benefit from hiring these foreign bodies (In-G-58).

In Chapter (6), the previous mentioned attempts will be examined, especially the licensing and approval procedures through the analysis of the case studies, and, therefore, whether the law is applied or not will be determined.

Egyptian initiative to reform the business atmosphere "Errada"²⁹:

Errada is an Egyptian governmental initiative designed to support the State's efforts to build a system of revision and amendment of the legislative instruments related to the business atmosphere. It depends on partnership between Egyptian public and private institutions to improve competitiveness and efficiency of the Egyptian economy and create more jobs. The initiative has been launched in February 2008 by the ex-Minister of trade and industry, decree No. 1089/2008 (Rasheed, 2008b), and operates under the umbrella of the Ministerial Group of Production³⁰ that is managed by the Minister of MTI. Errada seeks to contribute to the implementation of the reform plan adopted by the State since 2004 by reviewing the legislative tools in the business atmosphere and making recommendations aimed at improving the investment atmosphere and by contributing to solving the following problems (Errada, 2011a):

- The large number and complexity of legislative instruments.
- The lack of a clear statement of legislative instruments in force.
- The absence of a system identifying cancelled decisions.
- Overlap between agencies responsible for issuing regulations.
- Inconsistency of decisions release cycle in all ministries.
- The lack of a specific mechanism to study the economic impact of new resolutions.

Errada is based on four major objectives (Errada, 2011a):

- Identifying existing legislative tools concerning the business atmosphere through comprehensive inventory.
- Simplifying legislative instruments that were captured by an organized review in consultation with the business community through the Advisory Council of Business.
- Allowing all legislative tools to all people through an electronic record.
- Seeking to assess the economic impact of legislative instruments based on the analysis of different alternatives for establishing governance principles.

²⁹ "Errada" in Arabic means "Will" in English

³⁰ The Group consists of the ministers of finance and investment, military production, agriculture, health, population, transport and tourism in addition to minister of trade and industry as a rapporteur of the group. Its main objectives are: increase work opportunities, increase investment in all sectors of production in particular industrial sector (Ahram, 2006).

In this context, Helmy Abouleish, Chairman of the Egyptian National Council for Competitiveness, through the proceedings of the conference issuing the seventh version of the Egyptian Competitiveness Report entitled " Green Egypt", stressed the importance of Errada and the aim from it, saying:

... Errada has started the process of streamlining and rationalizing the legislative tools. It also took the initiative to organize the dialogue between institutions of public and private sector. The objective of this initiative was represented in building an Egyptian efficient system to manage the procedures and regulations concerning public and private institutions. This system is based on transparency and justice aiming at stimulating and creating a competitive economy. (Rasheed, 2010b)

Eleven ministries have joined the initiative in the first stage: investment, housing, oil, trade and industry, management development, community development, agriculture, tourism, health, finance, and transportation. Errada central unit together with the ministerial units set up the procedural manual of accounting which has become a general framework for inventory. Hence, ministerial units accounted more than 34,000 legislative tools that affect economic and business atmosphere in Egypt and then edited them to the electronic database of Errada in preparation for reviewing them. During the period from March 2009 until July 2010, the initiative reviewed about ten thousand legislative instruments representing about 32% of those that have been accounted. Based on the audit, about three thousand recommendations were released leading to the cancellation and the integration of about 1400 legislative instruments that have been implemented in accordance with resolutions issued by five ministries (Errada, 2011b).

Private sector initiatives supported and encouraged by the Egyptian Government

Egyptian National Council for Competitiveness (ENCC):

The Egyptian National Council for competitiveness was established in February 2004 by the efforts of a number of Egyptian business leaders and academics. That was after their participation in the annual campus of World Economic Forum (WEF) and by the support of Eng. Rasheed Mohamed Rasheed Ex-Minister of trade and industry. Also, the Arab Council for Businesses of WEF, the Egyptian Association of Young Businessmen and the International Economic Forum of Egypt have contributed in the establishing of the ENCC. It is meant to be a forum for dialogue among economists, private businesses sector representatives, decision-makers and representatives of the civil society institutions. It stands as an instrument for influencing both government policies and business atmosphere as well as public opinion in Egypt with a view to contributing to a better quality of life for all citizens.

This can be achieved through doing its role effectively and efficiently in raising awareness about the concept of competitiveness and proposing policies promoting and supporting efforts to improve the status of Egypt competitiveness globally. Therefore, NECC is considered to be the first Egyptian non-governmental organization dealing predominantly with competitiveness. The most important work and achievements of the NECC is its contribution³¹ to the process of legislative reform through Errada by playing a coordinator role between Errada and the private sector during the audit process which began on 1st of January 2009. The NECC also monitors and consults the business sector continuously and regularly in issuing laws and legislations. NECC uses a legislative impact assessment (RIA)³² during the two previous works (ENCC, 2011).

To conclude, it is now clear that since 2005, the Egyptian Government has made and announced steps to reform the governing system to incorporate sustainable development. The issue which poses itself now is: to what extent these steps have considerably changed the process through which industrial zones are founded in Egypt. More importantly, there is an utmost need to study the factors which control the impact of these steps. Therefore, the following questions could be initially raised:

- What is the current process through which industrial zones are founded in Egypt, and to what extent have the recent arrangements taken by the Government considerably changed this process?
- What are the factors which help shape the process through which industrial zones are founded in Egypt?

Answers to these questions are necessary in order to provide an evidence base for effective interventions to bring about more sustainable industrial development.

2.4. Narrowing down the research focus

Understanding the founding process of the current IZs and its governing factors, and examining the extent to which the recent steps made by Egypt to incorporate sustainability have effectively influenced it, is the initial focus of this research. This initial focus has been

³¹ The Egyptian National Council for Competitiveness contributes in the process of legislative reform through one of its initiatives known as the Business Advisory Council

³² The legislative impact assessment study aims at improving the quality of legislation where the provided legislations are assessed in terms of an objective study based on information and actual facts in a context of clear policies. This requires analysis and measurement of economic and social impacts - affecting certain areas which are identified in advance - resulting from the application of the proposed legislation. Analysis of the proposed legislation allows conducting an assessment and comparison of options for the various parties concerned, which include the authors of the legislation and the representatives of the business community ((National Council for Competitiveness))

narrowed down after constructing a preliminary comprehensive conceptual framework for founding sustainable IZs from available literature on good governance and SD. This framework has been used in a pilot study to investigate the local context and collect the available data and literature to help the researcher identify a contextual researchable issue. The pilot study came out with some initial results that helped narrow down the research focus from the founding process to the planning process of IZs. This section therefore, discusses the methodology used in the pilot study and concludes the findings of the pilot study. It ultimately poses the questions which this research attempts to answer.

2.4.1. Pilot study methodology and results

Given that there is a gap in the practice of sustainability, and that a grand theory of governance for sustainable development is extremely doubtful, a grounded theory approach is proposed in this research for the investigation of the Egyptian case. Hence, it was essential to develop, from the available literature, a comprehensive conceptual framework for founding sustainable IZs that could be used to initially collect and structure data on the founding process of Egyptian IZs.

To construct this framework, the normative and empirical literatures, like Geng and Yi (2005), Hollander (2005), Lowe (2001), OECD (2002), Qi (2005), Sterr (2005), Sundermann-Rosenow (2005), AMCG (2008), and Solutions (2008), were analyzed for overarching governing understandings, ideas and components through which sustainable IZs could potentially be brought to reality. This framework was designed as a best practice model which contains a combination between policies and instruments that need to be applied in different stages of the process of founding industrial zones. Constructing this framework was only to be used as a catalyst that could initially help in collecting relevant data from the local Egyptian context. To investigate the local context and to collect and update the data needed, a pilot study was conducted that included the following:

- Conducting a number of informal interviews with decision makers from the industrial sector and relevant bodies.
- Attending an international conference in Egypt focusing on the development of new urban communities, to get information about the recent ideas/directions/approaches in the academic and practical environment.
- Collecting documentary data related to the legal and institutional framework in Egypt as well as resources that could help understand the extent to which sustainability is understood in relevant ministries.

- Increasing the base of knowledge about stakeholders and public sector views on sustainability, industry and the governmental attitude towards sustainable development. This base has been gained from the Egyptian media.

By analyzing the data collected from the previous resources, some initial results have come out as follows:

- The Egyptian Government strongly endeavours to reform the legal and institutional framework to develop the industrial sector to attract investments to provide more work opportunities. However, there is a large contradiction between the governmental rhetoric and the opponents' critique about the governmental role towards applying the following:
 - Strengthening the role of major groups in participatory and deliberative decision-making.
 - Transparency, openness and disclosure,
 - The process by which those in authority are selected, monitored and replaced, and
 - The respect of law, order and independent judiciary.
- The governmental industrial bodies, which have the power, by law, by the political agenda and by practice, to leading the process of founding industrial zones in Egypt, lack an understanding of sustainability. Yet, the governmental environmental bodies which are responsible, by law, for applying sustainability have enough understandings of sustainability and industrial ecology but are with no power to intervene to improve the process.
- The IZs founding process is complicated where the decision making stage is so much controlled by the central government where other partners are marginalized. The planning stage represents the best area for partners in general and planners specifically to participate aiming at reaching sustainability. In this stage, experts and planners' ways of handling sustainability seem to be in the orbit of sanitary engineering and environmental management. They are to some extent away from the environmental sustainable dimensions.

In relation to narrowing down the research focus, as the Government dominates the decision making stage without the involvement of other stakeholders, and the planning stage represents an opportunity for public and technical participation, this research focuses on the planning process of IZs. What increases the importance of the planning stage is that it,

theoretically, directs the following stages from implementing to operating, monitoring and follow up. Therefore, it is plausible to suggest that a failure to apply sustainability in this stage should result in sustainability being lacking in the following stages while the contrary is not true. In addition, it was found that, according to the limitations of time and money, it will be hard to conduct in depth research into the comprehensive and complex process of founding IZs.

Consequently, the researcher has updated literature on sustainable industrial zones in general and on the planning for industrial ecology specifically. The following section shows a discussion on this review and its conclusions.

2.4.2. Industrial Ecology³³ as an operational approach to sustainable development

The early literature was very optimistic about what industrial ecology could provide. However, many scholars have agreed that industrial ecology (IE), the “science of sustainability” (Gibbs and Deutz (2005), p.453)³⁴ which mimic the nature environment, represents accurately one of the paths that could provide real solutions of how the concept of sustainable development can be made operational in an economically feasible way (Erkman, 1997). Eco-industrial parks (EIPs) are the IE emerging operational models that are being spread worldwide which can reconcile the three dimensions of sustainability: social, economic and environmental (see Erkman (1997), Elabras Veiga and Magrini (2009), Polyakov et al. (2008), Singh et al. (2007), Cervantes (2007), Geng and Hengxin (2009), and Kim (2007)). Adopting this concept, the literature considers industrial symbiosis (IS) as the primary concern of industrial ecology (see Roberts (2004), Gibbs and Deutz (2005), Erkman (1997), Tudor et al. (2007), Singh et al. (2007), Geng et al. (2009), Cervantes (2007), Liwarska-Bizukojc et al. (2009) and Kim (2007)). The case of Kalundborg make it more than a smart idea. It confirms the facts that IS can be practical and economically viable (Erkman, 1997). In the same area, the co-location and incorporation of firms that can reprocess wastes of other activities is critical to the success of the IE (Roberts, 2004). Gibbs and Deutz (2005) warned that defining IE or EIPs is facing the same risk of ambiguity as for SD. The expectations of this ambiguity increases due to the fact that IE till now “lacks a more of a comprehensive theoretical framework” (Boons et al., 2011)³⁵ or a grand theory/background or

³³ The ideas on IE are explored in greater detail in the following chapter.

³⁴ As mentioned by Allenby, 1999,p.40 in IEEE through Gibbs and Deutz 2005.

³⁵ Very recently, at the time of writing up this thesis, Boons et al. (2011) suggested a theoretical framework for industrial symbiosis (IS). They stated that their paper fills the gap of the absence of such a conceptual framework but only regarding IS. Their framework has a very specific focus on IS and does not cover comprehensively industrial ecology and governance for SD contrary to the conceptual framework constructed in

grand design (Agarwal and Strachan, 2006). The reason is that the field is still in its early stages where the gap is substantial between the concept and its implementation (McManus and Gibbs, 2008, Gibbs and Deutz, 2007). However, McManus and Gibbs (2008) noted that there is a need for the research to be continued looking for overcoming the barriers for its implementation from the perspective of various decision-makers, and recognizing how current industrial decisions are being made and the level of knowledge/acceptance of industrial ecology.

Gibbs and Deutz (2007) and Vermeulen (2007) mentioned that many authors, like Welford (2004), in the last decades, see a role for social sciences in guiding the implementation of IE. Hence, they have called for more input from other relevant scientific fields, where planning is one of the stated fields. In addition, linking the IE to these fields is a challenging job (Vermeulen, 2007).

Welford (2004) sees that the science and engineering approaches to IE have largely advanced beyond the social science ones. Furthermore, comprehension of processes and concepts of social theories is lacking. Therefore, there is an utmost need to show that IE can work in our communities where this is a demanding focus of the research still somewhat underdeveloped (Gibbs and Deutz, 2007). In a response, many authors argue that planning has a key role in applying IE. In this context:

- Roberts (2004) and a significant volume of literature (See Tudor et al. (2007) and Elabras Veiga and Magrini (2009)), noticed that planning is essential in encouraging new synergies and interchanging behaviour by locating activities in EIPs in clusters. The more strong the clustering, the greater are the expectations for synergies and for the implementation of IE.
- Gibbs and Deutz (2005) confirmed that EIP projects must be planned for a long term vision and to allow a gradual (incremental) approach, and each phase needs to be financially viable. This may be more viable than a purely park-based approach. They also contend that an EIP must be “a community of, and not just co-located, businesses” (Gibbs and Deutz, 2005, p.463). It is this networking that will encourage materials interchange in the long term. In this community, it is helpful for planners

Chapter (3) of this research. Furthermore, Boons et al. (2011) also stated that their conceptual framework “specifies basic relationships between variables. Further research is required to define variables more precisely, and establish in more detail the relationships among them” p.910. The conceptual framework constructed in this research on one hand, and the theorization on the actual process of founding industrial zones on the other attempt to fill the current gap in knowledge indicated, and, hence, stand as the novel contribution of this research.

and policy makers to understand the importance of individual champions to the development of EIPs. The development of social relationships is necessary for founding an EIP not just on technical basis but also as a community (Hewes and Lyons, 2008).

- Tudor et al. (2007) believes that EIPs have in general tended to arise naturally not through deliberate planning. However, they declared that various writers have asked for a more centralized planning process at different levels to overcome market failures concerning synergies. The writers contend that an overall framework to regulate EIPs and reduce any limitations is essential.
- Zhao, et al. (2008) stated that there are limitations not only in applying IS but also in the comprehensive evaluation. Some EIPs plans have failed to establish sustainability targets, indicators and benchmarks, maintenance and monitoring plans in detail. Therefore, many innovative planning strategies were simply adopted as decorative practices. Zhao, et al. (2008), therefore, sees that simulation and evaluation methods are important to measure quantitatively the strengths and weaknesses of the different scenarios adopted within the eco-industrial system plan.
- Fernandez and Ruiz (2009) called for planning that defines and incorporates subsystems and the important aspects of SD.

To conclude, IE is considered as an important tool for operationalizing sustainable development. The primary pillar of this concept is IS where the co-location and integration of firms can reprocess wastes of other industries. IE lacks a grand theory and is subjected to ambiguity. IE is still in its early stages, facing many barriers which make a gulf between the idea and its implementation which requires more social research regarding the role of planning in guiding the implementation of industrial ecology. One of the main reasons behind this gap is that, in the developing process, partners don't understand their roles in the process and are unaware of the importance of relationships between each other in advancing the implementation of industrial ecology in our societies. Hence, there is a need to continue the social research seeking practical ways to overcome the current barriers.

From this point of view, the role of planning emerges to guide the implementation of IE. Planning is essential at many levels in applying IS, using clustering as one of its tools. It is essential that planning, to reach the goal, has to be long term allowing for a gradual approach, and each phase needs to be financially viable. Planning also has to be oriented to using the existing social relationships.

Accordingly, to specify in more detail the focus of the research; it looks at the processes where different constellations between the public and private actors contribute to the planning of industrial zones, and to understand these processes and the governing factors. Then it is to examine the degree to which the processes cooperate with sustainability and industrial ecology.

2.5. Discussion and redefinition of the research question

As discussed in Chapter (1), Egypt has recently set out to prepare a new national urban development map to accommodate double the current population for the year 2050. Within this intended national urban plan, industry is one of the main proposed economic bases. Yet, it is widely argued that existing industrial development in Egypt is not sustainable. It was also found that theorising upon the current process of founding IZs in Egypt is lacking. Environmental conditions are expected to get worse, if the proposed IZs are going to follow the footsteps of the existing ones. It was concluded from local literature, the most recent of which was published before 2005, in line with the international debate, that there is a need for an empirical testing to measure the extent to which the industrial system in Egypt is moving towards governance for SD and how and why the process has produced unsustainable IZs. The main challenge for Egypt has been to develop an appropriate setup/framework that can adopt a governance system for SD that is culturally sensitive to the country. Therefore, Egypt, after 2005, has taken some enhancing steps to achieve a governance system for SD that could improve the industrial development process. Yet, these steps have not yet been practically examined and there is no literature that theorized on its effects on the sustainability framework of Egypt in general and on the founding process of the IZs in specific. The question which poses itself now is: to what extent have these steps considerably changed the process through which industrial zones are founded in Egypt. In line with IE lacking a grand theory and a huge gap between the idea and its practice, the role for planning emerged from the international discourse to guide the implementation of IE. The whole process of founding IZs in Egypt seems to be complex and controlled by the government. In this process, the planning phase represents a greater opportunities than other phases in allowing the intervention of other partners. For these reasons, in addition to the research limitations, the research focus has been narrowed down from the founding process to the planning process. To specify in more detail the focus of the research in line with the international discourse on IE, the research will be looking at the processes where different partners, public and private

actors, are involved. It will then theorize for the processes and its governing factors, and then examine the degree to which the processes cooperate with sustainability and IE.

In light of the foregoing, the research questions are redefined as follows:

1. Does the Egyptian government have an operational planning framework that could lead to sustainable industrial zones?
 - a. What is the official framework of the process under which the industrial zones should be planned?
 - b. What is the actual process through which the industrial zones are planned?
 - c. Consequently, to what extent is the current process sustainable and applying industrial ecology?
2. What are the factors that influence/shape the current process through which the industrial zones are planned?

Answers to these questions are necessary in order to provide an evidence base for effective interventions to bring about more sustainable industrial development. To answer these questions, the following chapter discusses the significant need for an in-depth conceptual framework for the planning process of EIPs. This framework is rather a catalyst that could initially help in collecting data relevant from the local Egyptian context.

3. CHAPTER THREE: INDUSTRIAL ECOLOGY: THE CONCEPTUAL FRAMEWORK OF THE PLANNING PROCESS

3.1. Introduction

The previous chapter discussed the problem of the international discourse about industrial ecology (IE) and eco industrial parks (EIPs). It was widely contended that the field is still in its early stages where the gap is substantial between the concept and its implementation. More importantly, IE lacks a comprehensive framework and is subjected to the same risk of ambiguity as for sustainable development (SD). A significant role for planning emerged from the international discourse to guide the implementation of IE. The previous chapter therefore redefined the research questions asking about the process through which the IZs are planned in Egypt and the extent to which this process is sustainable as well as its governing factors. To answer these questions, the need for an in-depth conceptual framework significantly came out as a catalyst that could initially help in organizing and collecting the data relevant from the local Egyptian context. This chapter therefore attempts to construct this conceptual framework of the process through which EIPs could be normatively developed. This framework is seen in this chapter as a *first step* to investigate the current process of planning IZs in Egypt, and developing it, when needed¹.

The chapter is organized in four sections. The first presents the overarching concepts that normatively have to govern the formation of the enabling context for the implementation of IE, and the planning process. The second outlines the set up of the context in relation to its different components such as education and research, institutional and regulatory frameworks, networking, and funding. The third lays down the planning process through which EIPs could be likely developed. Materials reviewed in these three sections take the shape of consecutive points which logically build on each other towards the construct of the framework, which is, then, synthesised as a 'whole' in the fourth concluding section.

¹ It is worth mentioning here that this chapter uses a normative style in formulating the conceptual framework. The main purpose of this framework is to help organizing data collection and that is why it is found that using the normative style is easier to follow in looking for relevant data from the Egyptian context than using the descriptive style. Another important reason for using such style is to use the research findings, synthesized in Chapter (8), concentrating on the Egyptian realities to reflect on the concepts of this framework. This aims at contributing to the international discourse by constructing a new list of barriers to the implementation of IE form understandings of the planning process of the Egyptian IZs and the factors governing its shape. Furthermore, in a future research, the potential comparison between the ideas presented by this conceptual framework and the investigated realities of the Egyptian process could enrich local scholarly as well as societal debates on how to develop the current process towards IE. As a first step on this breathtaking challenge, Chapter (8) ends with recommendations that could potentially help develop the current process.

3.2. Methodology and significance of the framework

To construct this framework, this chapter analyses normative and empirical literature available in the field of IE, governance and SD, looking for overarching governing concepts, contextual settings, and planning processes through which IE could potentially be brought to reality. A synthesis of these ideas/components into a coherent framework constitutes a part of the contribution of this research.

The importance of this framework emerges from being a catalyst to help evaluate the ability of the current process in Egypt to produce sustainable industrial development. That is utterly needed now, as Egypt is currently planning for an outstanding urban-industrial growth to accommodate double its population up to 2050. This chapter does not present this framework as a recipe that is placeless or timeless. Being a collection of mosaics, this framework is evidently inapplicable to any context. As indicated in Chapter (2), a grand theory of governance for SD or of IE is lacking. This highlights the importance of constructing this framework to be used to initially help in collecting and organizing data relevant from the local Egyptian context. These data are then to be analysed inductively towards an understanding of the current process of planning IZs, its shaping factors, and the obstacles it faces. Further, the ideas presented by this framework could enrich local scholarly as well as societal debates on how to develop the current process towards IE.

3.3. Industrial ecology: the conceptual framework of the planning process

3.3.1. Overarching concepts

This section presents two groups of concepts that normatively govern the formation of the enabling context for the implementation of IE and the emerging planning process. The first group, see Figure (3-1), generally addresses the nature of both, SD, governance and IE on one hand (mainly concluded from the previous chapter), and the local context on the other; and consequently hints to some principles/ideas that have to be considered in setting the context and the planning process to bring about best possible results. The second group, see Figure (3-4), identifies the gist of IE along with its major characteristics which have to inform and contribute to the formation of the planning process.

3.3.1.1. General concepts

- SD, governance (Jordan, 2008), and IE (Gibbs and Deutz, 2007, McManus and Gibbs, 2008, Agarwal and Strachan, 2006), are all ambiguous terms. Intensive scholarly and societal debates are needed to contextually define these terms (Jordan, 2008, McManus and Gibbs, 2008).

Figure 3-1: General concepts

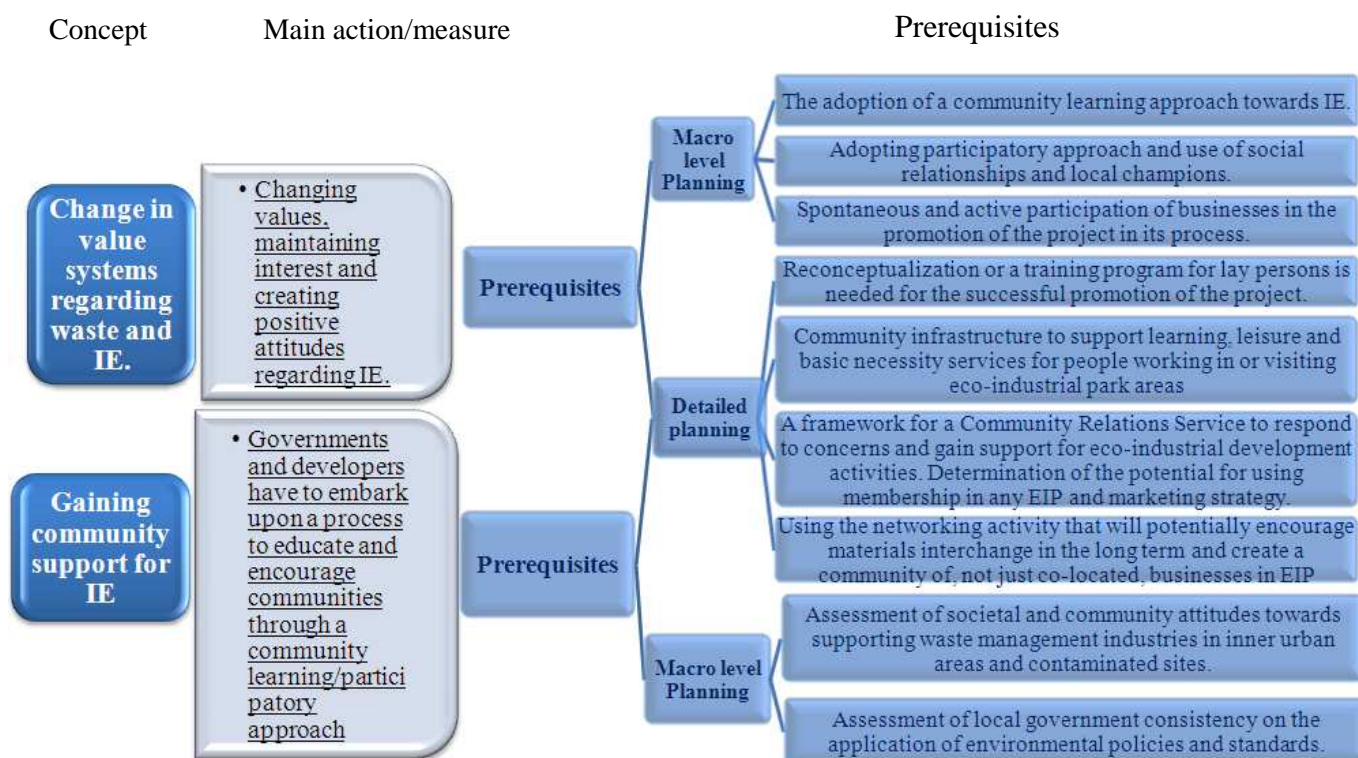
Society as a whole has to	locally define the ambiguous terms of IE					
	take actions (planning approaches, policies, plans and regulations) to make it viable. They are:	incremental	To insure the integrity and effectiveness of these actions:.	a context-specific governance system has to be created.	One of its powerful tools to guard the realisation of IE and most preferable in such a complex unpredictable context is:	a proscriptive, incentive-based code of law
		long term				
		interdisciplinary				
		integrated				
		coordinated				
regularly updated						

- SD is fundamentally a normative idea and achieving it is a complex issue (Jordan, 2008) that is handled in a continuously changing context. Therefore, policies, plans and regulations have to be regularly updated (Geng and Yi, 2005).
- SD principles related to its three pillars, society, economy and the environment, conflict sharply with one another, and hence require systems of governance that resolve conflicts and reach coordinated policies (Jordan, 2008).
- Governance mode has to be cognizant to its context (Jordan, 2008). Compared with developed nations, developing nations face different environmental, economic and social constraints, and, therefore, have to adopt a different approach to implement IE (Geng and Yi, 2005).
- Communities do not accept change which can make the implementation of IE a challenging task since it involves change. Gaining community support for applying IE is important. This requires governments and developers to embark upon a process to educate and encourage communities to learn about and support investment that would uphold IE concepts. A community learning/participatory approach to the development of EIPs will avoid much unfriendliness by local communities (Roberts, 2004). Figure (3-2) shows the concepts of gaining community support for IE in detail²

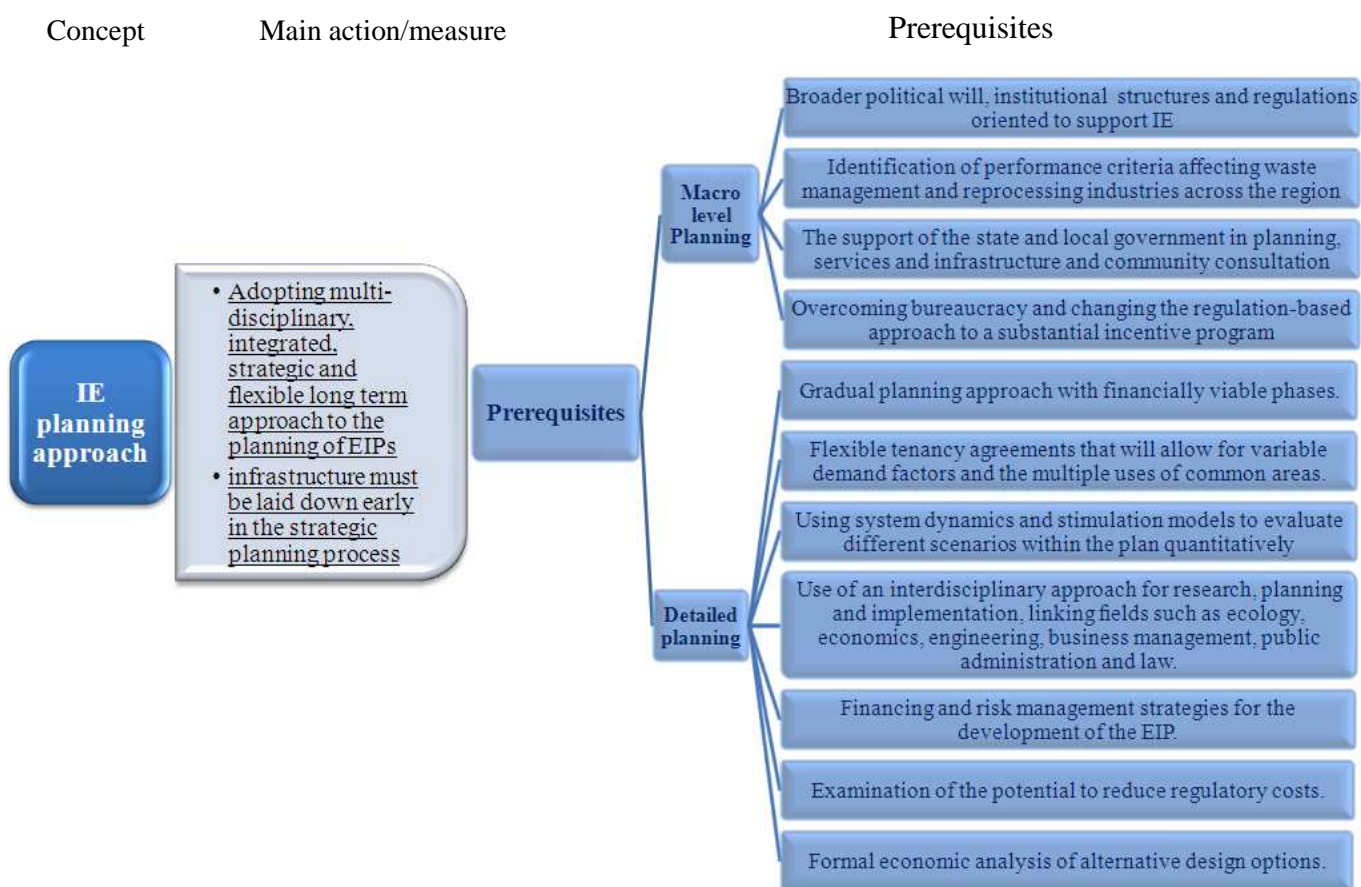
² Each of the figures similar to this one shows one of the IE concepts then the main action to be done to adopt it what also could be used to measure the application of the mentioned concept. It then addresses the prerequisites to the application of the concept on both macro and detailed levels of planning. It is important here to mention that the prerequisites are discussed and referenced in variant places in this chapter according to their appropriateness to other concepts and settings.

- Significant factors constraining IE are societal attitudes towards waste, and value systems of business, government and communities regarding treatment methods. Therefore, changing value systems regarding waste and IE, and maintaining interest and creating positive attitudes to mechanical or biotechnologies are indeed crucial concepts (Roberts, 2004). Figure (3-2) shows the concepts of changing the values system regarding IE and wastes in detail.

Figure 3-2: Societal change for IE



- IE is not a system that is merely applicable inside the boundaries of an EIP (Geng and Yi, 2005), but a culture that the community has to adopt. SD should not continue to be understood as a mere environmental matter (ESCWA, 2003). IE is, therefore, an interdisciplinary field of studying industrial systems in concert with nature and society (Geng and Yi, 2005). To apply IE, therefore, a long-term, incremental, multidisciplinary, integrated, and coordinated planning approach has to be adopted by the government (Geng and Yi, 2005, Gibbs and Deutz, 2005, Roberts, 2004). The outcome of such an approach has to be flexible and subject to regular scrutiny and potential change (ESCWA, 2003). Figure (3-3) shows the IE planning approach in detail.

Figure 3-3: IE planning approach

- For a regulatory/legal setup to be favourable, effective and realistic, it has to be not only context-specific, but also case-specific. A shift from a regulation-based to incentive-based approach, or from a prescriptive to proscriptive code of law, is a necessity. At present, the literature reviewed is in favour of a setup which tells people what not to do (as opposed to telling them what to exactly do), and encourages them to achieve good results rather than follow certain steps or abide by insensitive generalised regulations (Roberts, 2004, Shalaby, 2010).

3.3.1.2. *Industrial ecology concepts*

The primary concern of IE is industrial symbiosis (IS)/cycle closing (Boons et al., 2011). The co-location and integration of firms which can use or reprocess the waste of other industries in the same locality is critical to the success of IE (Roberts, 2004, Gibbs and Deutz, 2005, Tudor et al., 2007, Erkman, 1997, Geng et al., 2009, Singh et al., 2007, Cervantes, 2007, Liwarska-Bizukojc et al., 2009, Kim, 2007). Closed industrial system (Shalaby, 2003), industrial ecosystem (Geng and Yi, 2005), industrial round put system, and circular economy (Sterr, 2005) are different terms used to express the gist of IE to imply ideas of lowering the

ecological footprint (Shalaby, 2003), mimicking nature, optimizing the use of energy and resources (Geng and Yi, 2005), and meeting the challenge of resource depletion (Sterr, 2005).

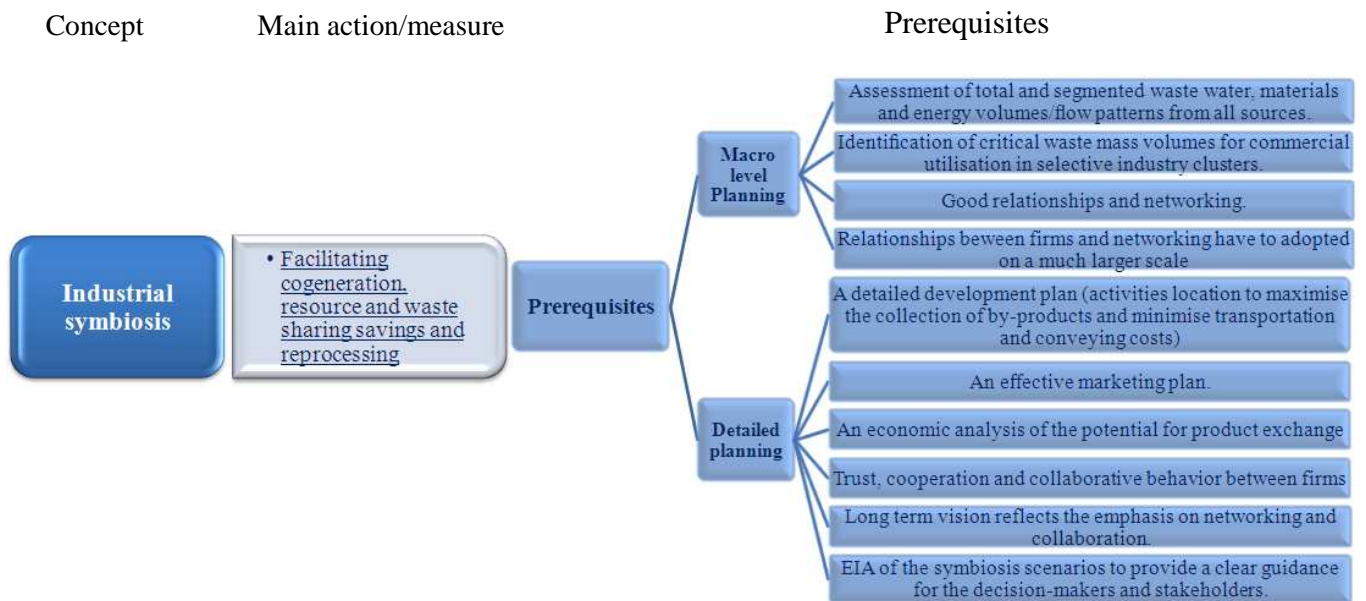
Figure 3-4: Industrial ecology concepts

IE principles and concerns	symbiosis as a primary concern (The more intense the agglomeration, the greater are the prospects for innovation and synergies)	mixed land uses with shift from activity-based to performance-based appraisal in the co-allocation process of uses/firms	waste as a source (waste and resource sharing and waste reprocessing)	EIPs (a community of sharing, integrated industrial and business enterprises) as a means of affording variety and redundancy	industrial regions as counterparts for EIPs (diversity of actors and activities enhances connectance and opens up new possibilities for cooperation)
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- In this regard, waste must no longer be seen as something that is harmful, but as a potential resource (Erkman, 1997, Elabras Veiga and Magrini, 2009).
- IE works best where there is a strong agglomeration or clustering of establishments that have the capacity to utilise waste as a resource in production. The more intense the agglomeration, the greater are the prospects for innovation and synergies (Roberts, 2004, Tudor et al., 2007, Erkman, 1997, Elabras Veiga and Magrini, 2009). This intensity implies not only variety, but also redundancy, of the agglomerated establishments. In support, reporting on Chertow (2007), Boons et al. (2011) state when defining IS:

[E]ngaging traditionally separate industries in a collective approach to competitive advantage involving physical exchange of materials, energy, water, and by-products. The keys to industrial symbiosis are collaboration and the synergistic possibilities offered by geographic proximity. p.905.

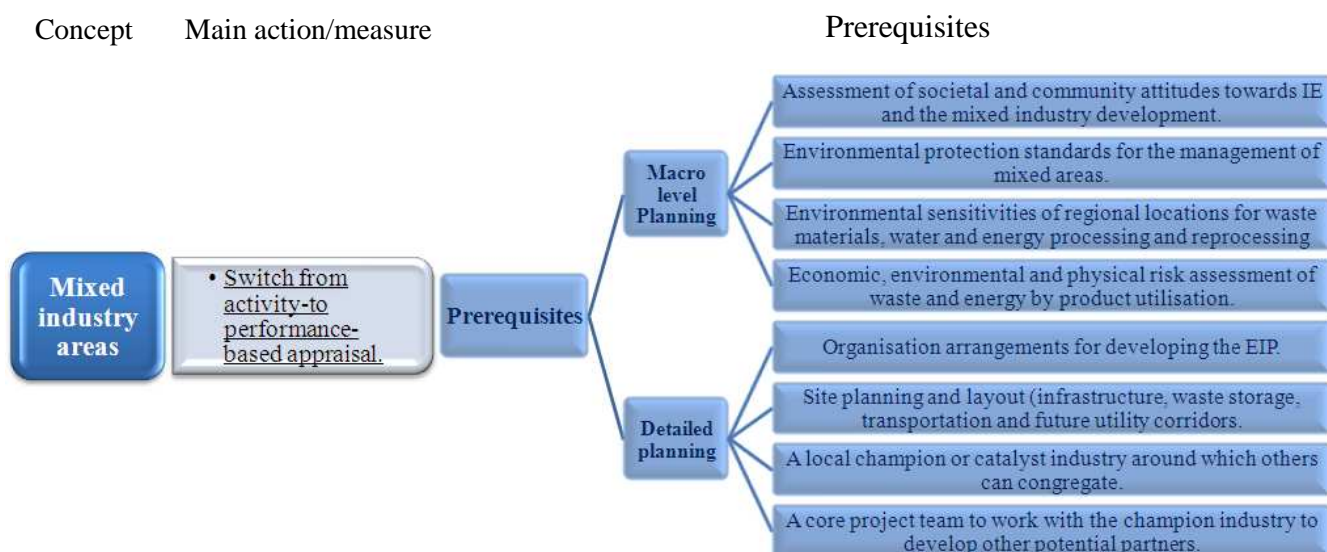
According to Sterr (2005), the principle of redundancy has proven to be one of the vital success factors of the natural role model. In other words, for closing the loop in an industrial setting, the number of establishments within an industrial context should not only extend into various branches and input-output systems in order to increase the probability that a fitting partner is among them, it should also provide several species of the same kind. Figure (3-5) shows the concept of industrial symbiosis in detail.

Figure 3-5: Industrial symbiosis

- EIPs have to provide such an opportunity of variety and redundancy (Sterr, 2005). An EIP is a piece of a contiguous fenced property owned and managed as a unit for a community of sharing, integrated industrial and business enterprises (Geng and Yi, 2005, Shalaby, 2003). EIPs encourage mixed land uses, and co-location of manufacturers and service providers; and facilitate cogeneration, waste and resource sharing and waste reprocessing (Roberts, 2004). A shift from activity-based to performance-based appraisal is, therefore, crucial in the co-allocation process of uses/firms. A performance-based appraisal would permit a business to be located not due to the nature of its activity, but according to its performance and the external benefits it could create (Roberts, 2004). Figure (3-6) shows the concept of mixed industry in detail.
- However, if EIPs fail short of achieving full industrial symbiosis, industrial regions are powerful counterparts. In fact, the adoption of IE principles on the regional level is argued by some to be more viable than on a purely park-based level (Gibbs and Deutz, 2005, Sterr, 2005). The increased diversity of actors and activities of the regional level, according to Korhonen and Snäkin (2005), “enhances connectance and opens up new possibilities for cooperation” (Boons et al., 2011, p.906) . Lyons (2007) sees that closing the loop is controlled by an economic logic for the companies involved. Therefore, there

is no preferable level at which the loop should be closed. Determining the level³, though, will differ from a context to another (Boons et al., 2011).

Figure 3-6: Mixed industry



3.3.2. Setting the context

Costa et al. (2010) argue that applying IE/IS requires a specific context, ‘the enabling context’, that should consider different knowledge, socio-cultural and socio-political structures, spatial, and temporal settings (Boons et al., 2011). In light of this as well as the above-mentioned concepts, this section shows how to make the context normatively ready to incorporate and implement IE. It sets the societal will central to any real shift towards the application of IE. It highlights the role that education and the media, capacity building and science have to play to raise people awareness on SD/IE issues, advance planning and management skills of industrial systems, and develop research on new technologies and theories of SD. In addition, it shows that institutions have to be restructured, regulatory frameworks have to be more effective and realistic, sustainability-oriented networking has to be established/strengthened among different stakeholders/factories, and funds have to be secured to facilitate governance processes for SD.

Yet, this contextual restructuring, collected from available regional and international literature, is not proposed as a way through which IE could be achieved in Egypt. Indeed, the

³ Sterr (2005) finds that the market size of the industrial region of Rhine-Neckar, Germany with its roughly 2 million inhabitants is large enough to economically guarantee self sustaining recycling processes within its systemic borders, and generalizes that almost any kind of waste that can be recycled within Germany can also be recycled within the systemic borders of an industrial region like that of Rhine-Neckar.

effective setup is a case-specific contextual one which builds on existing institutional and regulatory frameworks. In addition, embedded in the attempt to bring about an effective setup, change has to be gradual, coordinated and responsive to contemporary societal characteristics.

3.3.2.1. *Societal Will*

Society has to have the will to bring about SD. The political will (Gibbs and Deutz, 2007) is part of this, but what really matters is the collective will of all societal groups. Seeking substance not appearance is a key issue in this regard (Geng and Yi, 2005).

3.3.2.2. *Media and Education*

Media and education have a significant role to play in making the society willing and mobilised to bring about/accept SD, see Figure (3-7), through:

- Informing the public of the SD objectives and practices.
- Placing greater emphasis on the responsibility and role of individuals, communities and the private sector in supporting progress towards SD/IE (ESCWA, 2003).
- Affirming the inter-connectedness of development, environmental issues, and health through everyday coverage (ESCWA, 2003).
- Disseminating cleaner production strategies (Geng and Yi, 2005) and best sustainable practices.
- Exposing environmental violations, following up on enforcement of environmental laws, and even rating manufacturers and producers according to their environmental performance (ESCWA, 2003).
- Forming stronger connections with other civil society sectors, including NGOs, and academic and scientific institutions on sustainability issues (ESCWA, 2003).
- Incorporating environmental priorities and sustainability principles into school and university curricula (ESCWA, 2003).

Figure 3-7: Media and education settings

Education and media have to raise people awareness on SD/IE issues	emphasising on	1- the role of individuals, communities and the private sector in supporting progress towards SD/IE	2- forming stronger connections between key actors and civil society sectors with academic and scientific institutions	3- exposing environmental violations and following up on enforcement of environmental laws	4- Incorporating environmental priorities and sustainability principles into school and university curricula
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3.3.2.3. Capacity Building

In addition, to public education, further training is needed for those who are directly linked with the incorporation and implementation of IE. Hence, capacity building has emerged as an essential requirement for efficient planning and management of industrial systems. It aims at strengthening institutions, managerial systems and human resources on issues related to not only the environment but also good communication, exchange of information, and interaction among different stakeholders and levels. Capacity building applies to technical planners as well as industry and governmental managers who need continuous update on eco-industrial principles and methods (Geng and Yi, 2005). The outcome from IE is supported by a high level of capacity building (Boons et al., 2011). A successful capacity building program therefore, see Figure (3-8), has to observe the following:

- Capacity building should directly reflect the needs and overall conditions of the industrial system concerned across different levels/sectors (Geng and Yi, 2005).
- Capacity building should be a long-term process, with clearly stated short, medium and long-term goals which should be evaluated periodically. In this context, much literature gives more attention to the social features of IE as included in SD (Geng and Yi, 2005). Lambert and Boons (2002) describe the EIPs development as a social process dependent on social, ecological, and economic features. They highlight the significance of learning processes among social actors. On the one hand, achieving shallow short-term social changes is comparatively easy, but on the long term, the system could fail as social actors are subjected to fall back into their old behaviour model due to their embedment in an institutional context. On the other hand, to guarantee system change rather than system optimization, all actors of the system should be involved in the change process that should also emerge from the existing system (Boons et al., 2011).
- Moreover, functional networks are an effective way to complement traditional technical assistance. They mainly target communication, information exchange and wide interactions between different partners (Geng and Yi, 2005).

Figure 3-8: Capacity building settings

Capacity building has to advance planning and management skills of industrial systems.	emphasising on	It should be long-term process (with clearly stated short, medium and long-term goals).	It should highlight the significance of learning processes among social actors to avoid the fall back to the old models	strengthening institutions (environmentally, exchange of information, and communication and interactions using functional networks)
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3.3.2.4. *Science and New Technologies*

‘Techno-scientific state’ is critical in enhancing industrial competitiveness (Uttam, 2006) and central to finding sustainable solutions in terms of industrial processes and products. Contextualizing the concept of IE and theorizing on its implementation are basically scientific assignments. Improvement of techno-scientific conditions, see Figure (3-9), is dependent on:

- Pursuing academic research on environmental sciences, SD and IE (ESCWA, 2003).
- Institutionalising a bigger role for experts in policy making, planning and implementation (Sterr, 2005, Geng and Yi, 2005).
- Inventing and marketing appropriate/context specific environmentally superior solutions/technologies (Geng and Yi, 2005).

Figure 3-9: Science and new technologies settings

Techno-scientific state	emphasising on	develop research on new technologies	Contextualizing the concept of IE and theorizing on its implementation	Institutionalising a bigger role for experts in planning	Inventing and marketing appropriate environmentally superior solutions
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3.3.2.5. *Institutional Setup*

This subsection lays down the objectives that have to be ideally achieved regarding restructuring institutions to support governance processes for SD⁴, see Figure (3-10).

- Set the system of governance to be society-centric as opposed to state-centric. The former suggests that the state has been progressively hollowed out in a new era of ‘governance without government’, moving more and more of its policy competences to regional organisations and/or non-state actors (Jordan, 2008). In turn, increase social involvement and institutionalize public consultation and participation (Geng and Yi, 2005). Establish permanent and effective national councils/forums with adequate input from governmental institutions and other stakeholders to serve as a mechanism for facilitating policy integration and coordination. In more conclusive words, adopt/support decentralisation (Geng and Yi, 2005) and participatory decision making processes. In light of this, Costa

⁴ While the proposed setup is ultimately placeless, it cannot be completely separated from the Egyptian contextual socio-cultural and socio-political characteristics.

et al. (2010)⁵ argue that coordinating bodies and governmental policies can promote (or pose barriers to) the IS development by influencing the factors shaping the enabling context of IS. They mainly focus on the influence of policy development at different levels of decision making from supra international to local level⁶ (Boons et al., 2011).

- Secure an open access to information to empower participatory decision making (ESCWA, 2003).
- Hold government accountable to people (ESCWA, 2003).
- Overcome bureaucracy and eliminate corruption to facilitate openness, transparency, and acceptance of change (ESCWA, 2003).
- Fix artificial segmentation of administrative arrangements (Geng and Yi, 2005) towards more effective integrated ones (ESCWA, 2003).
- Set clear jurisdictions and adequately assign implementation responsibilities to different authorities concerned. Overlapping jurisdictions lead to policy conflicts, program duplication and inefficiency. Further, secure a wider jurisdiction for environmental authorities to address cross-sectoral issues (ESCWA, 2003).
- Resolve power politics (ESCWA, 2003), and coordinate among concerned authorities (Geng and Yi, 2005). Facilitate policy integration, coordination and complementarities among institutional bodies seeking to achieve sustainability, i.e., inter-sectoral/inter-ministerial coordination. Provide adequate mechanisms to follow up on policy decisions, resolve deficiencies in policy integration and implementation, and settle disputes (ESCWA, 2003).
- Set mechanisms to allow governmental institutions to over watch other institutions' actions that affect their areas of competence. Alternatively, non-governmental forums/committees can over watch non-compliance and non-integration practices (ESCWA, 2003).
- Advise institutions on means of integrating national SD priorities into their sector strategies, action plans and work programs (ESCWA, 2003).
- Provide competence and mandate to environmental institutions. Secure the ability of environmental authorities to implement legislations (ESCWA, 2003).

⁵ They build on the findings of Mirata (2004) in his assessment of the (National Industrial Symbiosis Programme) NISP in the United Kingdom (Boons et al., 2011).

⁶ Similarly, Costa and Ferrão (2010) see that the IS “can be shaped through an interactive process wherein the government, industries and other institutions are guided towards aligning their strategies in support of collaborative business strategies in resource management” (Boons et al., 2011, p.907).

- Enable existing regional environmental institutions to access and engage non environmental ministries on matters of SD in order to handle the task of supporting regional progress towards SD from a multidisciplinary perspective (ESCWA, 2003).

Figure 3-10: Institutional setup settings

Institutions have to be restructured to facilitate governance processes for SD	emphasising on	society-centric (not a state-centric) governance system (adopting decentralisation, participatory decision making processes)	Overcome bureaucracy, eliminate corruption (holding government accountable to people) and facilitate acceptance of change	Resolve power politics (secure a wider jurisdiction for environmental authorities) and fix conflict and settle disputes (clear jurisdictions and adequately assign implementation responsibilities)	Apply effective coordination among concerned authorities (inter-sectoral/inter-ministerial coordination, adequate follow up mechanisms on policy decisions and resolve deficiencies in policy integration and implementation)
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3.3.2.6. *Regulatory setup*

Reconciling the legislative framework in line with the principles of industrial ecology is crucial. In support, Van Beers et al. (2009) state that the legislative framework poses particular challenges for applying IS in Australia (Boons et al., 2011). Therefore, under the general connotation that a shift from a regulation-based to incentive-based approach (Roberts, 2004), or from a prescriptive to proscriptive code of law (Shalaby, 2010), is a necessity, an effective realistic regulatory setup, see Figure (3-11), tuned to IE requires the following:

- Change planning regulations from segregated land uses to allowing mixed harmoniously located areas of industrial and non-industrial activities; and set standards for environmental protection of these mixed areas (Roberts, 2004).
- Develop new regulations to promote waste reuse (Geng and Yi, 2005), and regulate environmental storage and handling of waste materials (Roberts, 2004). In support, Van Berkel et al. (2009) illustrate how the Eco-Town Program was became possible after the Japanese government set up a comprehensive legislative framework enabling a recycling-based society.
- Allow the creation of waste sinks or concentrations, and the establishment of reprocessing and energy recovery industries/activities (Roberts, 2004).

- Use economic instruments such as incentives, taxes, effluent charges, prices, and quotas to better allocate and use resources and services (Geng and Yi, 2005). For effective economic instruments, secure a strong monitoring system; a successful voluntary reporting system; a political will to remove subsidies and cancel exemption from complying with national environmental laws and standards; and fully and fairly apply these instruments to all concerned (ESCWA, 2003).
- Enact laws for cleaner production promotion (Geng and Yi, 2005); take measures needed to enforce (ESCWA, 2003) and close loopholes in (Geng and Yi, 2005) laws; and establish effective mechanisms to resolve disputes (ESCWA, 2003).
- Enact public right to know and access to information (ESCWA, 2003).
- Revise and amend regulations contradicting the above-mentioned regulatory setup.

Figure 3-11: Regulatory setup settings

Regulatory frameworks have to positively respond to IE requirements and be realistic and effective	emphasising on	shift from a regulation-based to incentive-based approach or from a prescriptive to proscriptive code of law	Change planning regulations from segregated land uses to allowing mixed harmoniously land uses and set standards for environmental protection of these mixed areas	Develop new regulations to promote waste reuse, storage and handling.	Enact laws for cleaner production promotion, public right to know and access to information
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3.3.2.7. *Networking and Information Systems*

Networks among different stakeholders are crucial for coordination inside an EIP/region in which sustainable cyclic management could be realized. In these networks, industry meets science and politics. Stakeholders exercise interdisciplinary and inter-organisational knowledge and ideas exchange (Sterr, 2005). For Lambert and Boons (2002), achieving sustainability is particularly difficult in mixed EIPs due to conflicting interests of the involved actors, a lack of collective networking, and enough cooperation experience (Boons et al., 2011). That is why Gibbs and Deutz (2005) recommend that an EIP should be (in a real sense) a community of, and not just co-located, businesses. It is this networking activity that will potentially encourage materials interchange in the long term and distinguish eco-industrial developments from other, more superficial, initiatives for the greening of industry. For Hewes and Lyons (2008), the development of social relationships is necessary to creating

an EIP, not just the technological connections. Indeed, systems make it work, people make it happen. They also emphasize on the role of champions of the local communities in building the trust needed for the establishment of social connections necessary for industrial symbiosis developments (Hewes and Lyons, 2008). For successful networking, see Figure (3-12), the following have to be considered regarding information systems:

- Support/develop an information system/database that helps plan for/manage optimal reduction, reuse and recycling of resources (Sterr, 2005, Geng and Yi, 2005, ESCWA, 2003).
- Face the challenge of information lack of transparency and incompatibility in order that a useful database could be reached (Sterr, 2005).

Figure 3-12: Networking and information systems settings

Sustainable networking has to be established/strengthened for inter-organisational knowledge/materials exchange among different stakeholders/establishment	emphasising on	integrate industry with science, politics and other stakeholders (not just technically but also socially)	emphasizing on local champions' role in building the trust needed for good networking	develop an information system that helps plan for/manage optimal reduction, reuse and recycling of resources
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3.3.2.8. *Funding*

Systematic means to allocate, secure and monitor funding for SD initiatives and environmental protection are a must (Geng and Yi, 2005, ESCWA, 2003). This could be achieved through the following, see Figure (3-13) for abstract:

- Integrate SD initiatives into national budget/plans.
- Provide enough budget for environmental authorities and allow local and regional governmental institutions to raise funds and generate income through decentralized revenue collection schemes which capitalize on environmental taxes and pollution charges (ESCWA, 2003).
- Secure complementary funding through international and national partnerships (expanding partnership with local civil society institutions) (ESCWA, 2003). Secure additional funds through opening new areas of investment, supporting privatization efforts, and expanding economic instruments usage (ESCWA, 2003).

Figure 3-13: Funding settings

Funds have to be secured for SD/IE initiatives.	emphasising on	systematic means to allocate, secure and monitor funding for SD:	Integrate SD initiatives into national budget/plans	Provide enough budget for environmental authorities	Secure complementary funding through international and national partnerships and opening new areas of investment
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3.3.3. Planning role for industrial ecology

The following presents the steps on national, regional and local levels to be taken to help setup the context and establish EIPs.

3.3.3.1. *National Level*

Governmental IE policies/plans/programs are usually referred to as a major conditioning factor that initially represents the political will to move towards IE. In support, the influence of policies is probably most evident in China. The Circular Economy Policy is one of the significant factors of influence on Chinese industrial symbiosis development (Boons et al., 2011). In this regard, the following steps are necessary, see Figure (3-14) for abstract:

- Define a national platform of SD including IE, taking into consideration local contextual characteristics (ESCWA, 2003).
- Prepare a National Industrial Ecology Strategy⁷ (NIES) which is multidisciplinary and inter-sectoral. In NIES, identify and prioritise national goals of IE. These goals are concerned with incrementally enabling the context to incorporate IE (ESCWA, 2003).
- Prepare National Programs of Industrial Ecology (NPIE) that are multidisciplinary and inter-sectoral. Give leverage to NPIE through funding in national budget. In NPIE, set financing, coordination and implementation mechanisms; adequately assign implementation responsibilities to different institutions, and synchronise policy measures; and set targets, triggers and indicators for assessing progress in achieving national IE priorities (ESCWA, 2003).
- In light of NIES and NPIEs, relevant institutions should set out to prepare and implement work plans for funding and implementation (ESCWA, 2003).
- A national interdisciplinary planning research team prepares a comprehensive national urban plan which takes on board IE principles. Preparing this plan is to be informed with contextual and environmental data collected by local and regional authorities. In addition,

⁷ NIES is supposed to be one strategy in a series of integrated sustainable development strategies.

it is to be developed through back and forth dialogue/consultation with regional authorities (ESCWA, 2003).

Figure 3-14: Planning process: national level

National Level		defining a (locally contextual) platform of SD		
	setting up the context through:	preparing a NIES (participatory multidisciplinary and inter-sectoral)	forming an interdisciplinary national planning team with the participation of all stakeholders, to prepare	a contextual, comprehensive national urban plan which takes on board IE principles. it is to be developed through back and forth dialogue/consultation with regional authorities
		preparing a NPIE (participatory, multidisciplinary and inter-sectoral)		

3.3.3.2. Regional level

On the regional level, an interdisciplinary planning research team has the following tasks to perform regarding IE, see Figure (3-15) for abstract:

- Surveying the region to identify actual and potential total and segmented wastewater, materials and energy volumes/flow patterns from natural/ production sources, local manufacturers and partners, reprocessing industries, and current practices of waste management (Roberts, 2004).
- Assessment of community attitudes towards integrated manufacturing development planning, mixed industry development, and supportive waste management industries (Roberts, 2004).
- Assessment of local government stability on the application of environmental policies and standards (Roberts, 2004).
- Involving different stakeholders in learning/participatory networking activities to increase awareness of IE and encourage stakeholders to support it (Hewes and Lyons, 2008); and to build trust, social relationships, cooperation, and collaborative behaviour among stakeholders (Boons et al., 2011).
- Preparing a Regional Eco-industrial Plan (REIP) step-by-step with all partners in light of NIES. The plan should indicate implications of the regional growth management strategy and planning schemes for SD on future industry locations; local champion/catalyst industries around which others can congregate (Hewes and Lyons, 2008); potential industrial clustering; actual/potential spatial concentrations and flows of waste by type; environmental sensitivities of regional locations for waste materials; water and energy

processing and reprocessing; potential reprocessing industries and cogeneration firms; a scheme of information systems and networks; different partners roles according to their awareness and attitudes towards IE (Boons et al., 2011); and further recommendations on institutional arrangements (ESCWA, 2003). The REIP is to be finalised through dialogue and consultation with national and local levels.

- Assessing demands for potential EIPs available in the region.

Figure 3-15: Planning process: regional level

Regional Level	forming an interdisciplinary regional planning team to:	Survey the region to identify actual and potential elements (wastes, materials and energy) local manufacturers and partners, reprocessing industries, and current practices of waste management	applying a learning participatory approach (Involving different stakeholders in networking activities to increase awareness of IE and encourage stakeholders to support it and to build trust, social relationships,	develop a REIP within the national urban plan. (it should indicate implications of the regional growth management strategy and planning schemes for SD/IE on future industry locations; local champion/catalyst industries; potential industrial clustering; spatial resources quantities and concentrations and flows of waste; environmental sensitivities; a scheme of information systems and networks; different partners roles; and recommendations on institutional arrangements)
		Assessing demands for potential EIPs available in the region	assess community attitudes towards applying IE principles and local government stability on the application of	

3.3.3.3. Local Level

A local planning team for preparing an EIP within a REIP will work with the champion/catalyst industry identified to develop other potential partners. This team will work side by side with all local partners on the following tasks, see Figure (3-16):

- Designing different scenarios of industrial clustering and technologies to be used, using performance-based appraisal (Roberts, 2004).
- Using systems dynamics and stimulation models to measure the strengths and weaknesses of different designed scenarios quantitatively in a triple bottom line base⁸ (Zhao et al., 2008, Liwarska-Bizukojc et al., 2009).

⁸ Triple bottom line (TBL or "People, Planet, Profit") accounting means expanding the traditional reporting framework to take into account environmental and social performance in addition to financial performance (Wikipedia, 2011b).

- Evaluating different scenarios operationally, in terms of their symbiosis' environmental impacts and marketability, and choosing best possible ones (Zhao et al., 2008, Liwarska-Bizukojc et al., 2009).
- Working on the chosen scenarios with all partners, with the help and support from local community leaders, and the use of different social relationships, to come up with a case-specific preferable scenario that would lay the foundations for an EIP that works (in a real sense) as a community of businesses (Gibbs and Deutz, 2005, Kim, 2007).
- Trust, cooperation and collaborative behaviour need to be developed among establishments before they are prepared to link processes together in ways which have an impact on the economic viability of each establishment (Elabras Veiga and Magrini, 2009).
- Conducting economic and environmental risk assessment of waste and energy by-products' utilisation and exchange (Roberts, 2004) for the chosen scenario, for final tuning.
- Working on detailed development plans of the chosen scenario which include locations of business activities, infrastructure, waste storage, transportation and future utility corridors. The latter aims at maximising the collection of industrial by-products, minimising transportation and conveying costs between producer and user establishments. Plans must consider landscaping and buildings' utilities as a means of resource recovery, especially water; flexible tenancy agreements of building or land that will allow for seasonal or variable demand factors; multiple uses of common areas; and community infrastructure as a means of providing learning and leisure in addition to basic services for the community (Roberts, 2004). Plans must also show economically viable development phases (Gibbs and Deutz, 2005), organisational arrangements, recommended implementation processes, and training programs for potential implementation bodies (Kim, 2007).
- Formulating an effective marketing plan for the chosen EIP (Roberts, 2004).
- The park operator (Hollander, 2005), the waste operator and waste analyser⁹, already members of the local planning team, will continue, as permanent personnel, to monitor the incremental development of the EIP, and prepare supplementary scenarios of waste

⁹ The park operator manages all or part of the infrastructure installations and provides or organizes the provision of the services. Since the operator is the manager of the site he/she will decide whether a new settler company may join the park, and will negotiate the conditions under which it may do so. The waste manager focuses on the companies' internal requirements, while the waste analyser concentrates on the aggregation and analysis of data on a supra-company level or the level of a corporate group. Both are supported by specialised software (Hollander, 2005).

and energy exchange accordingly within the EIP or with other regional counterparts. These permanent members will be supported by an in-house scientific institution for data collection and analysis, and problem solving (Sterr, 2004).

Figure 3-16: Planning process: local level

Local Level	Forming a local planning team (will work with the champion/catalyst industry identified to develop other potential partners and will work side by side with all local partners) to:	In tune with the REIP, develop and examine industrial clustering scenarios of the pioneer EIP (via systems dynamics and stimulation models and using performance-based appraisal). Then	maximises the collection of industrial by-products and utilizing means of resource recovery
		choosing the preferable and marketable scenario with the highest industrial symbiosis. Then working on the chosen scenarios with all partners to come up with a case-specific preferable scenario that would lay the foundations for a pioneer EIP. Then conducting economic and environmental risk assessment of waste and energy by-products' utilisation and exchange for the chosen scenario, for final tuning.	minimises transportation and conveys costs between producer and user establishments
		preparing a detailed plan for the tuned scenario in such a way (locations of business activities, infrastructure, waste storage, transportation and future utility corridors) that:	follows up, yet through its permanent personnel, with the development of the project phases to secure industrial symbiosis, whether inside the EIP or with regional counterparts.

3.4. Synthesizing the conceptual framework of the industrial ecology planning process

This chapter constructs a conceptual framework of the potential process of planning EIPs. The developed framework is composed of three interrelated, interconnected parts: overarching governing concepts, context setup and the planning process towards the realisation of IE.

The framework advocates the understanding that IE realisation is a societal task. Society as a whole has to locally define IE and take actions to make it viable. These actions, taken inside a continuously changing and complex context to bring about a complex issue, have to be

incremental, interdisciplinary, integrated, coordinated and subject to regular update. To insure the integrity and effectiveness of these actions, a context-specific and society-centric governance system has to be created. One of its powerful tools to guard the realisation of IE is, indeed, a proscriptive, incentive-based code of law, most preferable in such a complex unpredictable context. Also, there should be the concept that planning process for IE has to consider industrial symbiosis as a primary concern, waste as a source, EIPs as a means of affording variety and redundancy, and industrial regions as counterparts for EIPs.

The context has to be geared/structured in light of these concepts. Society, as a whole, has to develop the will to bring about IE; education and media have to raise people awareness on SD/IE issues; capacity building has to advance planning and management skills of industrial systems; and science has to develop research on new technologies and theories of SD/IE. In addition, institutions have to be restructured to facilitate governance processes for SD; regulatory frameworks have to positively respond to IE requirements and be realistic and effective; and sustainable networking has to be established/strengthened for inter-organisational knowledge/materials exchange among different stakeholders/establishments. Further, funds have to be secured for SD/IE initiatives.

The IE planning process starts with nationally defining a platform of SD and IE, and preparing a NIES and NPIE aimed at setting up the context. In light of the NIES, and with the participation of all stakeholders, an interdisciplinary national planning team prepares a contextual, comprehensive national urban plan. Within the national urban plan, an interdisciplinary regional planning team develops a REIP through a learning participatory approach in which champion industries will be identified in terms of industry type and location, taking advantage of regional natural resources and environmental sensitivities, and explores potential waste flows. In tune with the REIP, a local planning team develops and examines industrial clustering scenarios of the pioneer EIP to choose the preferable and marketable scenario with the highest industrial symbiosis. The team prepares a detailed plan in such a way that maximises the collection of industrial by-products, minimises transportation and conveys costs between producer and user establishments; and follows up, yet through its permanent personnel, with the development of the project phases to secure industrial symbiosis, whether inside the EIP or with regional counterparts.

The importance of this framework emerges from being a tool for future research to help evaluate the ability of the current process in Egypt to produce sustainable IZs. That is utterly needed now, as Egypt is currently planning for an outstanding urban-industrial growth to

accommodate double its population up to 2050. This framework is to be used to initially help in collecting and organizing data relevant from the local Egyptian context. The data is then to be analysed inductively to gain an understanding of the current process of planning IZs, its shaping factors, and the obstacles it faces. Chapter (4) therefore, discusses the methodology through which the data relevant is collected using this framework in order to answer the research questions.

4. CHAPTER FOUR: METHODOLOGY

4.1. Introduction

On the international level, Chapter (2) identified a gap in the practice of sustainability where theories of governance for sustainable development are lacking. In other words, the literature is generic and needs more practices of ideas on the ground. Towards more focus into the research concern, Chapter (2) concluded that there is a gulf between the idea of industrial ecology (IE) and its implementation which requires more social research regarding the *planning role* in guiding the implementation of IE. On the local level, although Egypt is still away from SD in general, Chapter (2) shows that the Egyptian government has recently made some institutional/legislative arrangements in favour of environmental protection, and has announced taking steps to effectively incorporate SD. It then ends expressing the paramount need to examine the extent to which these steps/arrangements have considerably changed the *planning process* through which industrial zones (IZs) are founded, towards IE. In addition, identifying the factors which influence/shape the current prevailing process is essential for the development of the process as well as its product. Hence, Chapter (3) presents a conceptual framework of the planning process through which eco-industrial parks (EIPs) could be potentially developed. This framework is constructed to guide the formation of the methodology, and the structuring and analysis of data collected.

This chapter therefore, first, discusses the research strategy that illustrates how the empirical study was conducted towards answering the research questions. Second, it explains how and why the case studies were chosen. Third, it covers/justifies how the needed data is derived from primary and secondary resources, and the research methods utilised therein. Fourth, it discusses the settings in which the stages of the field study were carried out. Fifth, it addresses how ethics are considerably respected in this research. Finally, this chapter shows how the data was analysed and reported, along with the instruments used in this concern.

4.2. Research Strategy

This research is a qualitative study in that it aims at identifying and analysing the current planning process through which the industrial zones in Egypt are founded as it is practised and conceived by the involved partners. In this regard, the research questions this study attempts to answer are:

1. Does the Egyptian government have an operational planning framework that could lead to sustainable industrial zones?

- a. What is the official framework of the process under which the industrial zones in Egypt should be planned?
 - b. What is the actual process through which the industrial zones are planned?
 - c. Consequently, to what extent is the current planning process sustainable and applying industrial ecology?
2. What are the factors that influence/shape the current process through which the industrial zones are planned?

To answer these research questions, this research strategy depends mainly on a case study design. A case study design was considered to be appropriate as case studies can be especially useful in explanatory studies of social processes (Yin, 2009). Yin (2009) shows the importance of choosing case studies stating: “the distinctive need for case studies arises out of the desire to understand complex social phenomena” (p.4). The selection of case studies is described in Section (4.3). In light of this, the research strategy sought data mainly on two broad issues. The first is about the process through which the IZs in Egypt are planned. This contains the detailed procedures and steps of the process, the involved actors and their roles and powers, and the prevailing relationships among those actors. The second issue is about the factors/forces which influence/shape this process. Accordingly, this research strategy depends on a multi-stage, multi-method approach. Johnson et al. (2007) defined the mixed methods research as “an intellectual and practical synthesis based on qualitative and quantitative research ...” (p.129). Brannen, J. (2008) gives a wider definition that explains the previous one, saying:

Mixed methods research means adopting a research strategy employing more than one type of research *method*. The methods may be a mix of qualitative and quantitative methods, a mix of quantitative methods or a mix of qualitative methods.... If mixed methods research is a research strategy does it represent a particular type of research design? The answer is both yes and no. Adopting a mixed method strategy may constitute a strategy in its own right or it may be subsumed within another research strategy, as in the case of adopting a case study design in which a number of different methods are embedded. (p.2)

The variety of methods, as those this strategy applied, affords, according to John Brewer and Albert Hunter (2006), “rich opportunities for cross-validating and cross-fertilizing research procedures, findings, and theories.” (p.1). Johnson et al. (2007) agree with the previous advantages and also believe that such approach guarantees complete answers to the research questions as well as the most balanced and useful research results. Having said that, this

research strategy contains three layers that follow a multi-method approach with a case study design in its core as follows:

- a) The first layer is a pilot study involving conducting semi-structured interviews with a group of experts and secondary resources. It aimed at updating the general knowledge on the planning process of the IZs, choosing the research sample, and checking the accuracy of the design of the other research methods.
- b) The second layer, the core of the research strategy that has required most developmental effort, is a multi-method approach. These methods aimed mainly at answering the first research question while giving the base of preconceptions for the second one. Hence, this layer was divided into three interlocking sections as follows:
 - A case study design was adopted that contains; a) semi-structured interviews with the case studies partners, b) informal discussion with a group of experts who have enough knowledge on the case studies, and c) collecting related documentations. This design was mainly focusing on identifying the actual framework for the process through which the industrial zones are planned and whether they are sustainable.
 - Another design was conducted principally to cover the official framework for the process under which the industrial zones are developed. It contains; a) a documentary analysis, b) expert interviews with a group of governmental representatives and consultants of the involved bodies.
 - A number of informal observations at the governmental bodies involved in the planning process of the IZs, were conducted to triangulate some issues related to the licensing stage of the process.
- c) The final layer was primarily concerned with answering the last research question covering the governing factors of the current planning process of the IZs. A group of semi-structured interviews with key experts was conducted along with collecting the documentary evidences available.

It is worth mentioning here that stating those three layers as shown above does not mean that they were completely separated. The research context/setting (discussed in details in Section (4-5)) mandated a considerable overlay among those layers.

The strategy followed a specific order to answer the research question. This order was important to utilize one step findings to understand how to structure/develop the following

one. The research strategy, through this order and by using the above mentioned methods, was able to answer the research questions as follows:

4.2.1. Identifying the official framework (research question No.1 a)

Before attempting to answer the question about the actual process, that the case studies investigation is concerned with, it was essential to have the appropriate base/background on what officially the process should be. In other words, it was important to draw a comprehensive image on the current framework of the process through which the IZs ought to be *officially* planned (from the governmental view). This information is not available in any one place, and compiling and organizing it in an orderly way itself a contribution to our knowledge of the governance of IZs in Egypt. Although the researcher was not able to fully conclude this framework in the field prior to analysing the data collected, what he gained and was able to comprehend from the interviews, was enough to help organize/structure the case studies data. This framework includes; description of the stakeholders and their roles and powers, relationships among those stakeholders and how they have to coordinate with each other, and the institutional/legal arrangements governing such a process. To identify those issues, the study applied a group of methods as follows:

1. Data was collected from primary documentary resources: such as laws, executive regulations, presidential/governmental decrees, initiatives, protocols and various conventions adopted by the State on the organization of the planning process of IZs. The focus was on the establishing laws/decrees of the involved bodies in the planning process, as they give the basic description of different bodies involved in the process, their roles/responsibilities, and institutional setup controlling the relationship among them. Data in this regard was collected by variant ways:
 - Interviewees from different fields/groups were asked, when appropriate, to support their opinions with documentary resources or to recommend the potential places from which the data could be collected.
 - Governmental bodies were visited to collect the needed data in person.
 - Utilizing the internet as a last resort to use when discovering the need for some other data especially during the data analysis and reporting.
2. Semi-structured interviews with a group of governmental representatives to identify how they perceive and comprehend those legal materials, were conducted. The official framework is about not only laws and decrees, but, more importantly, how these legal

resources are comprehended by those applying them. In addition, interviewing those representatives was important to fill some gaps in the legal material especially regarding the details of the official process. In particular, those representatives were chosen from the highest administrative levels of the departments that the IZs development is its main focus/responsibility like the Central Administration of IZs in the IDA and the IZs Development Department in the EEAA. Targeting top officials was essential, according to the work atmosphere in Egypt¹, as they are the only ones who have the authority to partially take decisions according to what they understood from the legal resources, and more importantly, are allowed to disseminate data outside their departments. Due to the fact that , in an autocratic context like Egypt² (Elbeshry, 2011, El-Barghothy, 2011), discussing politics and related issues especially in a governmental body is problematic, unthreatening questions were imperative (Foddy, 1993) in this regard. The questions were in the shape of telling the official story of founding IZs avoiding any connection with any problems in laws/decrees except in the cases that the researcher felt the respondent was willing to speak.

3. Semi-structured interviews with experts who work as consultants for those governmental bodies, were conducted. This was important, as it has been discussed that approaching governmental employees especially in Egypt, likely to result in skewed data. Without doubt, because of the observer's paradox (Labov, 1972) and for the reason stated earlier regarding the autocratic context causing anxieties to the governmental employees when being questioned about political or governmental issues. Once questioning the respondent, he/she starts to construct a form of how the process and its details ideally would be done, and from this form the answers may come out. Therefore, it was essential to triangulate their drawn understandings/answers from other respondents who have enough knowledge on the same issue and can respond in a way that is uninfluenced by such anxieties.
4. Media interviews/statements made by high levels of administration of the concerned bodies and the government, were collected especially for those who refused to be interviewed. Collecting data from these secondary resources was important during the fieldwork and, more importantly during the data analysis and reporting to fill the gaps and/or discover the hidden points in the collected data from other data resources and to

¹ This will be established in Chapters (6 and 7), but see also El-Barghothy (2011) and Elbeshry (2011).

² This issue is discussed in the research context in this chapter: Section (4.5), and it is fully analysed and proofed in Chapter (7), Section (7.2).

triangulate the data as well. Such interviews/statements were collected from the internet in the form of newspaper articles, reports, and governmental periodicals.

This multi-method study applied, offered an answer for the first part of the research question mainly inquiring about the official framework of the process through which the IZs should be planned in Egypt. In addition, it gave initial indications on shortcomings embedded in the current legal system. This framework along with its shortcomings helped in structuring/triangulating the data collected from case studies to identify the actual framework of the process through which the IZs are planned.

4.2.2. Identifying the actual process (research question No.1 b and c)

To answer the second and third part of the first research question and partially the second question regarding the actual process through which the IZs are planned, whether it is sustainable, and giving a base of preconceptions on the shaping factors of the process, the research strategy used a case study design. As previously stated, case studies are particularly needed for understanding complex social phenomena (Yin, 2009). This design sought data mainly to identify the actual process through challenging the official/governmental view of the process. Further, identifying the differences between the official story of the planning process and the one through which the case studies were planned, helped spot a group of preconceptions on the shaping factors of such process. These preconceptions were used as a base to be build upon in the third layer in organizing and triangulating the data collected in response to the shaping factors questions.

The case study design adopted depended in its core on interviewing different partners involved in a chosen sample of industrial parks (IPs) along with experts who have enough experience on those case studies' development. Collecting data from primary and secondary resources, conducting informal discussions with a group of academics and investors, and field observations were complementary methods. Those methods were reasonably helpful in completing and triangulating data collected from interviews.

In details, a sample of industrial zones was selected to investigate their planning process in terms of; a) detailed steps/procedures, partners and their roles and powers, and the prevailing relationships among partners and, b) initial indications of the shaping forces/factors. The process of choosing the sample was selective rather than random. This was because this research investigates the most recent and closer types of IZs to the application of SD/IE. Therefore, the chosen sample had to be from those types likely to be the closest to the application of IE ideas and concepts. Selection therefore, had to be based on different

constellations of public and private actors that are likely to make a difference in IZs developments towards IE. In other words, the chosen types should give greater opportunities for participation likely resulting in a more sympathetic approach to IE. More importantly, the selection had to seek the current prevailing practices which potentially influence IZs future development in Egypt.

Out of this sampling process, discussed in details in Section (4.3), three IPs representing the Industrial Developer Program (IDP) were chosen as the research case studies. These IPs are:

- “AL Tajamouat Industrial Park, a fully serviced and integrated industrial park” (Al Tagamouat IP).
- “CPC Egypt, the one stop shop towards building the future” (CPC).
- A third Company that its directors asked the researcher to hide their names and the company name (IP3).

To identify the process through which those three IPs were planned and the shaping factors, the study sought data mainly from semi-structured interviews with different partners involved in the process. Partners of such process were mainly from the two key players of the IDP and the IDA (especially the CAID and the CAIZs)³ on one side, and the industrial developers of these cases on the other. Other important partners, albeit with lesser roles⁴, like the EEAA (especially the Legal and Environmental Assessment departments), local administrations, planning teams, NGOs, and others, were also interviewed. Seeking the process story from different views/interests/backgrounds appeared as a rigorous way to identify the actual process in details, along with triangulating the collected data. The process of choosing the respondents was selective at its beginning. Then, to gain access to other respondents, snowball sampling was utilized involving, according to Delamont (2002), “getting each respondent to help you find the next one” (p.83). Respondents were selected from the highest levels of governmental departments responsible for/concerned with the IDP. As stated earlier, according to the work atmosphere in Egypt, top officials are the only ones who relatively have a clear image and full details of the IDP process and are allowed to disseminate data.

In addition to interviewing key governmental bodies, It was important to interview the consultants of these governmental bodies to triangulate the answers told by the governmental personnel. The reason is that approaching governmental employees especially in Egypt, as

³ CAID: the Central Administration of Industrial Developer and CAIZs: Central Administration of the IZs

⁴ Detailing of this issue is discussed in Chapter (5), from the official view point and in Chapter (6) from the actual one.

indicated earlier, is likely to result in skewed data. The researcher targeted a specific key consultant⁵ in the IDA, who can respond in a way that is uninfluenced by the anxieties that the governmental employees influenced by when addressing political or governmental issues. The research sought, through his friends/fellows, an appropriate link to gain access to this consultant.

The researcher did not get access to the planning teams of the chosen IPs for reasons out of his control⁶. The researcher, therefore, sought two other ways to overcome this issue. Conducting semi-structure interviews and informal discussions with planners worked in the planning teams of other IPs was the first way. The other way was collecting the planning reports of the chosen case studies. These methods allowed the researcher to identify the process from the planners' view and triangulate the data collected from the industrial developers⁷.

To verify and fill the gaps of the data gained from the previous methods, a number of methods were used as follows:

1. Data from primary resources were collected. In addition to the planning reports of the case studies, other documentary evidence, such as different editions of the TOR of the IDP, the contract model between the IDA and the developers, related laws and decrees, and official correspondences between the concerned parties were collected during site visits and/or from the websites of the concerned parties.
2. As stated earlier, informal observations were conducted at the governmental bodies concerned with the licensing process of the IPs. This was to feel the procedure from the ground and to verify the data collected from the interviews and documents.

The research strategy so far, utilizing multi-method approach in this case study design of the IDP, completed the answer on the first research question mainly about the actual framework of the process through which the IZs are planned in Egypt. It also offered, through identifying this framework, the base needed to challenge the official framework and to analyze whether the process is sustainable. More importantly, it formed preconceptions of why the process took the current shape. These preconceptions construct a base that the next research layer built upon to organize the research methods in this layer to identify the shaping factors of the process. It was also helpful in triangulating the data collected in this regard.

⁵ This consultant was recommended by many experts as a key expert in my research field.

⁶ See Section (4.5.1) for more details

⁷ As they are legally responsible to prepare the planning through their choice of planning teams, so they represented the planners in the conducted interviews.

4.2.3. Identifying the shaping factors of the process (research question No.2)

The previous two sections show how the data was collected for theorizing on the official and actual frameworks of the planning process of the IZs, whether it is sustainable and preconceptions of the shaping factors. Findings from these two sections depended on the case of the IDP and its challenging to the official framework. To verify these findings on one hand and to circulate them to cover the Egyptian IZs in general on the other, they need to be discussed again but from a broader/ more comprehensive perspective. To do so, the research sought data through interviewing a group of experts who have a broad experiences on this issue like consultants of the concerned bodies, governmental representatives and industrial developers. Primary and secondary sources, were used for data triangulation.

In more details, the main objective of interviewing the experts was to understand why the planning process of the IZs has taken its current shape. As the indications on the shaping factors that came out from the case studies were mostly on political and governmental issues, highly sensitive in the Egyptian context, the interview was carefully designed. The interview first sought the identification of the problems that the process faces and then the direct scientific explanation of how and why these problems exist. The interview after then built on the degree to which the expert was opened to speak and was redesigned on the spot targeting eventually the complete image of the shaping factors. The implications from the problems and the shaping factors on the environment and sustainability including the recent approaches to apply it especially industrial ecology were among the issues discussed. Applying this design, to answer the second research question, resulted in interviewing 5 key-experts that their sessions were comprehensive as they were inclusive of most of the issues; political, economic, societal, institutional and legal. In addition, there were also a considerable number of interviews, with experts from different backgrounds, which tackled some and not all of these issues, and were used to verify the data collected from the comprehensive interviews. Yet, the overall number of the interviews in this regard is about 25 interviews which is scientifically satisfactory in terms of the quality of the data collected. The researcher sought complementary data on these issues from different sources which were basically secondary rather than primary. This is a normal result in a political context that considers governmental information, especially what uncovers the mistakes/corruption of the government, top secrets⁸.

⁸ This issue is discussed and proved in Section (7.6).

Yet, the problem of relying on interviews with modest supporting independent evidence from primary sources is abated by the fact that the researcher interviewed experts from different backgrounds. The core of those experts are professionals not only with full involvement in the planning process of IZs but, more importantly, close to the decision making circuits in governmental bodies concerned. Also, those experts were interviewed independently from each other, so their individual thoughts were used to triangulate the issues discussed. Furthermore, the interviews conducted with other experts, mainly academics and judges who have experiences on the discussed issues, were another tool which contributed to data triangulation. Last of all, collecting available/enough data from different secondary sources were utilized as practical to verify with interviews.

4.2.4. Research strategy summary

To summarize, this research is a qualitative research which adopted a multi-layer multi-method approach that depends on a case study design in its core to answer the research questions.

To answer the first research question, part a, about the official version of the planning process of the IZs, documentary evidences from primary sources was used. The focus was on the establishing laws/decrees of the concerned bodies. These laws/decrees basically describe those bodies, their roles, and the institutional setup controlling the relationship among them. To identify how these legal resources are comprehended by those applying them, it was essential to interview a group of governmental top officials. This was also important to fill the gaps in legal documents regarding the details of the process. As approaching governmental employees is likely to result in skewed data, it was important to triangulate their constructs from other respondents. Interviewing academic consultants of those governmental bodies along with collecting available data from secondary resources were helpful.

To answer the first research question, part b and c, and partially the second question about the actual planning process of IZs, its sustainability status and preconceptions of the shaping factors, the research strategy used a case study design. Data collection depended mainly on interviewing different partners involved in a chosen sample of the IPs, such as governmental officials, developers and planning teams, along with experts who have enough expertise on the IDP development. Seeking the process story from different partners was important to identify the whole actual process with its details and to triangulate the collected data. Governmental respondents were selected from the highest levels, usually the ones who have

full data and can disseminate them, of governmental departments responsible for/concerned with the IDP. Again, to avoid the skewed answers expected from the governmental employees and to triangulate them, semi-structured interviews with consultants of the concerned governmental bodies were conducted. To guarantee an impartial environment in those interviews, the researcher utilized his friends/fellows to informally gain access to specific qualified consultants that they know. Lastly, to verify the data gained from the previous methods and fill its gaps, collecting documentary data, conducting informal discussions with a group of professionals, and field observations were helpful in this concern.

To answer the second question about the shaping factors of the actual planning process building upon the base of the preconceptions that inescapably came out from the case studies, the strategy sought data from a group of key-experts with a broader knowledge on the planning process of the IZs. The main objective from interviewing those experts was to identify the problems of the planning process and to understand why it takes its current shape. Due to the sensitivity of the political issues that the interviews was designed to seek, “unthreatening” questions were used. Due to the state of cloudiness controlling the government in Egypt, trials to collect enough documentary evidence were not successful, and, hence, data was alternatively collected from secondary rather than primary sources. This is abated by the fact that the researcher interviewed a satisfactory number of experts from different backgrounds and collected abundant secondary data, both of which provided together a suitable ground to triangulate data collected.

To conclude, the research strategy applied different methods to acquire different sets of data that satisfactorily offered answers to the research questions. Furthermore, this multiple methods approach helped triangulating the collected data.

4.3. Choosing Case studies

4.3.1. Introduction

As mentioned earlier, to answer the research questions, a case study design was adopted. This design sought data to identify the actual process through which the IZs are planned and whether it is sustainable. Accordingly, a sample of IZs was selected to investigate their planning process in full details. According to Shalaby (2003b), the IZs in Egypt founded prior to 2003, are having different insurmountable problems on top of which are environmental ones (Shalaby, 2003b). This indicates that the planning process responsible for the development of these IZs was not sustainable. Recently, the Egyptian Government, has made some institutional/legislative arrangements in favour of environmental protection, and has

announced taking steps to effectively incorporate SD⁹. Investigating the extent to which these steps/arrangements have considerably changed the planning process through which IZs are founded, towards IE, is the focus of this research. This is why the process of choosing a sample was selective and tended to look for the most *recent, influential and closer* types of IZs to the application of SD and IE ideas. This closeness was sensed by the presence of different interconnected networking constellations of public and private actors that, according to IE concepts (Boons et al., 2011), are going to make a difference in IZs developments towards IE. In other words, the chosen types should give greater opportunities for participation, likely resulting in a more sympathetic approach to IE. More importantly, the selected sample had to strongly represent the current prevailing practices which would potentially influence IZs future development in Egypt.

In brief, the chosen sample came out as a result of two factors: adopting sympathetic approaches to IE, and influencing the IZs future development in Egypt. Time and resources limitations stand as the third factor. This section, accordingly, justifies selecting the research sample among a total number of 128 IZs included in five different types.

This section, after defining Egyptian IZs and their types discussed in details in Appendix (I), identifies the most recent, influential and IE-related type. This section then justifies how the sample was selected from the chosen type.

4.3.2. Choosing the case study

The study of the Egyptian IZs' definition and types, discussed in Appendix (I), came out with the exclusion of the governorate IZs inside cities and the heavy industries zones from the sample. The sampling process is therefore performed on the other three types: a) the governorate IZs outside cities, b) the IZs in the new cities, and c) the industrial parks (IPs) of the Industrial Developer Program (IDP). It is also important to mention that (a) and (b) types are both owned and managed completely by the government although they vary in location and mandate. Both types, therefore, represent the traditional way of founding the IZs.

Due to the scarcity of in-depth published data¹⁰, especially on the internet, regarding the IZs of the chosen three types in a context like Egypt, it was hard to collect detailed data about those types that allows choosing the sample during designing the research methodology. The researcher, therefore, had to postpone this step to the fieldwork. The fieldwork, therefore, was

⁹ Discussed in Chapter (2), Section (2.3.4).

¹⁰ Available data are mainly indentifying data with nothing related to the research focus on the planning process and items could help choosing the case studies.

designed, to adopt a pilot study¹¹ as a first layer of the research strategy. This pilot study sought different groups of data, where data on the three IZs types came on top. Conducting semi-structured interviews with a group of experts was the main methods used in this regard. The researcher sought experts with enough expertise on IZs in general and those three types in particular. 15 interviews have mainly been conducted with different professionals/officials/investors to collect data related to the three IZs types. In addition to the active listening during interviews, data collected from these interviews was quickly but consciously scanned looking for cross cutting factors that potentially could lead the choosing process. Some important findings came out and strongly influenced the choosing process towards the IDP as the case study. Such findings¹² are as follows:

- There has not been any significant change in the planning process of founding traditional governmental IZs since as discussed in Shalaby (2003b). The process of founding these IZs represents a clear top down process where the competent authority, in both new and existing cities, is in full charge of the whole process without the participation of other concerned parties even other governmental bodies (Ac-15, Ac-66, Ac-G-03, Ac-08, Ac-G-11, and Ac-G-38). As stated earlier, the product of such processes was not sustainable.
- Participation, when exceptionally applied in the traditional way, has been limited to the implementation stage exactly when extending the utilities networks¹³ (In-04, In-G-41, and In-G-58).
- Since its establishment as the only governmental body responsible for industrial zones, the IDA stopped establishing new IZs of the traditional type, focusing instead on activating the existing ones (Ac-G-03, In-G-58, In-G-06).
- Also, since its establishment and according to the industrial policy of the government, the IDA has changed its strategy of founding industrial zones, targeting the private-public partnership that has allowed for the implementation of the IDP (IDP, 2011c, and Ac-G-03 and In-G-06).
- The IPs of the IDP are the most advanced and recent IZs cases and as announced by the government as well as the IPs' developers, they consider international environmental standards and apply SD concepts (In-28, In-47, En-G-32, IDP, 2011c, Altajamouat-Egypt, 2011, and CPC-Egypt, 2011b). Therefore, when we theorise on the IDP we expect

¹¹ It is different from the pilot study, mentioned in Chapter (2), that its results have been used to narrow down the research focus.

¹² These factors have been discussed in full details with enough evidences in the following Chapters (5, 6, and 7)

¹³ Lessons from such cases are considered when discussing the research recommendations.

that the situation regarding applying SD is to be worse when addressing the other types. According to the current situation and the announced phases of the IDP along with being adopted by the governmental industrial policy, it is expected¹⁴ that IPs are to be the future of the IZs development in Egypt (IDP, 2011b).

As we stated in the introduction of this section, the criteria used for choosing the sample were mainly: adopting sympathetic approaches to IE, and influencing the IZs future development in Egypt. Yet, when analysing the previous mentioned findings together on one side and using the criteria to challenge the three IZs types on the other, it was concluded that both traditional types, the governorate and the new cities IZs, are to be excluded. Both IZs types are not sustainable and are no longer present in recent governmental plans. Now, the IDP is the way adopted by the Egyptian government and is expected to influence the future development of IZs. Having said that, the research depended only on the IDP as the case study to be analysed towards theorizing on the actual, as well as the expected, planning process of the IZs in Egypt.

4.3.3. Choosing the research sample of the IDP

After choosing the IDP as the case study of the research, a group of IPs were chosen to represent the IDP. Choosing a sample that has already gone through **the planning** stage, as the focus of the research, and represents **different phases** of the IDP, to come up with the whole picture of the program, were the criteria set for the choosing process. The procedure followed for this purpose is as follows:

- 2- Collecting available identifying data on all IPs of the IDP was the starting step. This step sought data about: contact details, the phase of the IDP that these IPs belong to, and, more importantly, whether these IPs passed the planning stage. Such data has been sought mainly from the industrial data base available on the IDP website following the IDA and from the available websites of IPs.
- 3- After analysing the data collected, the study concluded that the IDP has, until the time of the field work, three phases. The first phase and the most of the second one have passed the planning stage (Ac-G-03). The third one was announced in March 2009 (IDP, 2011c), which is very recent and still in early steps of contraction (Ac-G-03). Table (4-1) shows the 11 IPs that passed the planning stage from both the first and the second phases of the IDP.

¹⁴ It is worth mentioning that the Heavy Industries Zones will be part of this future but it is excluded from the sample as they are in a very early step in the planning process as discussed in appendix (I).

Table 4-1: Industrial parks that passed the planning stage

Name	Phase	City	Activity	Nationality	Total area (Million m ²)	Investment costs (Per billion LE)	Expected employment (by thousand)
CPC	1	6th October	Building materials	Saudi Arabia	1.5	2.8	10
International POLARIS	1	6th October	Fabric and clothing	Egypt Turkey	2	4	22
IDG "Industrial Development Group"	1	6th October	Feeding automotive industries	Egypt	2	3.4	20
Al-Tajamout Industrial City –Qiz	1	10th Ramadan	Fabric and clothes	Jordan	1.1	1.8	50
P. I. PARKS	1	10th Ramadan	Engineering chemical – food	Egypt	2	3	18
International POLARIS	2	6th October	Fabric and clothing	Egypt Turkey	1.1	2.2	
IDG "Industrial Development Group"	2	6th October	Feeding automotive industries	Egypt	1.1	1.9	
The 1st Company for Real Estate Development	2	6th October	Engineering variant	Saudi Arabia - Egypt	1	1.3	
Olympic Group for Financial Investments	2	10th Ramadan	-	Egypt			
Concerti Del zone Franca Barcelona Company	2	10th Ramadan	-		2	3.5	
Energia Company for Specialist Cables- Swidi	2	10th Ramadan	-	-	-	-	

Reference: (IDP, 2011a)

4- All the 11 IPs have been contacted through their websites or by email requesting their approval to conduct interviews. The sent message/email presented the research focus and a brief on the interview subjects and questions, along with the confirmation on confidentiality, see Appendix (II) for a model of this email. Out of 11, three IPs cases responded and showed interest to take part. Two of them are from two different cities representing the first phase of the IDP. These two are as follows:

- a. “AL Tajamout Industrial Park, a fully serviced and integrated industrial park” (Al Tagamout IP), 10th of Ramadan City.
- b. “CPC Egypt, the one stop shop towards building the future” (CPC), 6th of October City.

The third IP (IP3) represents the second phase of the IDP¹⁵. Having one IP from the second phase was important to check on whether a significant change has taken place in the planning process. What added to the importance of taking IP3 was that its executive director has already worked on projects preparation of the first phase. This helped more in triangulating the data and spotting the difference between the two phases.

When comparing the three cases, see Appendix (III) for the sample description, it is possible to argue that Al Tajamouat Company is more experienced in the industrial development field. This is due to its previous involvement, as an industrial developer in establishing, and operating an industrial park in Jordan. This is not the case for CPC which is working only in the area of manufacturing building materials in such a way far from the idea of industrial developer. The third company differs from Al Tajamouat Company despite the fact that its executive manager had been involved in the preparation for a first phase company. As all companies of the first and second phase have not been implemented and hence lack the experience of operating and production, this advantage particular to Al Tajamouat Company has uniquely influenced the process of initiating the IDP through discussions which the ex-Minister of industry made with its directors¹⁶.

To conclude, the choosing process of the research sample was selective. It consists of two main steps. The first was to study five different types of the IZs in Egypt then to choose the suitable types for addressing the research questions of this study. The criteria used in this step were: adopting sympathetic approaches to IE, and influencing the IZs future development in Egypt. Out of this step, the IDP was chosen as the case study. The second step was concerned with choosing a representative sample of the chosen case study, the IDP. The criteria used in this step were: passing the **planning stage** and covering **different phases** of the IDP. Resulting from applying such criteria were 11 IPs. Out of the 11, three IPs responded and showed interest to participate in the research. Those three IPs were taken as the research sample and were found enough to theorize on the actual planning process through which the IPs of the IDP were planned.

¹⁵ The researcher is not able to tell any details could lead to identify this IP as requested by its executive director.

¹⁶ Discussed in details in Chapter (6).

4.4. Research Methods

To collect data needed to answer the research questions, interviews and informal discussions, informal observations, and documentary studies were used.

4.4.1. Interviews

Two main reasons were behind using qualitative interviewing to collect data as the best method. First, data in an autocratic atmosphere like Egypt is mostly unobtainable¹⁷ where interviewing is the least affected among other methods. This matter magnifies when seeking data on socio-political and governmental issues like that of this research. Second, this research sought data mainly to explain why the planning process of the IZs in Egypt is taking its current shape. Such interpreting data is hard to be found in documentary sources inside and outside Egypt. This doubled difficulty directed the research towards interviewing as the only way available to collect the needed data. This was suggested by Mason (2002), saying:

Rather more pragmatically, you may choose qualitative interviewing because *the data you want may not feasibly be available in any other form*, so that asking people for their accounts, talking and listening to them, and so on, is the only way to generate the kind of data you want (p.66).

From another complementary side, seeking interpreting data required in-depth understanding of partners/experts' contextual accounts and experiences where interviewing appeared as the best choice for collecting such data. Mason (2002) considered the case of this research as one of the cases in which qualitative interviewing is recommended, writing:

So, for example, you may wish to explain something about social process, social change, social organizations, social meaning, ... [Y]ou may wish to achieve depth and roundedness of understanding in these areas, rather than a broad understanding of surface patterns. This is likely to mean that you take a distinctive approach to comparison, to analysing data and to the construction of arguments. You may aspire to the generation of cross-contextual generalities (p.65).

Aiming at gaining depth and roundedness of understanding regarding the process through which IZs are planned in Egypt, this study gave a lot of consideration for interviewing. Conducting interviews was the most important part of the three layers of this research strategy. The interviews conducted in this study are diverse and interrelated. Semi-structured interviews were constructed based on: a) the knowledge of the researcher as an insider, b) the conceptual framework of the planning process of the EIPs that is constructed from the review of literature, and c) the informal discussion that were conducted during the pilot study while

¹⁷ Ch 7 discusses this issue in full details.

reviewing the literature (7 months prior to the fieldwork). The interviews were prepared to cover four related purposes, these purposes, as discussed earlier, conclusively are:

- 1- To choose the research sample in the first layer of the fieldwork. A group of experts was interviewed to discuss the current planning process of IZs and best models therein.
- 2- To identify how governmental bodies comprehend the official planning process expressed by legal resources. A group of officials from the concerned bodies was interviewed.
- 3- To identify the process through which the three IPs were planned. Different partners involved in the process of such IPs were interviewed.
- 4- To identify the shaping factors of the planning process of the IZs. A group of experts with a broader knowledge on the planning process of the IZs were interviewed.

These interviews, despite having variant purposes, are centred around one main topic which is the planning process of the IZs. Discussing the planning process of the IZs on one hand and covering these variant purposes and keeping cross cutting issues among these interviews on the other, required designing one flexible/loose framework for all the interviews. Robertson and McLaughlin (1996), see also (Mason, 2002)¹⁸, confirmed on this, saying:

The semi-structured interview, or guided interview, allows the respondents to talk about those aspects of the topic which are relevant to them. It does so within a loose framework which is intended to ensure that all the issues thought to be important by the researcher are adequately covered. In essence, it's a compromise which draws from both the checklist of the structured interview and the flexibility of the unstructured format. As a consequence, it makes the analysis of data more manageable, while retaining the opportunity to be flexible and open in certain areas of questioning.... The schedule should help keep the interview focused and provide a degree of continuity across a set of related interviews. (p.107).

In light of this understanding, variant semi-structured interviews based on one flexible framework (see Appendix (IV) for the general framework of questions) were conducted to cover the previous shown purposes. This framework was divided into six topics, and each topic contained set of interrelated questions. These main topics are as follows:

- 1- The story of the planning of the IZs, in general (the process and its steps, and different involved partners and relationships among them).

¹⁸ Mason (2002) also considered flexibility as a common feature in qualitative interviews structures, saying: "A thematic, topic-centred, biographical or narrative approach, for example, where the researcher has a number of topics, themes or issues which they wish to cover, or a set of starting points for discussion, or specific 'stories' which they wish the interviewee to tell. The researcher is unlikely to have a complete and sequenced script of questions, and most qualitative interviews are designed to have fluid and flexible structure, and to allow researcher and interviewee(s) to develop unexpected themes." (p. 62).

- 2- The detailed role of every particular involved partner in the process and its power, evaluated by the respondent.
- 3- Relationships among partners and tools/arrangements adopted to develop these relations.
- 4- Different obstacles/problems facing the process, the reasons behind them, and how to overcome them.
- 5- The teamwork formation and environment (choosing the team, adopted studies, regulations and standards, the product and its approval).
- 6- Sustainability and industrial ecology related issues.

The following parts discuss the considerations on which the interviews were designed and conducted to collect the needed data.

4.4.1.1. Introducing the research

To ensure success in conducting the interviews, the researcher gave enough care to the way of approaching respondents and introducing the research to them. Bryman (2008) stated that the “prospective respondents have to be provided with a credible rationale for the research” (p.200). This is what Davies (1997) recommended as a way to ‘building trust’ to satisfy respondents before asking them to participate. To reach this goal, some principles were considered in designing the introductory statement, either written down such as emails and official letters, or spoken which is the verbal introduction (Bryman, 2008). These principles are, mainly stressing on the research importance and the purpose of the interview, the reasons behind choosing respondents, and confidentiality (Robertson and McLaughlin, 1996).

Yet, there are many reasons that drive interviewers to vary the wording (Bryman, 2008) between respondents. Louisy (1997) mentioned that literature regarding this issue have different thoughts. Some suggested that the opportunity to accept being interviewed, in full detailed/real view of the research, should be given to possible respondents. In contrast, others argued that such view could direct respondents’ participation towards compromising the study findings. The Egyptian context, in which this study took place, influenced the researcher to make small changes in the wording of the introductory statement to some respondents especially the officials. Due to the sensitivity of discussing the governmental/political issues, the wording had to avoid talking negatively about such subjects or any other sensitive issues the research thought to be so. For example, the research title and the introduction have been amended to show that the research builds on the steps made by the government to improve applying SD. In other words, the interview was about

improving steps taken rather than criticizing their drawbacks. This, to some extent, helped create the needed environment of trust.

4.4.1.2. *Unthreatening questions*

Reporting on Kvale (1996), Bryman (2008) indicated nine different types of questions that most interviews practically contain. Kvale's types of questions are: introducing, follow-up, probing, specifying, direct, indirect, structuring, silence and interpreting (Bryman, 2008). The research employed some of Kvale's nine types like introducing, follow-up and indirect questions. Some other types were used during the interview by being "very attentive to what the interviewee [was] saying or even not saying" (Bryman, 2008, p.447) such as probing, direct, and silence questions. The most important type that the research used was the indirect type to avoid threatening question especially in the governmental context. In tune, Robertson and McLaughlin (1996) stated:

The best interviews tend to occur when conducted in a comfortable, relaxed manner. This not only implies that the location for the interview should be familiar to the respondent, but that the interview session should not be perceived to be threatening' (p.109)

For instance, in identifying the extent to which top officials of governmental bodies comprehend the process as expressed in legal resources, indirect questions were imperative. The questions were in the shape of inquiring about the story of founding IZs, avoiding mentioning any problems in laws/decrees. This created a placid environment that allowed governmental employees to go on to speak. Surprisingly, the data collected from those employees was effective in challenging the process of legal materials towards concluding the official process of the Egyptian government. For example, to show the extent to which the data was surprising consider that a prominent official from the EEAA when answering a question on the authority granted to EEAA to interfere in approving projects during the planning process, did not try, as was expected, to show powerful role of his body or defend its weak situation. Instead, he completely agreed on what is ordained by laws, stating:

You know the Egyptian system and how approvals could be gained: from the important/powerful entities like GOPP and the IDA. Everything is submitted to the Cabinet of Egypt after approvals from those bodies. Then, what is our role? If they consulted us, we give them the environmental dimensions that we need to apply. Then the decision is to be independently issued by the Cabinet. When this happens, you cannot do anything despite that the plans might be defective (En-G-32).

4.4.1.3. *Active interviewing and sensitivity*

Holstein and Gubrium (2004) argued that the active interview is not a particular type of interview. This is because they believe that all interviews are “unavoidably active meaning-making ventures.” (p. 157). Being active is something driven by the nature of the interview process, with its interactional and interpretive activities (see also (Mason, 2002)¹⁹), that keeps the interviewer involved to a minimum (Holstein and Gubrium, 2004). It was not a call for not being active or decreasing the importance of being so, as Holstein and Gubrium (2004) gave many considerations to the advantages of active interviews when saying:

The active view widens the analytical purview of interview research to consider a wider array of questions than are the bailiwick of standardized or naturalistic approaches.... The challenge of the active interview is to carefully consider what is said in relation to how, where, when, and by whom experiential information is conveyed, and to what end. Construing the interview as active, then, provides us with a much wider, more richly variegated field of inquiry than ever before. (Holstein and Gubrium, 2004, p.158)

In light of this importance, the researcher was “very attentive to what the interviewee [was] saying or even not saying.” (Bryman, 2008, p.447) . Asking for examples and/or using interpreting questions, along with other ways that obtain data on certain issues, were used. As stated earlier, these ways were variant such as posing alternatives²⁰, silence, and checking on contradiction²¹. This was performed, as suggested by Davies (1997), in a way applying “a balance between politeness and a little productive aggression” (p.146).

For example, silence was helpful to politely express an objection on what a respondent was saying especially with those whom the researcher met for the first time. This was mainly used with governmental officials when addressing the official planning process of IZs. In such a situation, an inquiry about the mismatch/contradiction between what was told by the respondent and that stated in the legal documents was very briefly posed followed by a pause/silence, as Bryman (2008) said: “allow pauses to signal that you want to give the interviewee the opportunity to reflect and amplify and answer.” (p.447). In this sense, pauses proved to be more powerful in obtaining data than questioning.

¹⁹ In support, Mason (2002) suggested that all qualitative interviewing has core features in common which “[t]he interactional exchange of dialogue” (p. 62) is one of them. She also said: “If you choose qualitative interviewing, you are highly likely to conceptualize yourself as active and reflexive in the process of data generation, and seek to examine this rather than aspiring to be a neutral data collector. While most qualitative researchers do have this kind of aspiration, it is important not to under-estimate the reflexive challenge posed by analysing your own role within the research process” (Mason, 2002, p. 66).

²⁰ Like saying: “but, some would say ...”

²¹ Like saying (“Yeah, but I thought that you said ...?”)

Being an active and reflexive in interviewing experts did not affect the respect given to participants during sessions. In this regard, the researcher was used to be, as suggested by Mason (2002), “sensitive to the interviewees, to their needs and rights” (p. 74)²². Due to the variation of participants and the extent to which they were close to the researcher, the sensitivity degree accordingly differed from one interview to another. With those whom the researcher was meeting for the first time, sensitivity degree increased, and it decreased with fellows and friends.

Being sensitive to fears²³ that were expected to arise when addressing political and governmental issues was in the focus of the researcher, through posing indirect question or avoiding stressing on these fears when arisen .

Being sensitive to participants included also, as mentioned by Robertson and McLaughlin (1996), rephrasing and reordering questions, or probing questions. In this regard, obtaining data sought on the shaping factors of the planning process of the IZs, was mainly depended on the judgement instantly/continuously made by the researcher regarding the appropriate time of probing for more information and the response of the participants on those questions. Being highly sensitive was greatly essential to maintain the interview sessions interactive and enjoyable to both participants and the researcher.

This interviewing approach, which combined unthreatening questions with being active, reflexive and sensitive, was adopted to obtain the needed data away from annoying participants to avoid bias or negatively affect their interaction.

4.4.2. Observations

As interviewing is seen by many qualitative researchers as part of ethnographic research practices, others argued that qualitative interviewing takes research gaze away from observational, visual and spatial social worlds (Mason, 2002). Observations, therefore, were used, as a part of the ethnography practices, to verify the data collected through the interviews on the planning process of IZs and its shaping factors. Observations were useful

²² She gave more details in this, saying: “Observing, picking up verbal and non-verbal cues about the social situation, its visual and spatial dynamics, and the mood of your interviewee(s). This means making sure you are tuned in to body language and to demeanour, but be unable to interpret it. This should include understandings, anticipating and interpreting the social dynamics of interviewing, for example, showing appropriate respect and courtesy to your participants.” (Mason, 2002, p. 75).

²³ These fears were largely noticed. They have been spotted when respondents asked the researcher to stop recording when speaking negatively about the government or, by nature, speaking with low voice when mentioning negative things about important people/bodies and raised it again to normal when talking about positive things (like what happened from: Ac-G-11, En-G-32 and En-65).

means of gaining understanding about the licensing process of industrial projects and mainly the investors' satisfaction and behaviour regarding this process. In this research, some visits were paid to the Environmental Assessment Department of the EEAA and licensing departments in governmental bodies like the IDA and new cities' councils. These visits included observing investors' reactions towards the licensing procedure and the extent to which they were satisfied with it. It also included conducting some informal discussions with a group of those investors. Again, using the observation method is seen as a complementary method to verify the data collected from interviews regarding the licensing process.

To make benefit from such a method, the researcher started the observations in a covert role to easily gain access (Bryman, 2008) to the waiting areas in the previous mentioned departments seeking common attitudes towards the licensing procedure. What was more important is that starting with a covert role was essential to fairly observe the investors' actions, as "they are less likely to adjust their behaviour because of the researcher's presence" (Bryman, 2008, p. 406). Moving from covert role to an overt one, as stated by Bryman (2008) as a common action from some ethnographers²⁴, was ethically important to being able to conduct some informal discussions with some investors and to cite the data elicited from their talks after having their consents. The researcher, therefore, introduced the research as well as himself to those whom a direct contact happened with them during observation sessions. To avoid transgressing the ethical tenets regarding the common perceptions gained from these sessions, those perceptions were cited in common rather than to particular individuals. This was also the case even when the researcher identified some of those individuals, as there was no opportunity to gain informed consent.

To conclude, such a research method was practical and productive to the extent that the data collected from interviews on the licensing procedure was triangulated.

4.4.3. Documentary evidence

Data was collected using documentary studies in addition to interviews and observational method. Documentary studies were used mainly to theorize on the official framework of the process through which IZs in Egypt are planned. In this regard, primary resources used are; laws, executive regulations, presidential/governmental decrees, initiatives, protocols and various conventions adopted by the State on the organization of the planning process of IZs. Secondary resources were also used in this regard such as interviews made by the media

²⁴ Although Bryman referred to ethnographers, the researcher believes that this applied to all research conditions involving this research.

means with/ statements made by high levels of administration of the concerned bodies and the government. The documentary evidence was also used to triangulate data collected from other methods. On the actual process of the chosen sample, in addition to the case studies planning reports, other documentary evidence on the actual process were utilised, such as different editions of the TOR of the IDP, the contract model between the IDA and developers, related laws and decrees, and official correspondences among the concerned parties. On why the process is taking its current shape, primary sources were unobtainable. Instead, available data from different secondary sources was utilized as practical to triangulate data collected from interviews.

Documentary evidence was collected by various means:

- Asking the interviewees from different fields, when appropriate, to support their opinions by documentary resources or to recommend the potential places from which the data could be collected.
- Visiting the governmental bodies to collect the needed data in person was another way. Utilizing formal letters from the FURP²⁵, where the research usually works, directed to those bodies to facilitate collecting the data, was helpful to some extent in this regard.
- Utilizing the internet is seen to be the last resort method to use when discovering the need for some other data especially during the data analysis and reporting. Through this way, visiting the governmental websites and purchasing online access to legal networks²⁶ were done. The case studies' websites and different newspapers articles, papers, and governmental periodicals.

4.5. Research Context

This part discusses the fieldwork context of this study. This discussion is important as it allows the reader to be aware of the limitation/difficulty of collecting data in a Third World country like Egypt.

4.5.1. Gaining access

One of the biggest problems that social sciences face, especially in a qualitative research like this research, is to gain access to respondents, become familiar to them, and get them to speak. These problems increase in a context like Egypt where autocracy, fear²⁷, and lack of

²⁵ Faculty of Urban and Regional Planning, Cairo University

²⁶ Like the Arab Legal Information Network: <http://www.eastlaws.com/>

²⁷ The fieldwork of this research were conducted during three months started on the first week of November 2009. This means about 14 months before the 25th of January 2011 Revolution happened in Egypt what the

interest in scientific research²⁸ are dominant. This research discusses the planning process of Egyptian IZs and its shaping factors where the government is almost in control. This means that discussing socio-political issues was a must, and, indeed, added more limitation/difficulty to gaining access. Designing and then applying techniques to gain access in such a context were not easy tasks.

Depending on personal contacts in gaining access was a key factor. It was expected that the difficulty of gaining access would vary from one place to another and one group of respondents to another according to the extent to which the researcher was able to build the needed connections in those places and to those groups. Therefore, the researcher started by the FURP where he work back home as a Teaching Assistant and keeps good relationships with his fellows. This allowed the researcher to use some of the FURP staff as respondents as well as links to other potential respondents. Similarly, Delamont (2002) in referring to fieldwork she conducted noted: “we started with personal contacts and places we felt we would get cooperation. It is an excellent idea to use contacts to get started on access negotiations.” (p.71).

In this context, the group of experts from the academic field in general and those from the FURP in specific was expected to be easy to access. Trust and support were expected from the FURP educational environment with some limitations in discussing the political issues. These expectations decreased to some extent but still existed in the case of academics/judges/NGOs that the researcher used his contacts from the FURP to gain access to. For example, a relative to a key-expert, who works in the FURP where the researcher usually works, was a good link that created the appropriate environment for this expert to respond freely/impartially and generously.

For the group of the developers of the IPs, the researcher did not hold any ties or contacts. In addition, as these IPs are part of a competitive market, there was fear that their managers would probably be conservative in disseminating real data about their IPs if not rejecting the interviewing idea in the first place. That is why the researcher contacted all the IPs in Egypt to maximize the opportunity to gain access to welcoming IPs. Out of this action, three IPs positively responded. Only one of them was conservative to some extent.

Regarding governmental officials, the researcher, like the case of the developers, did not hold any contacts. Access to this group was expected to be very hard. In addition, fears from

researcher believes, and did not practice yet as being away from home, it changed the context to a great extent regarding the people’s fear from discussing governmental and political issues.

²⁸ These factors are discussed in details in Chapter (7).

disseminating skewed data from this group, if accessed, were highly expected. Accessing this group via personal contacts to overcome these fears was very essential towards obtaining the data needed.

By expecting this variant degrees of difficulty, the researcher tried as much as possible and in early stages of the research to build/develop connections to gain access to different groups. The researcher, at first, conducted two pilot studies mainly to build these connections. The first was around seven months prior to the fieldwork and it was a good source in this regard. During this pilot study, the researcher was able to be connected, through his close contacts and then by snowball sampling, with a few number of employees in the concerned governmental bodies, mainly the IDA and the EEAA, who were willing to help. The researcher kept himself, during those seven months, in contact with those employees. The researcher then utilized these new connections with those already available in the FURP in the second pilot study²⁹ to add more employees to the connection list. These unofficial attempts to gain access continued to be the researcher's main concern when conducting the main field study. In addition, the official letter issued from the FURP was another helping tool to access the areas that the researcher's connection list did not cover. The letter was also very important when some employees, being disseminating official data³⁰, asked for an official cover for themselves.

Most groups that the researcher managed to gain access to, were interviewed. In some cases, only when using the official way of gaining access to governmental bodies, employees refused to be interviewed giving different excuses. Asking them for recommending other colleagues in the same specialisation/department seemed as the best way to deal with this issue. In other unexpected cases, the researcher did not get access to the planning teams of the chosen IPs. This is because the planning team of two of the chosen IPs is located outside Egypt. The researcher contacted its head by phone, but he was not helpful and asked the researcher to check the planning reports. Regarding the third case study, its executive director refused to disseminate any data on the planning team of his IP. As a substitute, the researcher interviewed other IPs' planners to triangulate the planning data told by the IPs' developers along with studying the planning reports as recommended. These methods were quite enough to collect the needed data.

²⁹ The one that worked as the first layer of the fieldwork mentioned in the research strategy

³⁰ This must be seen in the context we mentioned in the introduction of this section.

To conclude, while gaining access to academics and experts were already secured, that of IPs and governmental employees needed many efforts that continued for months.

4.5.2. Conducting interviews

It has been argued that qualitative interviewing is difficult, challenging, and heavily consumes time and effort (Mason, 2002). When considering the Egyptian context, we have to admit that these concerns largely increase. This section discusses difficulties faced in such context and how they were dealt with.

Every typical interview took a long time to start due to the need for socialising, normally with close respondents and necessarily with other respondents to bring about familiarity. Differences between living in Egypt and the UK especially in the educational context were common topics to address to allow the interview to comfortably start. Some respondents, especially those whom the researcher met without previous arrangements as a result of using the official way of gaining access, seemed to be very busy, hence the introductory statement on the research was reasonably thought to be enough.

In total, the researcher conducted almost 65 interviews with an average of 40 minutes/interviewee. While some interviews lasted for more than 2 hours, others were almost around 20 minutes or less. Many reasons were behind the large number of interviews. These reasons are as follows:

- Although gaining access to conduct interviews in the governmental context, almost the main source of respondents, was expected to be hard, it was surprisingly found it to be hard to conduct/complete interviews as planned. Bureaucracy, unwillingness to disseminate data, and chaos, characterize this context. In such context, therefore, the researcher found it hard to complete the interview and ask all the needed questions in many cases. The researcher, then, had to seek alternative interviewees who were able to give the appropriate time and concentration to uncover the hidden areas. In such situations, when the researcher felt the respondents were busy³¹/reluctant to be interviewed/conservative in their speech, they were asked to nominate other qualified individual in the same department.
- Due to the nature of the semi-structured interview that the researcher was always sensitive to benefit from, some interviewees addressed new issues which they know about

³¹ For an example, during an interview that only last for 30 minutes and although it was arranged and confirmed, the interview has been interrupted for more than 8 times by phone calls and administration requests to the interviewee.

the best. In such cases, seeking other respondents to triangulate these emerging issues was another reason that increased the number of interviews.

- In other cases, if rare, respondents rather than clarifying things were, with/without intent, adding ambiguities and creating contradictions that the researcher struggled to clarify from them or by seeking other respondents.

Getting hold of respondents within the Egyptian context is quite difficult and challenging. The fieldwork difficulties started with arranging with respondents, from different groups, to set a meeting. Phone calls, rather than emails, were the preferable way for most of the respondent to contact them. Phone calls, in many cases, were used just to set a first meeting in order to set an appointment for an interview! In such cases, the respondents were mainly senior staff. It was thought, for cultural reasons, that it is improper to ask those seniors for conducting an interview by phone as they might receive it coolly. Others, like some of the IPs developers, wanted first to have full details about the interview topics before deciding whether to conduct the interview due to the competition with other IPs.

The difficulty was not only regarding arranging for the meeting, but after succeeding in that and even after phoning again to confirm the meeting, many appointments were changed. Some of them have been changed occasionally at the last minute. In some other cases, respondents came late or did not come leaving a message in the meeting place asking for another appointment.

4.5.3. Collecting documentary evidence

The legal/institutional framework of Egypt suffers from the abundance of and conflict among laws, decrees and regulations governing the work system³². Once laws and decrees issued they legally must be published in the official newspaper. The problem, therefore, is not in collecting them but the problem is in accounting/identifying them. The reason is that there is no structured/organized/classified inventory that can be used to identify a list of the legal documents relevant to a specific subject. Some agencies and ministries, one of which is the MTI, publish, on their websites, their establishing laws/decrees with some other basic related legal documents. This published material is not comprehensive or organized and cannot be seen as an updated inventory that is classified by type. Therefore, the problem regarding legal documentations needed for theorizing on the official framework of the process through which IZs are planned, was on how to count and identify them not to collect them. The group of employees the researcher contacted in the first pilot study, as stated earlier, was very helpful

³² This issue is discussed and proved in Section (7.3.1).

in this regard. Considering their willingness to help, the researcher was in contact with those employees since then and up to the time of fieldwork, collecting some of the data needed. During the fieldwork he collected most of the required data on a second visit.

Data on political/governmental issues especially what proves the mistakes/corruption of the government, is considered in the institutional framework of Egypt as top secrets³³. This context resulted in the shortage of documentary evidence from primary resources of the shaping factors of the planning process of the IZs as they are mainly governmental/political factors³⁴. Yet, this was abated by satisfactorily interviewing experts from different background, conducting informal discussions with other experts, and collecting available/enough data from different secondary sources.

4.5.4. Limitations

The research context, we discussed earlier, put a lot of pressure physically as well as psychologically on the researcher and made him busy with collecting data and arranging for meetings most of the time. The researcher then was not able as was planned, and as stated by Robertson and McLaughlin (1996), to sit at his desk/PC to study the data while being collected³⁵. The researcher had initially hoped to have the data analysis done to revisit the key respondents to discuss the fieldwork results, if initial. The researcher hoped to discuss/initiate possible long-term, incremental and context-specific scenarios towards the application of the EIPs in Egypt. The researcher then according to time/money limits decided to consider these hopes as avenues for near future research.

The empirical study of this research was conducted in the authoritarian atmosphere of Egypt prior to the 25th of January 2011 revolution. Although the obstacles this study faced have been overcome by following the techniques discussed earlier, reporting on the data collected and presenting it to the context where the researcher usually work or keep business relationships would cause harassments or embarrassment to him. Though there has been a revolution, by default many governance structures and attitudes remain in place or are at least not yet replaced in total - there are always continuities as well as ruptures. Though, this matter had a psychological effect on the researcher, he did his best not to negatively affect reporting properly on the data collected.

³³ This issue is discussed and proved in Section (7.6).

³⁴ See Chapter (7) for full details.

³⁵ This differs from what the researcher was keen to do in time before and after the data collecting trips. In such time, the researcher used to take notes/ideas and conclude comments after interviews/visits.

4.5.5. Researcher background

Two key elements in the researcher's background had a profound impact on the steps of this research in general and the fieldwork study in particular. The first element is the experience/knowledge gained by the researcher from his work over 12 years before the start of this research. This experience included both practical and scientific branches. Working as a professional planner in major projects allowed the researcher to go through different planning processes (the focus of this research). This practical expertise was developed by the scientific experience the researcher obtained from his work as a teaching assistant and two diplomas and a masters in Urban Planning. The master in particular studied IZs in Egypt and the ways to develop them environmentally. Scientific and practical experience gained by the researcher can be summarized as the trio of: planning processes, environment and industrial zones. This experience gave the researcher the ability to identify the research problem, questions and goals in a reasonable way. As the researcher experienced the Egyptian research context of this trio before, he was able to set up a strategy of this research that enabled him to collect the required data and then analyze them to answer the research questions including theorizing on the planning process of the IZs and its shaping factors.

The second element is the social network that the researcher built during his career. This network, especially friends/fellows from work, worked significantly as the main tool that allowed the researcher to gain access to different places/groups to collect the needed data.

4.6. Ethics

It has been argued by many scholars in social sciences, one of them is Bryman (2008), that ethics tenets are to be considered whenever the research is conducted with participants. The informed consent comes on top of these tenets as it can cover other tenets like confidentiality. In the Egyptian context, there are practical difficulties with getting a signature or written consent from participants. This would be, culturally, regarded as impolite or even insulting to ask for a signature on paper rather than receiving acceptance by word of mouth or through emails. As the informed consent introduced the research to participants to allow them to take a decision on whether to participate, the consent was gained from those who participated through their replies to the introductory statement³⁶. Such replies were received through emails or orally, see Appendix (II) for an example.

Recording is highly recommended as fully as the researcher can do for the qualitative interviewing (Mason, 2002). While it was also argued by many social researchers, like

³⁶ Discussed in Section (4.4.1.1)

(Bryman, 2008) and (Mason, 2002), that recording should be ethically overt rather than covert, others see covert recording as a preferable way for specific situations. For an example, the BBC website, under the Editorial Guidelines, Section 7: Privacy, Secret Recording, states that the BBC uses secret recording only for some purposes that include:

- [T]o obtain material outside the UK where a country's laws make the normal and responsible gathering of material extraordinarily difficult or impossible.
- [A]s a method of ... social research in the public interest, where no other methods could naturally capture the attitudes or behaviour in question. (BBC, 2011)

Actually, this is the case of Egypt. Collecting data is something very difficult, as discussed before as well as in details in Chapter (7). Difficulty increases whenever the data is on political and governmental issues like the case of this research. The researcher in this context tried to overtly record interviews in the pilot study, but the result was not scientifically acceptable. In some situations, respondents refused to record meetings, expectedly because of fear, and became sceptical about what they thought the researcher' hidden purposes. Some respondents refused to continue giving any excuses while others continued with scepticism that led mainly to skewed and partial data. In other cases, respondents, mainly from governmental officials, conservatively accepted recording, and this also produced partial data. The researcher, in this context, contented with that recording the interview was mentioned clearly in the introductory statement where none of the participants did not express a refusal to record except one case in which the researcher abided. Based on this, the researcher used covert recording in contexts that he felt being overt could scientifically affect the data collected. This is despite the fact that anonymity is applied when referring to those participants in this thesis in order not to inflict any harm on them by any means. Consequently, it is impossible for any reader to recognize those participants. Furthermore, due to the sensitivity of the issues discussed in this research, it was preferable to use codes for all participants, not only those we mentioned earlier, to cover their identities, (see Appendix (V) for codes and participants list). Yet, to give credibility to this research findings, role/position and experience of participants are exposed so that the reader can judge the significance of their views.

4.7. Data Analysis and Reporting

This research did not test an existing theory because of the lack of theorising on the research's concern on one hand. On the other, considering the complexity of social sciences, it was also because of the researcher's belief that a theory worked in one environment/context cannot be applied in another. Therefore, this research is an inductive one attempting to build a

theory that explains realistic events as they emerge from the data, not a deductive research that works, as mentioned by LeCompte et al. (1993), “to find data to match a theory” (p.42)³⁷. It therefore depends on coding analysis that is “a form of content analysis to find and conceptualise the underlying issues amongst the ‘noise’ of the data” (Allan, 2003, p.1). The conceptual framework constructed in Chapter (3) was helpful not only in organizing the data while being collected, but also in generating coding categories deductively at the start of the analysis. After this start, the whole analysis process was about discovering rather than creating facts (Robertson and McLaughlin, 1996) where coding categories were repeatedly developed according to the data discovered.

This study produced qualitative data from interviews and documentary resources. For interviews, the total number is almost 65 interviews where almost 45 are considered as full and important interviews while the other 20 are considered complementary ones. The recordings of 45 interviews were transcribed verbatim where the other complementary 20 interviews were summarised and the parts thought to be related to the research questions were briefly outlined in the transcriptions. The documentary resources have been studied and prepared for the software analysis. After becoming familiar with the data, it was found that the data is very complex, multiple and interrelated that is hard to be coded by hand³⁸. Therefore, Atlas.ti 5 software has been employed. The researcher compared between Atlas.ti and other qualitative analysis softwares. The researcher found Atlas.ti to be more flexible, functional, and easier to use. What is more important, as this research is mainly an inductive one, is that Atlas.ti was chosen as it offers all the tools needed to analyzing unstructured data as of this research. The transcribed interviews and documentary resources were ‘assigned’ as different ‘documents’ to one ‘project’ in Atlas.ti. The researcher then revisited all documents and repeatedly interrogated them looking for themes that would help answering the research questions. As indicated earlier, the researcher generated coding categories deductively at the start from the conceptual framework and, then, developed these codes during the analysis process inductively according to what emerged from data. Accordingly, through Atlas.ti, tasks of coding with appropriate related quotations along with different relationships³⁹ between codes and quotations were gradually constructed. Codes and, accordingly, related quotations were classified and distributed under ‘family’ codes where each family answer a

³⁷ In support, Allan (2003) stated that Glaser & Strauss (1967) “insisted that preconceived ideas should not be forced on the data by looking for evidence to support established ideas” (p.1).

³⁸ My case is the opposite of Rashid (1998), as he considered his research is not an ethnographical study of complex social interactions. So that, he thought using computerised techniques to analyse data collected was deemed unnecessary.

³⁹ Relationships between codes/quotations are such as; contradictions, complementary, explanatory and so on.

research question or a part of it. Those families with its contents were extracted from Atlas.ti to Microsoft Word files where every group of families shaped one chapter. The quotations forming the chapters have been revised, reclassified and grouped into main subjects forming the main structure of each chapter. For an example for this procedure, Table (4-2) illustrates how the family codes of Chapter (6) constructed to answer the second and third parts of the first research question, asking about the actual process of the planning process of the Egyptian IZs and whether sustainable, and give preconceptions for the second research question, asking about the governing factors of the process. This includes a group of sub-families that each of them contains a number of codes and quotations and represents a part of Chapter (6) structure. This hierarchical formation has been extracted with its quotations, and relationships between them to Micro Soft Word forming the initial construction of Chapter (6).

During the analysis, the need for more data, mainly to triangulate data from interviews and documentary resources, emerged. The researcher sought this data through the internet as soon as they were needed.

It is important here to mention that all the data collected and hence the extracted quotations were in Arabic. Translation to English consumed a lot of time and efforts adding to the difficulty of conducting this research.

Table 4-2: Hierarchical formation of codes of chapter 6 and relations with the research questions

Family code	Sub-family code	Codes	Quotations	Coverage of codes to answer research questions			Description	
				1st R.Q.		2nd R.Q.		
				2nd part	3rd part			
Chapter 6	Chapter6 part1: Introduction to the case study	[Egypt: IZs types] [^ Establishing the Egyptian IPs program] [P. Developers]	85				Second and third parts of the first research question	
	Chapter6 part2: The case study planning process	[^ Announcing/approving of establishing an IZs and buying the land] [^ Approvals and licensing the project] [^ Changing, generating and transferring ideas] [^ Choosing and forming teams] [^ Choosing IZs/IPs activities] [^ Choosing IZs' locations] [^ Coordination among the governmental bodies] [^ Economic Studies and Marketing] [^ Establishing appropriate structures and procedures] [^ Habilitating/evaluating developers] [^ Information system] [^ lands pricing/allotment/receiving] [^ National and regional planning] [^ Networking and Participation] [^ Overcoming bureaucracy and improving the investment climate] [^ Physical Planning preparation] [^ Specifications, regulations & criteria] [^ TOR & Contracting]	381					
	Chapter6 part3: Partners & roles	[P. Civil society and NGOs] [P. Consultanta and Planning teams] [P. Developers] [P. EEAA] [P. FESDIZ] [P. GAFI] [P. GOPP] [P. Government] [P. HCUP] [P. IDA] [P. IMPC] [P. Local government] [P. NCP SLU] [P. NUCA] [P. Relationships among partners]	356					
	Chapter6 part4: The partners understandings	[Egypt: On the way to sustainability and EIPs] [Egypt: the pillars of industry] [P. Partners thoughts and understandings] [P. Private-public partnership]	207					Third part of the first research question and preconception on the second
	Chapter6 part5: Problems face the planning process	[^ Utilities issues and problems] [^ Environmental issues & problems] [Egypt: Financial framework] [Problems face the developers]	187					

4.8. Summary

This research is a qualitative research which adopted a multi-layer multi-method approach that depends on a case study design in its core. This chapter detailed the research strategy followed illustrating how the empirical study was conducted to answer the research questions, and the context under which the various stages of investigations were carried out. Development of contacts and how access was gained, were discussed. This chapter also covered the research methods and derivation of data collected from primary and secondary sources. It explained how and why the Industrial Developer Program was chosen as the case study and then how and why three representative industrial parks were chosen as the research sample. Collecting documentary evidences, conducting interviews, and observations were the research methods this chapter justified addressing how issues of validity and reliability were addressed and finally how ethics were considerably respected.

The following chapters therefore analyze and then reporting on the data collected to answer the research question. Chapter (5) discusses and concludes the official framework of the process through which the Egyptian IZs should be planned answering by this the first part of the first research question. To answer the second and third parts of the research question and initially the second research question, Chapter (6) deals with the case study analysis and concludes the actual process through which the industrial parks are planned and preconceptions on the governing factors. Chapter (7) therefore discusses the governing factors of the planning process answering the second research question.

5. CHAPTER FIVE: PLANNING PROCESS OF INDUSTRIAL ZONES: THE OFFICIAL FRAMEWORK OF THE STATE

5.1. *Introduction*

Chapter (2) discusses the recent arrangements of the institutional and legal framework governing the planning process of the Egyptian industrial zones (IZs) related to governance for sustainable development (SD) in the last decade. This chapter therefore discusses the extent to which these changes influenced the official framework. It aims at *normatively*¹ describing, understanding and then theorizing for this framework. This includes; theorizing on the stakeholders, their respective roles, relationships and how they coordinate between each other as well as the institutional and legal arrangements governing the planning process of IZs. This chapter deals with the official viewpoint of the State as comprehended from legal documents and interviews with officials. In other words, the official version is based on the laws issued in this regard, decrees whether presidential or governmental, initiatives, protocols and various conventions adopted by the State on the organization of the planning process of IZs. Additionally, it depends on the interviews conducted with a number of governmental representatives, and, in particular, those who are focusing on the explanation of the official framework. It finally depends on interviews and statements taken by various media regarding this matter. This chapter therefore, helps addressing parts of the first research question asking about the official framework for the process under which industrial zones could be planned in Egypt and whether the process is sustainable. Reaching this answer is a contribution to knowledge, because at present there is no single place where this official framework can be found, and there exists considerable confusion about the process even in the minds of those involved in it. That fact itself suggests that it is not likely to be very influential in shaping the process in reality, though parts of the framework may have influence, of course.

To analyze the extent to which this official framework is applied on the ground, the subsequent chapter will challenge three case studies against the official framework concluded in this chapter. This will help determine problems and challenges facing the planning process of IZs, and how near Egypt and its institutions are from the application of the principles of SD and industrial ecology (IE). Accordingly, it will help theorizing for the application of eco-industrial parks in Egypt which will contribute to the knowledge at the local level as well as enriching the global debate about the application of industrial ecology.

¹ It discusses what should legally be followed not what happens in reality.

In this context, this chapter synthesizes the official framework of the State through concluding phases and steps that are supposed to be officially followed, as well as main roles and relationships among the relevant bodies in Egypt concerning the planning process of IZs. It, then, concludes the most important characteristics and problems of the State official framework for the planning process of IZs.

5.2. The State official framework of the planning process of Egyptian industrial zones

Appendix (VI) discusses in details various concerned governmental bodies involved in the process through which the Egyptian IZs are planned, and their competences, roles, and institutional arrangements legally imposed to tighten the relationships among those bodies². Depending on this appendix, this chapter synthesizes the official framework of the planning process of IZs. This comes by concluding phases of the process, and their steps and procedures supposed to be followed by the concerned bodies regarding the planning of IZs. All are addressed together with flowcharts showing and explaining this framework including partners, roles and relationships.

Many phases and steps are mentioned by the Egyptian law during addressing the planning process of IZs. They are not displayed in order but they can be classified into six main phases that each of them contains a number of tasks/steps. They begin with ‘Setting up Policies’: the phase of preparing studies at national level and setting the State policies by sector. It is followed by four phases: a) ‘Pre-Planning’: the phase of preparation of studies and land allocation, b) ‘Planning’, c) ‘Regulations and Legislations’: the phase of preparation of legislation and governing regulations for land allocation, its planning, approvals and licenses, and d) ‘Licensing, Approvals and Accreditation’ phase. The Egyptian Law also intensively displays functions/tasks of coordination among bodies concerned with planning and following-up of the implementation of the prepared policies, plans and programs of the various aforementioned phases. Hence it is not a phase by itself but rather a set of multiple interlocking tasks that appear in various phases of the planning process. These tasks are gathered here under the ‘Coordination and follow-up’ phase.

This section discusses in detail each phase, concluding the most important steps and functions of each one, authorities in charge, and different partners and the role of each of them. This discussion is supported by a matrix of tasks and roles with a flowchart illustrating the previous mentioned elements.

² All evidences that this chapter depended on are stated in Appendix (VI).

It is worth mentioning here that many of these phases contain several cross-cutting steps the location of which, in the IZs production process, can vary according to the nature of the project. Therefore, the researcher does not claim that he develops, in this part of the research, a logical and unilateral order for those phases and steps. However, what has been mentioned earlier regarding those six phases is just to facilitate the presentation of the various stages linked to the bodies responsible for implementation and the inter-relatedness relationships with other bodies.

5.2.1. Setting up Policies

Reviewing policies here is confined mainly to the industrial sector with industrial policy related particularly to IZs, and urban and environmental matters. As shown in Table (5-1) and Figure (5-1), in the industrial sector, the most important player is the Industrial Development Authority (IDA). While the Egyptian law has singled out the Ministry of Trade and Industry (MTI) as the only body responsible for setting up industrial policies, it singled out the IDA as the sole body to implement such policies. It also assigned the IDA to develop and implement policies of land development for industrial purposes, as well as policies to stimulate and encourage investment, and improve its overall environment. The IDA is alone competent to decide on the establishment of IZs and the expansion of existing ones. In addition, it is also competent to develop policies and plans necessary for the training of industrial workers, and policies and mechanisms required for connecting industrial development requirements to scientific research activities and associated technology. The Egyptian Law does not mention any partners of the IDA that should be involved in the previously mentioned roles and tasks but in two things. First, concerning the tasks related to the development and implementation of policies for industrial lands, the IDA is obligated to coordinate with governorates and authorities concerned thereby. Second, on investment promoting/improving policies, the IDA should coordinate with the General Authority for Investment (GAFI).

As for urban policies (which their outcomes could contain new, or extensions of, IZs), there are two key players with overlapping in responsibilities between them. The Egyptian law singled out the New Urban Communities Authority (NUCA) as the body to study, propose, implement and follow-up plans, policies and programs of the establishment of new urban communities. As for planning and sustainable urban development, the General Organization for Physical Planning (GOPP) is by law the State's apparatus in charge of laying down the general policy in this regard that the Supreme Council for Planning and Urban Development (SCPUD) should approve in a next step. The Provinces Executive Council (PEC) participates

with GOPP, at the province level, in setting up policies and goals. The Provinces local People's Council (PLPC) also formulates planning needs at the local level that GOPP builds on in laying down urban policies.

With regard to environmental policies and according to the law, the Egyptian Environmental Affairs Agency's (EEAA) competences are limited to setting up policies and plans necessary to preserve the environment while it is not responsible for their implementation, which is assigned to the competent administrative authorities. Regarding following-up on implementation such policies and programs, EEAA should coordinate with those authorities. However, the law gave EEAA the authority to undertake the implementation of some pilot projects.

By analyzing the above-mentioned bodies and assignments and with the consideration of Figure (5-1), it is found that the legal obligation regarding cooperation and partnership among the three sectors industrial, urbanism and environmental - that are supposed to be the most connected - is mostly missing³. It is also observed that there is overlapping among those assignments. This gives an indication - which the subsequent chapters examine - on the domination of each of the IDA, the GOPP and the NUCA on its own territory separately and away from the EEAA participation in policy formulation, whether industrial or urbanism. Overlapping in responsibilities in a context lacking coordination among its partners make this phase away from principles of governance for SD (Jordan, 2008).

³ Absence of relationships arrows between those sectors could be observed in Figure (5-1) and also by the shaded cells in Table (5-1).

Table 5-1: Matrix of the Setting up Policies phase

Phase	Task/step	Role of	Implementati on by	In coordination with	
State Policies	Industrial	Setting industrial sector Policies	MTI	IDA	
		Setting Land/IZs development policies/plans	IDA	IDA	Provinces and other stakeholders
		Deciding on the IZs establishment	IDA	No info	
		Improving the investment climate in IZs	IDA	No info	GAFI
		Setting policies for the training of industrial sector's labour and linking the development of the industrial sector with scientific research	IDA	No info	
	Environmentally	Setting environmental policies/plans EEAA as an environmental advisor to the state and decision makers	EEAA	The concerned administrative authorities	
				EEAA may implement some pilot projects.	
	Urban development	General policy for planning and sustainable urban development	GOPP then to be accredited by SCPUD		PEC participates with GOPP in setting local urban policies and goals (at the province level). Local needs are to be set by PLPC (Province Local People's Council)
		Policies for establishing new urban communities (studying, setting, implementing and follow up)	NUCA		

Areas lacking coordination

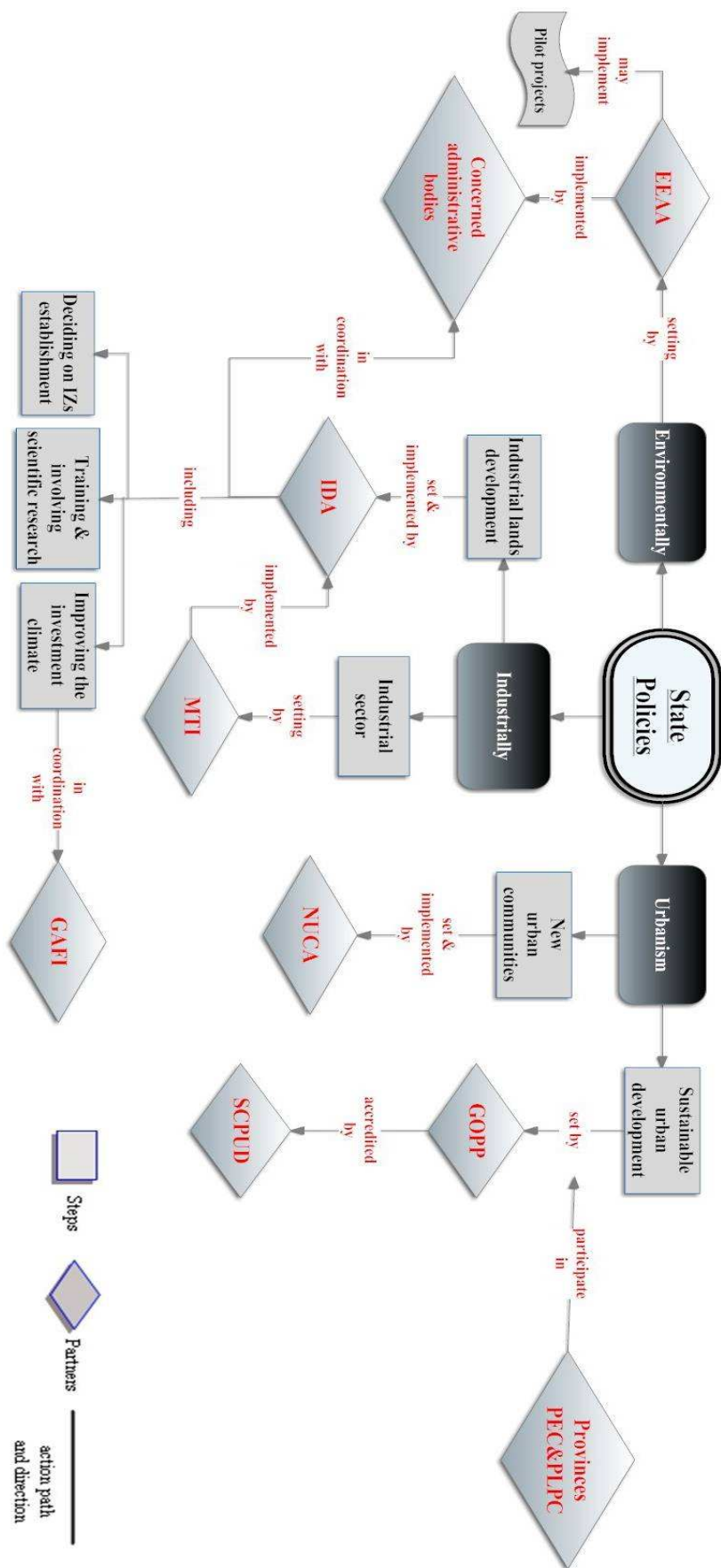


Figure 5-1: Simplified flowchart of the Setting up Policies phase

5.2.2. Pre-Planning

As shown in Table (5-2) and Figure (5-2) regarding the pre-planning phase, the tasks/steps mentioned by the Egyptian law related to the IZs are: a) marketing and publicity of IZs, b) qualifying of and contracting with companies/investors, and c) land allocation. In addition to the above, extending infrastructure is also presented that contains utilities supply inside and outside IZs and regional infrastructure.

With respect to the first three tasks, it is notable that the law has singled out the IDA for their responsibilities. The law does not stipulate on any other partners with the IDA in these responsibilities, but at marketing and publicity of IZs. The IDA, in this regard, is obliged to coordinate with the competent body of investment (the GAFI) to facilitate the exposure of the projects to a wide range of investors.

With regard to infrastructure, it is found that there are three sub-tasks: infrastructure outside IZs, inside IZs and regional infrastructure for new urban communities. Starting from infrastructure outside IZs, the law authorizes the IDA to coordinate with the competent governmental bodies to include its projects within the plans of these bodies to implement them. The law in this regard does not give the IDA any power over these bodies. The matter was not significantly different with regard to infrastructure inside IZs. IDA's role is limited to the coordination with local competent authorities yet through the Fund for Supporting the Establishment, Extending Public Utilities and Development of IZs (FSEEDIZ). The FSEEDIZ coordinates with the NUCA with respect to IZs in new urban communities, and with provinces with respect to existing IZs within its ownership boundaries. Regarding regional infrastructure, the NUCA alone has absolute powers in the study and implementation of regional infrastructure necessary for new urban communities.

Coordination among partners outwardly appears in this phase in a better way than the previous phase although the existence of some areas lacking it (see the shaded cells in Table (5-2)). The reason here is that the IDA although having the mandate over industrial development, lacks powers needed to extend infrastructure to its projects. The law therefore, obliges the IDA to coordinate with those bodies having the power; the NUCA and governorates. In a contradictory way, the law did not oblige those in power to coordinate with the IDA and let it facing them without stating mechanisms could activate such coordination. This context having unbalanced powers among partners with absence of coordination mechanisms, again, lacks the principles of governance for SD (Geng and Yi, 2005, ESCWA, 2003) where problems regarding infrastructure implementation are therefore, expected.

Table 5-2: Matrix of the Pre-Planning phase

Phase	Task/step		Role of	Implementation by	In coordination with
Marketing, qualifying, contracting and utilizing	Marketing and Publicity of IZs		IDA	No info	GAFI
	Qualifying & Contracting		IDA	No info	
	Land Allocation		IDA	No info	
	IZs Utilities and infrastructure	Outer	IDA coordinates with utilities ministries	utilities ministries	Utilities ministries
		inner	IDA through FESDIZ coordinates with local authorities (the NUCA in new cities and provinces in existing cities).	Local authorities (NUCA and provinces).	local authorities
			FESDIZ is responsible for payment	No info	
	Regional infrastructure for new communities		NUCA	NUCA	

Areas lacking coordination

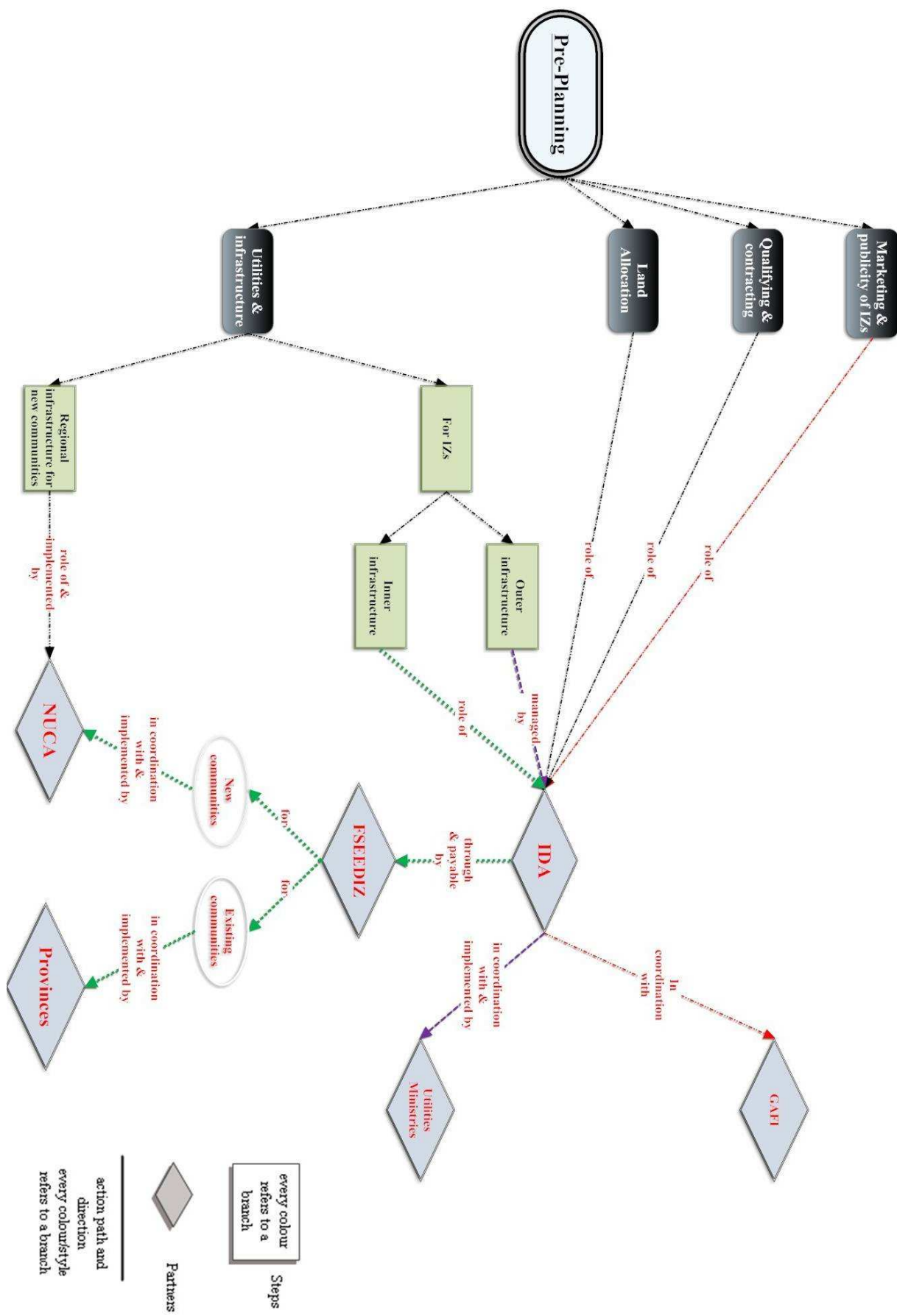


Figure 5-2: Simplified flowchart of the pre-planning phase

5.2.3. Planning

As shown in Table (5-3) and Figure (5-3), the planning phase is divided internally into 4 sections: planning for industry, planning for urban development, planning for the State's lands outside the provinces' reins and environmental planning.

First, starting with planning for industry, in general, it is found that planning is managed by the IDA through its technical team and finally prepared by specialized consultancy offices. These offices are assigned by the competent bodies in terms of the project location. With regard to existing IZs, they are divided into two types, 'new cities' and 'provinces' IZs. The NUCA is singled out legally to be responsible for the planning of its possession of IZs, but it entrusted the task to the GOPP that finally assigned consultancy offices for doing the job. Regarding existing IZs within provinces, plans are prepared by provinces through specialized consultancy offices. Regarding industrial parks (IPs), developers of such zones are in charge of the task through entrusting consultancy offices. In this general context, the law specifically highlighted two tasks because of their importance. These are; the selection of IZs locations and lands, and the identification of their activities and related services. For both tasks, the IDA is responsible by law. In the first task, the IDA is legally obliged to coordinate with the National Centre for Planning the State Lands Uses (NCPSLU). For the second task, the IDA is compelled by law to coordinate with all relevant bodies in general and the EEAA in specific.

Second, with regard to the planning for urban development, this depends entirely on the national program of strategic planning. The strategic planning program is basically the GOPP responsibility under the condition that the outcome is to be accredited by the SCPUD. In details, it can be said that this program has three levels; national, regional and local. For the national and regional levels, the GOPP is in charge of studying, preparing and implementing such a program. However, the SCPUD is competent for accreditation before the implementation. There are two parties that sharing the GOPP in such a task other than the SCPUD. The first is the NCPSLU that is required to participate in the site selection of key projects in the country. The second is provinces which identify their planning needs and priorities which the GOPP has to consider when preparing the strategic plan. With respect to the local level, there are three cases as follows:

1. In new urban communities, the NUCA is legally competent but through the GOPP which entrusts specialized consultancy offices to do such tasks. In such case, the law does not mention the necessity of accrediting schemes by the SCPUD.

2. In existing urban communities, regional centres of the GOPP are competent therein through local departments of planning of governorates. Those departments contract with specialized consultancy offices to do the task under the supervision and the auspices of the GOPP.
3. For projects outside the adopted boundaries of urban masses of existing urban communities, the SCPUD is in charge of selecting sites and boundaries of such projects.

Third, for State lands outside the reins of provinces, the NCPSLU is generally in charge of planning. However, with regard to land allocated to new urban communities owned by the NUCA, the NUCA is solely in charge of the whole process.

Finally, regarding environmental planning, the law states only two main functions in which the EEAA is in charge to perform. The first is related to the preparation of environmental studies, plans and programs of the State. The second is regarded collecting and processing the environmental information required by the State in preparation of its plans. Yet, the law does not mention the presence of any partners with the EEAA in this matter and even does not grant the EEAA the powers necessary for the implementation of its limited tasks.

The relationships network of the planning phase is considered to be the most influential if compared to that of other phases, as seen in Figure (5-3) through multiplicity of partners, roles and relationships among them. Although the urban planning in most cases is carried out by specialized consultancy offices, but till getting to this step it is required to pass through many of the steps and interrelationships which could be sometimes conflicting. Starting with planning IZs outside the provinces reins, it is found that the role of the NCPSLU and the IDA contradicts with powers legally given to the NUCA controlling in full over the whole planning process of new urban communities. Similar contradiction applies in the process of planning lands within the provinces reins. The role of the GOPP with cooperation from provinces, in preparation of the strategic planning at all levels, may end with identifying locations for industrial development rather than the physical planning for them. The effect of these positions of contradiction maximizes by two issues: a) accreditation body of schemes vary according to the competent administrative authority and b) the law does not oblige bodies in many cases to coordinate with each other. The latter issue strongly appears regarding the environmental role. Governmental bodies are mostly not legally required to coordinate with the EEAA. Hence, the EEAA is kept without sufficient powers enabling it to enforce/activate its work within the competent bodies.

To conclude, the planning phase suffers from contradictions/overlapping jurisdictions among involved partners in addition to lacking coordination in some areas that maximize the effects from contradictions in responsibilities especially on the environment. This overlapping could lead to policy conflicts, program duplication and inefficiency (ESCWA, 2003). Therefore, the planning phase is legally missing some of the principles of governance for SD/IE.

Table 5-3: Matrix of the Planning phase

	<u>Task/step</u>	<u>Role of</u>	<u>Implementation by</u>	<u>In coordination with</u>
Planning for industry	In general	IDA through its technical team or through consultancy offices	No info	
	Existing IZs in provinces	provinces through consultancy offices	No info	
	Existing IZs in new cities	NUCA through GOPP through consultancy offices	No info	
	IPs	Developers through consultancy offices.	No info	
	IZs locations and lands	IDA	No info	NCPSLU
	IZs activities and related services	IDA	No info	EEAA and other stakeholders (public and private)
National program of the strategic planning for urban development (nationally, regionally and on the provinces' level).		Study by GOPP. In addition, GOPP supports other concerned authorities in issues related to planning and urban development	GOPP	NCPSLU participates in locations' selection for key projects.
			No info	Concerned authorities (Province partners to set planning needs and priorities locally)
		accredited by SCPUD	No info	

To be continued in the next page

Task/step		Role of	Implementation by	In coordination with
Planning the state lands (outside the provinces reins)		NCPSLU Then delivers a land use map to each concerned ministry.	No info	
		NUCA by law is responsible for planning new urban communities (studying, site selection, planning)	NUCA	
Local urban plans	For existing communities	Set by GOPP regional centers.	No info	Local Planning Administration (LPA) through consultancy offices according to GOPP guidelines. (LPA puts planning needs and priorities locally)
		Reviewed and accredited by GOPP	No info	Concerned authorities
	For new communities	Set by NUCA through GOPP through consultancy offices.	NUCA	
	Issuing (boundaries and location) of the new urban development projects outside the approved boundaries of the urban area	Studied then accredited by SCPUD	No info	
State's environmental studies/plans/programs (in addition to collecting and processing environmental information)		EEAA and expresses its opinions to decision-makers when being asked.	No info	

Areas lacking coordination

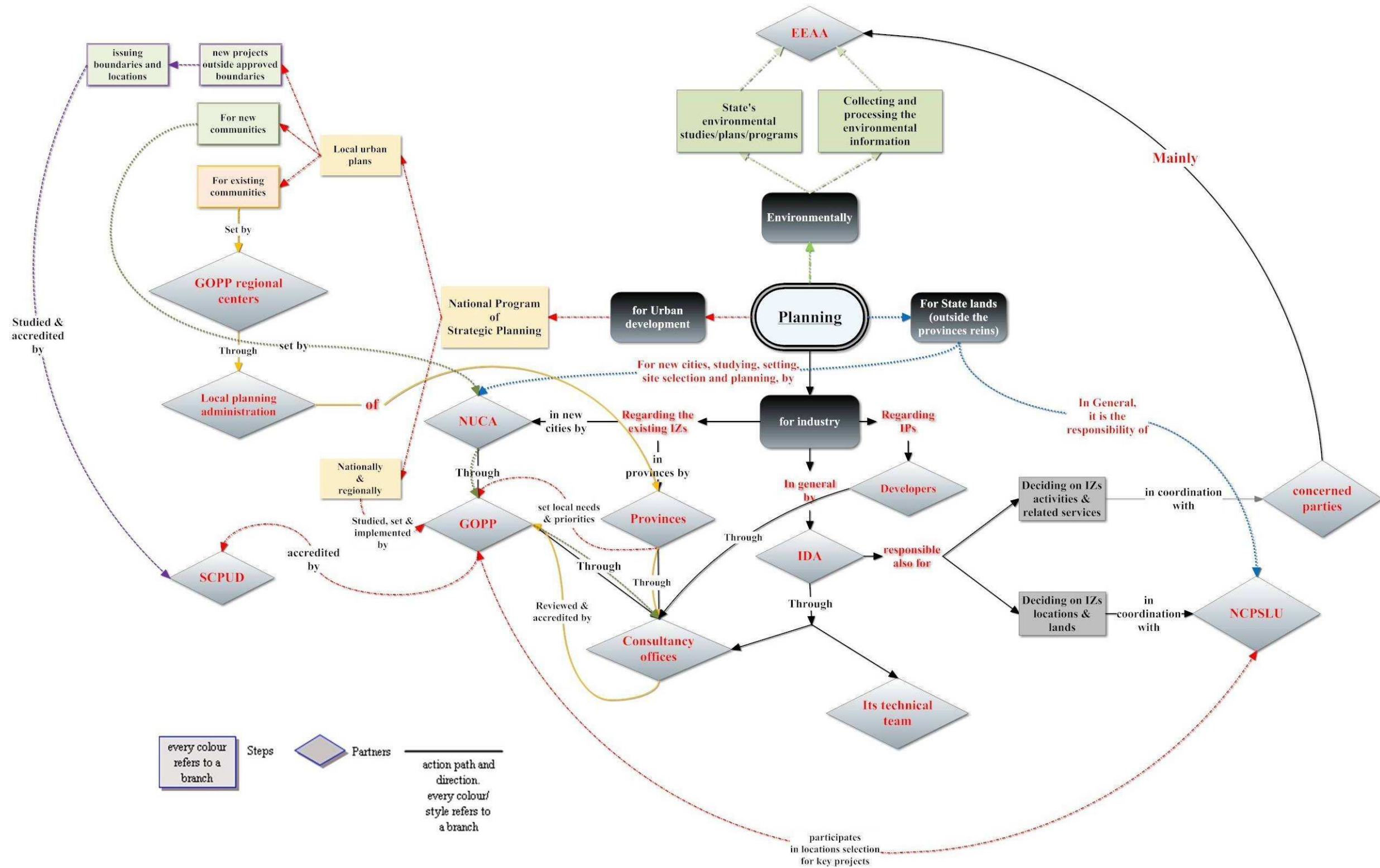


Figure 5-3: Simplified flowchart of the planning phase

5.2.4. Regulations and Legislations

As shown in Table (5-4) and Figure (5-4), the IDA is clearly competent to set up regulations, conditions and governing rules of industry and IZs in Egypt. A few partners may share the IDA in these competences.

Starting from regulations of industry in general, the IDA is competent to set them up and manage this task alone without partners. To give importance to regulations of the establishment of IZs and to stress on them as being within the competences of the IDA, the law mentions them clearly despite of being covered within regulations related to industry.

For conditions and governing rules, the law mentions two cases:

- Conditions and governing rules of the use, development and pricing of industrial lands are the responsibility of the IDA alone without the partnership of others but the pricing committee (consists of the IDA, the GAFI and other partners like financial organizations), which the IDA has to coordinate with regarding land pricing. Regarding conditions for improving the investment atmosphere, the IDA is in charge of coordination with the GAFI then the outcome is to be accredited by the SCPUD. Additionally, the FSEEDIZ develops incentives to push forward the IZs development then to be accredited by the Cabinet.
- Regarding conditions and governing rules of establishing and managing IPs (of the IDP), the IDA is competent and acts as a regulator for the entire program. It also acts as a facilitator to manage provision of infrastructure and coordinates with utilities' providers in this concern.

For studying legislations and laws related to industry and suggesting amendments in this regard, the MTI and the IDA are in charge.

As regards new urban communities, the NUCA plays alone the role of setting up zones regulations and building specifications.

In respect to environmental affairs, the EEAA, in coordination with the MOF, is in charge of formulating economic incentives for investors protecting the environment. It is also competent to develop and issue environmental guidelines and standards to be observed when planning for different uses, as well as for the preparation of the Environmental Impact Assessment (EIA) studies. Furthermore, The EEAA is competent to study and review environmental legislations and laws as well as suggesting appropriate amendments without the partnership of others.

For different land uses of urban development, the GOPP is in charge of developing all land uses' guidelines and standards. These guidelines are to be reviewed and modified by the competent authorities, then to be finally accredited by the SCPUD. For studying and reviewing legislations and laws on urban development and suggesting appropriate amendments, both the GOPP and the SCPUD are in charge.

Table 5-4: Matrix of the Regulations and Legislations phase

	Task/step	Role of	In coordination with
Regulations	Related to Industry in general	set and managed by IDA	
	of the IZs establishment	IDA	
Conditions and governing rules	of the use and development of IZs lands and its pricing.	set by IDA	
		Pricing by a committee stationed in IDA with three banks involved.	
	Of establishing and providing infrastructure, and managing IPs by private developers.	Set by IDA as a regulator.	
		IDA as an infrastructure facilitator	Utilities providers
	to motivate investors and improve the investment climate in IZs	set by IDA (including rules for facilitating licensing), incentives are put by FESDIZ	GAFI
		accredited by the Cabinet	
Zones regulations and building specifications (in new urban communities).	It is the role of NUCA to divide the community area to zones and set regulations and building specifications of each zone.		
Incentives for actions that protect the environment	set by EEAA	MOF	
Guidelines and standards for the planning and urban development	Environmentally (+EIA)	set by EEAA	
	of the EIA studies	Are prepared and issued by EEAA. (EIA guidelines)	
	In general (all land uses)	set by GOPP	to be reviewed and checked by concerned authorities
		accredited by SCPUD	
Studying legislations and suggesting amendments	related to industry	IDA	
	Environmental legislations	EEAA and prepares drafts of laws related to its goals.	
	related to planning and urban development	GOPP and SCPUD	

Areas lacking coordination



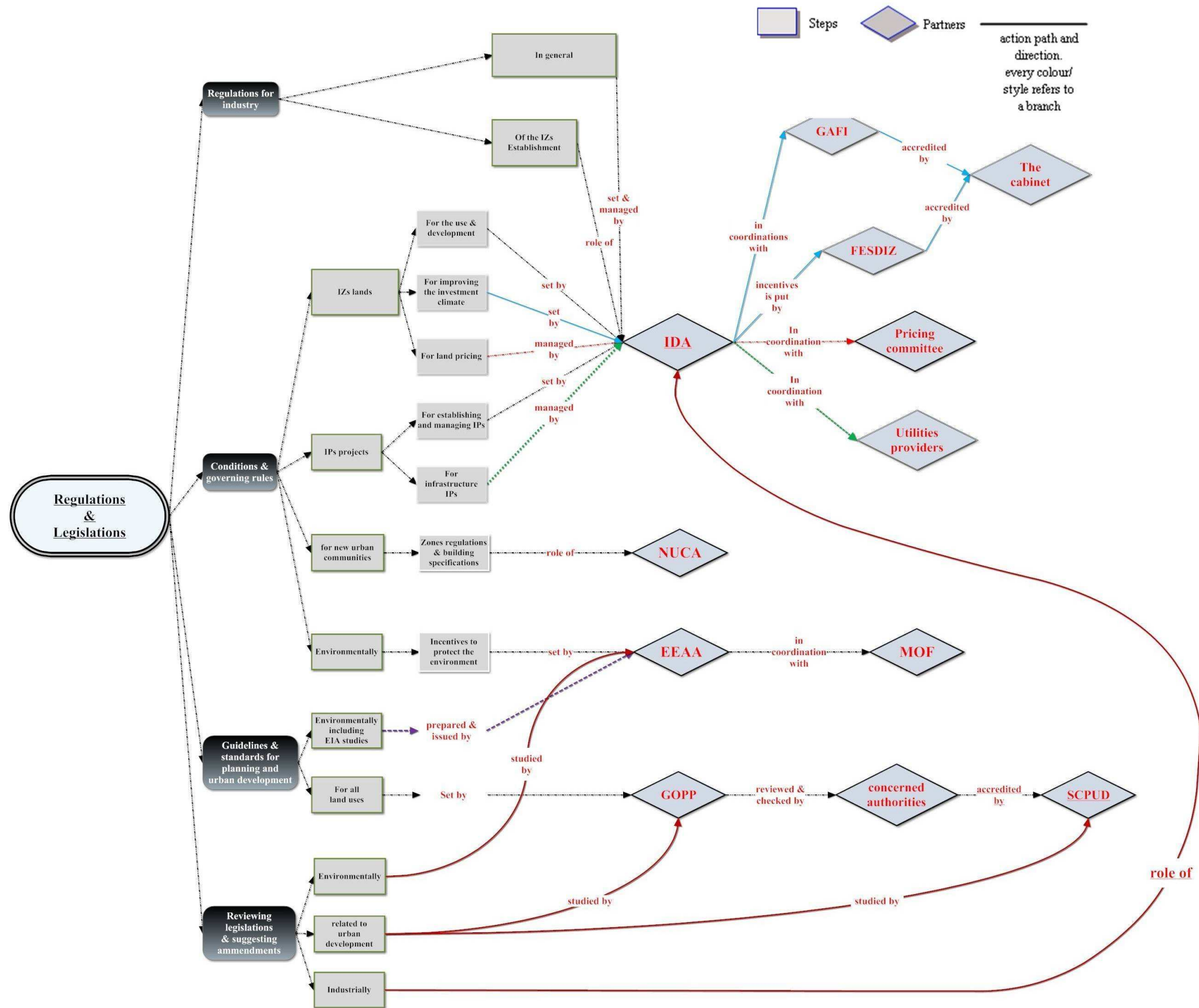


Figure 5-4: Simplified flowchart of the regulations and legislations phase


5.2.5. Licensing, Approvals and Accreditation

It can be seen from Table (5-5) and Figure (5-5) that multiplicity of the authorities responsible for this phase are observed where the SCPUD is on top. For urban development projects of all authorities including the IDA, the SCPUD is competent to examine all prescribed conditions and governing rules issued by different laws/resolutions/decrees from those authorities. Based on this examination, the SCPUD shall issue a unified set of conditions and governing rules for licensing to be followed without any further permissions from concerned authorities. This task is under processing and therefore, the IDA is still legally in charge of licensing, approvals and accreditation of the industrial projects in general except for the EIA studies. In details:

- Conditions and governing rules for licensing, required for industrial projects, are set and issued by the IDA. Approvals for IZs and industrial projects plans, development plans and detailed plans, are generally accredited by the IDA according to regulations to be issued by the SCPUD. The IDA may authorize one of the concerned administration authorities in issuing such approvals and licenses. For example, the NUCA is authorized by the IDA in issuing building licenses for industrial projects in new cities. Approvals for IZs and industrial projects' detailed plans in provinces are accredited by the mayor after the approval from the PLPC.
- EIA studies are firstly prepared by investors through their consultancy offices. Then, concerned administrative authorities, such as the NUCA in the new urban communities and provinces in existing communities, receive and check these studies, and then send to the EEAA for a reasoned opinion. . The law authorized the EEAA to send back any incomplete or defective study to the administrative authority to be reformed/amended by its investor. This cycle may be repeated till the full satisfaction of the EEAA on the EIA study before issuing its final decision. The whole process must be done before the implementation of the project.

Table 5-5: Matrix of the Licensing, Approvals and Accreditation phase

	Task/step	Role of	Implementation by	In coordination with
Conditions and governing rules for licensing	Urban development projects (for different concerned administrative authorities including IDA).	SCPUD examines all prescribed laws/resolutions/decrees then issues a unified set of rules to be followed without further permission from concerned authorities.	No info	
	of approvals and licenses required for industrial projects	set and issued by IDA	No info	
IZs and industrial plans (development plans and detailed plans)	In general	accredited by IDA (according to regulations issued by SCPUD)	IDA may authorize one of the concerned authorities in issuing such approvals and licenses NUCA authorized by IDA in issuing building licenses for industrial projects in new cities.	
	in provinces	The mayor issues decree to accredit the detailed planning for IZs after the approval from LPC (Local People's Council)	No info	
EIA studies		Received and checked then sent to EEAA by concerned administrative authorities (before the implementation of the project).	No info	
		EEAA examines then sends its opinion to the administrative authority.	No info	

Areas lacking coordination 

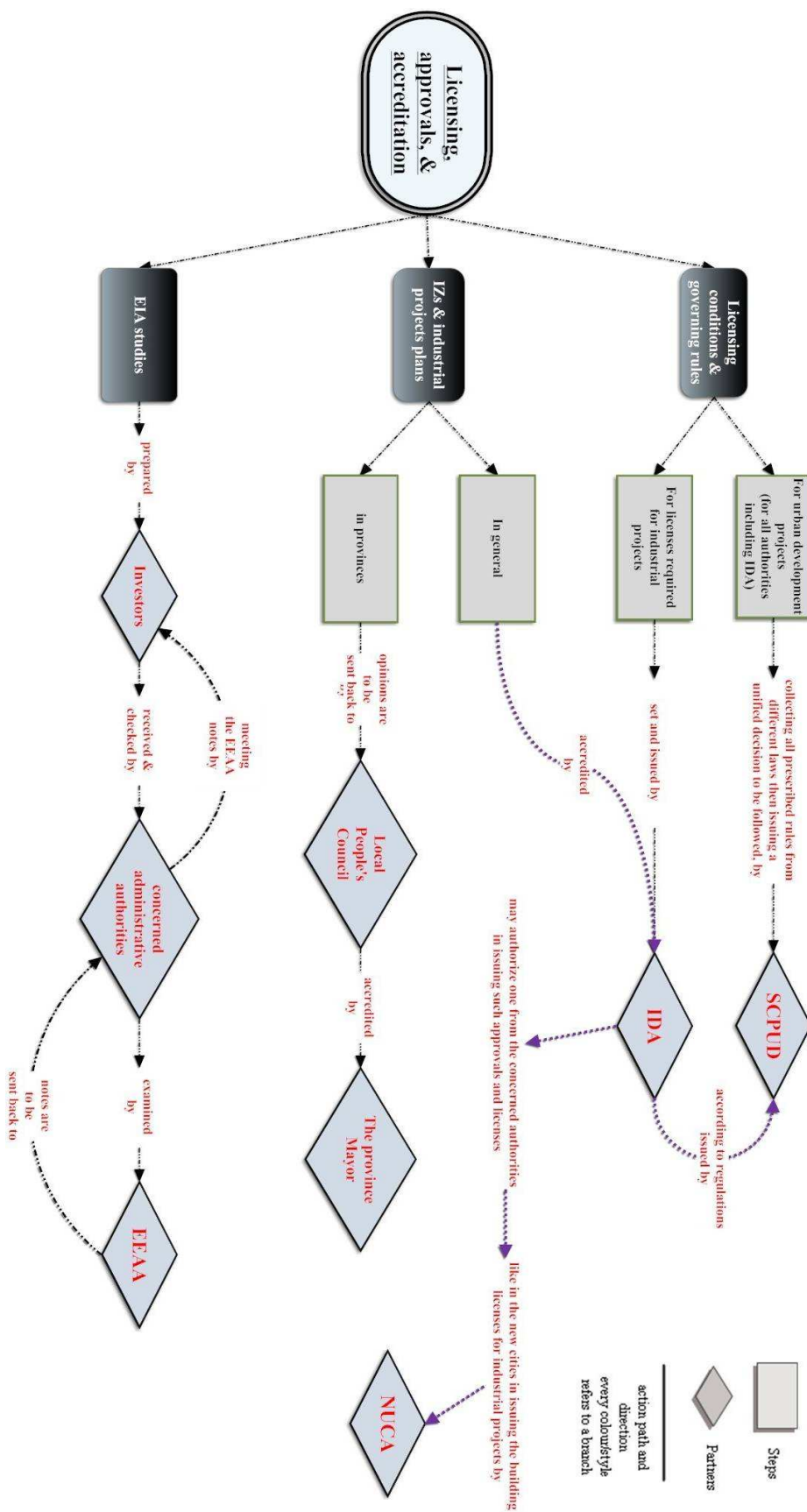


Figure 5-5: Simplified flowchart of the licensing, approvals and accreditation phase

5.2.6. Coordination and Follow Up

In this research context, coordination has three applications. It is the function that an authority is basically created to perform, such as in the case of the SCPUD and NCPSLU. Otherwise, coordination is a role that an authority has to willingly play to fulfil its tasks, like in the case of the EEAA and the NUCA. And, sometimes, coordination is a routine that is imposed on an authority in order to accomplish its main roles, such as in the case of the IDA. To explain these cases, shown in Table (5-6) and Figure (5-6), the following could be considered:

Firstly, the SCPUD and the NCPSLU are two entities that have been recently established basically in order to overcome the bureaucracy that the institutional framework in Egypt widely suffers from. Their main role is the coordination among all the State's entities concerned with the planning process. To go into details, tasks of both are as follows:

- The NCPSLU assures the complete coordination among the State's entities to achieve the best possible use of the State's lands besides resolve conflicts among different bodies regarding possession of such lands. It is also competent to following up the development of the State lands, and monitoring and prohibiting the encroachments on such lands.
- The SCPUD coordinates among the authorities concerned with the process of planning and urban development. Particularly, it is in charge of coordinating among authorities involved in setting and implementing the national strategic plan. In addition, it enables all partners to carry out their roles and responsibilities towards the achievement of national goals. Regarding the follow up, the SCPUD overmatches the implementation of urban development plans and programs which are followed up, verified and submitted by the GOPP. It then evaluates results of programs and assigns ministries and agencies to follow up on implementation.

Secondly, as the entity concerned with the environment, the EEAA should produce and implement/follow up the implementation of environmental plans and programs in different agencies/sectors. However, the EEAA has no power to implement such programs/plans or even guarantee their implementation in relevant competent bodies. So, it is understandable to include coordination as a main role of EEAA. In this regard, the EEAA coordinates among all authorities concerned with the environmental plans and programs. It also supports the relationships and coordinates between Egypt and regional and international organizations.

The EEAA also observes concerned authorities in the implementation of environmental plans and programs.

Also, a body like the NUCA has multiple and varied powers starting from the preparation of policies and specialized studies to planning and implementation. It also holds monopoly over the establishment and development of new urban communities. To apply such tasks, the NUCA must deal with several bodies and ministries. Therefore, coordination and follow up should appear as one of the main roles of an entity like the NUCA. In this concern, it organizes, coordinates and exchanges advice with authorities concerned with urban activities in new urban communities. The NUCA also follows up on the implementation of new urban communities plans, overcomes what may hinder their implementation and evaluate achievements.

Thirdly, the IDA is not represented in Table (5-6) and Figure (5-6) in relation to coordination. The IDA is required by law, in some areas indicated previously, to coordinate with other concerned entities but it is not one of its main functions like in the case of the SCPUD and NCPSLU. The IDA just follows up the implementation of industrial development schemes in coordination with concerned authorities. Further, it oversees projects financed from grants or foreign loans.

Table 5-6: Matrix of the Coordination and Follow up phase

	Task/step	Role of
Coordination	Coordination among all authorities concerned with the State's land uses and urban development	Role and authority of SCPUD.
	Coordination among all authorities involved in setting and implementing the national strategic plan.	Role and authority of SCPUD. In addition to enabling all partners to carry out their roles and responsibilities towards the achievement of national goals
	among all authorities concerned with environmental plans	role of EEAA
	Supporting relationships between Egypt and regional and international organizations regarding environmental preservation	Role of EEAA
	Coordination and resolve conflicts between different authorities regarding possession the State lands	Role of NCPSLU to achieve the best possible use of State lands and monitor encroachments on such lands
	Coordination among authorities concerned with urban activities in new communities.	It is the role of NUCA to organize, coordinate and exchange advice with other authorities.
Following up	The application of urban development plans and programs.	Followed up and verified by GOPP, then reports to SCPUD SCPUD evaluates results, then assigns ministries and agencies to follow up on implementation
	the implementation of industrial development schemes	role of IDA In addition to overseeing projects financed from grants or foreign loans
	Implementation of new urban communities plans.	Role of NUCA in addition to overcoming what may hinder the implementation and evaluating achievements.
	implementation of environmental plans	EEAA
	monitoring encroachments on State lands	role of NCPSLU

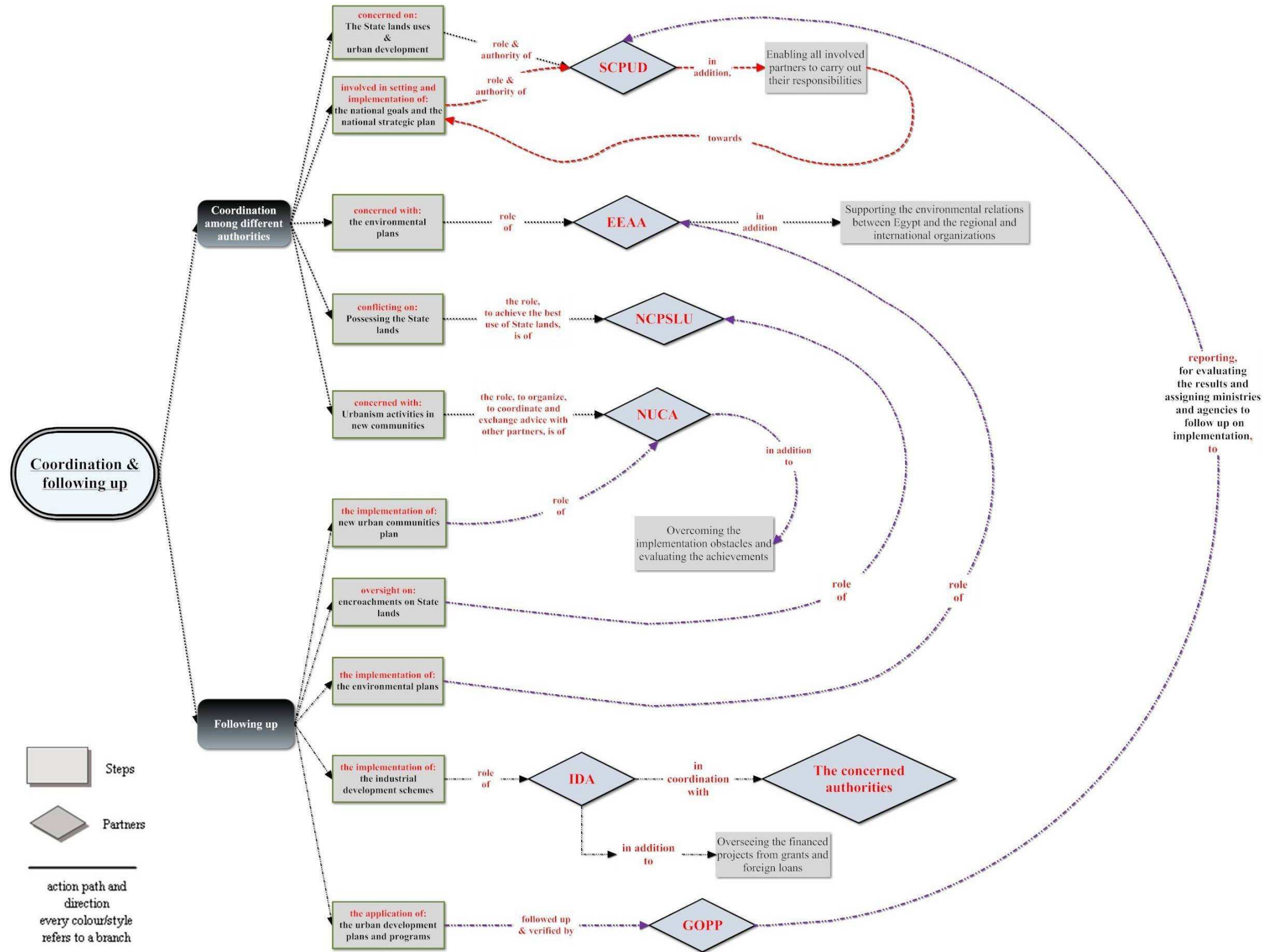


Figure 5-6: Simplified flowchart of the coordination, follow up and supervision phase

5.3. Conclusion

Egypt has witnessed several changes and amendments in the legal framework governing the planning process of IZs, see Appendix (VI) and Chapter (2), Section (2.3.4) for full details on these changes. These changes aimed basically at improving the general investment atmosphere through overcoming the bureaucracy resulted from the plenty of laws and the contradictions among them. Hence, unified laws have been issued such as the Building Unified Law as well as applying the One Window Policy in many governmental bodies in general and specifically in the IDA. The changes also targeted speeding up the process of decision making regarding the EIA studies to reduce the pressures on investors, and strengthening the respect to the environment by giving more powers to the EEAA. The changes also reached the institutional framework, as Egypt has also witnessed some transformations in the nature of some working bodies in the planning framework of IZs besides the establishment of new entities therein. The most important changes were; a) the transformation of the General Authority for Manufacturing to the IDA aiming at improving the investment atmosphere through giving the IDA the authority of directing the industrial investment, and b) the establishment of both the NCPSLU and the SCPUD aiming at coordinating among the parties involved in the planning process. These changes are supposed to improve the coordination system but taking into considerations the newness of most of them, it could be said that effects of such changes on the current planning framework of IZs need to be actually examined.

This chapter has come up with a clear picture of the phases forming the official framework of the process through which the Egyptian IZs could be planned. By reviewing these phases, it could be said that “the isolated islands” (In-G-03) is the best expression that could describe governmental bodies and sectors of such framework. Explanations of this in details are as follows:

- One to two agencies govern one of the sectors whether industrial, urban or environmental with no connections among them regarding the policies preparation phase which is the most important phase. This could give an indication that must be examined in the following chapters on the domination of each sector on its own territory separately and away from the EEAA participation in policy formulation whether industrial or urban.
- Pre-planning phase suffers from fragmentations in powers with absence of coordination mechanisms among involved partners particularly regarding extending

infrastructure to IZs sites. While the mandate over the IZs is for the IDA, utilities in general lay under the control of the sovereign bodies such as the ministries of electricity, gas and water and sanitation. It is also the responsibility of provinces and the NUCA to extend utilities within their respective regions according to ownership. Therefore, the IDA, according to an expert, is "a body without blood vessels" especially as Egypt lacks coordination among/within sectors and different bodies.

- Planning phase is characterized by conflicting roles among the involved partners. Roles of the NUCA, in new urban communities, and the GOPP with provinces, in preparing strategic planning, contradicts with, mainly, the NCPSLU and then with the IDA. Differentiation of the accreditation body of schemes and lacking coordination in some areas in the process, particularly with environmental bodies, maximize the effect of the problem. Policy conflicts, program duplication and inefficiency are expected.
- With respect to licensing and the setting of its conditions for industrial projects, the IDA is competent therein. However, due to the multiplicity of land owners each of which set up its own conditions, the nature of proceedings and conditions that are supposed to be followed is confusing. This led recently to the establishment of the SCPUD and to be given a central role to deal with this matter. It works on collecting all conditions/rules from all bodies, studying them and then issuing a full unified set of conditions that is binding for all. It is therefore expected that confusion in licensing will be resolved what the next chapter will examine.
- On the environmental side, regarding the coordination among different competent administrative bodies for the implementation of environmental plans prepared by the EEAA, it is found that the EEAA is in charge but with no power over these bodies to ensure implementation.

In an attempt to overcome this situation of internal isolation and poor coordination, the State has established, as we pointed out previously, the NCPSLU and the SCPUD. While the first is authorised to set clear jurisdictions to various bodies and determine the optimal use of the State lands, the latter is competent to coordinate among the State bodies involved in the planning process for different lands and in particular with regard to lands within the reins of provinces. Yet, establishment of such entities has not yet influenced the State legal setup as their roles contradicts with others roles as stated in laws and as comprehended from the governmental officials. This issue therefore, is under examination by the next chapter.

To conclude, this chapter synthesizes the official framework of the process through which the Egyptian IZs could be planned. Due to contradicting responsibilities and lacking coordination among concerned bodies, the official framework analysed in this chapter is theoretically not applying principles of governance for SD/IE and therefore, unable to produce sustainable IZs. Egypt has recently made some institutional and legal arrangements to overcome these problems towards the application of sustainable development principles. Effects of such changes on the current planning framework of IZs need to be actually examined. The following chapter discusses this issue through analysing three case studies.

Finally, by synthesizing the official planning process and theoretically concluding its lacking of sustainability principles, this chapter has answered part (a) and incompletely part (c) of the first research question.

6. CHAPTER SIX: PLANNING PROCESS OF THE INDUSTRIAL DEVELOPER PROGRAM

6.1. Introduction

This chapter aims to analyze the planning process of the case studies of private industrial zones, entitled in Egypt “industrial parks (IPs)”, of the Industrial Developer Program (IDP). In this analysis, the study follows the same classification of phases of the planning process used in the previous chapter; describing then concluding the official framework of the planning process of industrial zones in Egypt. Using the same classification allows challenging the planning process of the case study versus the official one (that has been analyzed in the previous chapter). This is to be done aiming at investigating the extent to which the official process is applied and hence exploring the differences between the official framework and the one in practice, as well as identifying the problems of the application. Therefore, this chapter contributes to the knowledge by formulating the closest image of the actual planning process of industrial zones (IZs) in Egypt and hence, analyzing the extent to which this process could produce sustainable IZs. This chapter by doing so completes answering the first research question that was incompletely answered in Chapter (5). At the same degree of importance, this chapter also partially answers the second research question by concluding preconceptions on the factors governing the planning process. It, in this frame, forms the base that the following chapter will be built upon to complete answering the second research question.

This chapter is divided into three parts: a) A brief about the IDP and the cases chosen to represent it, b) Discussing the process followed in three IPs. This section also deals with the developers’ thoughts on the process followed and the problems faced by them during the process, and c) Discussion and conclusion.

6.2. Introduction to the Industrial Developer Program and the case studies

The Industrial Developer Program is part of the State plan recently encouraging the partnership with the private sector. The key reasons behind this program were due to the weakness of the State budget that forced the State to enter a partner. What helped the State doing so were the plans put aiming at solving industrial development problems, and on top of which was the unserious dealing of the investors regarding the lands they possess. This led to changing the thought to involve the private sector in management, and giving it part of the responsibility (for more details, see Appendix (VII) that addresses the nature, importance,

purposes and key reasons behind the IDP). This research analyzes three IPs representing this program, they are as follows:

- c. “AL Tajamouat Industrial Park, a fully serviced and integrated industrial park” (Al Tagamouat IP), 10th of Ramadan City.
- d. “CPC Egypt, the one stop shop towards building the future” (CPC), 6th of October City.
- e. The third IP (IP3)¹

When comparing² the three cases, it is possible to argue that Al Tajamouat Company is more experienced in the industrial development field. This is due to its previous involvement, as an industrial developer in establishing, and operating an industrial park in Jordan. This is not the case for CPC which is working only in the area of manufacturing building materials in such a way far from the idea of industrial developer. It is also not the case for the third company despite the fact that its executive manager had been involved in the preparation for a first phase company, as all companies of the first and second phase have not been implemented and hence lack the experience of operating and production. This advantage particular to Al Tajamouat Company has uniquely influenced the process of initiating the IDP, as discussed in details in section (6.3.1).

6.3. Planning process of the industrial parks

This section discusses in details stages and steps of the planning process of the three case studies which almost refer to setting up policy, pre-planning, planning, approvals and licenses, regulations and legislation, and ultimately coordination and networking. Although they are as a whole arranged according to time but some steps are not. The incoming parts explain these stages³ separately in details and in order according to time as follows:

6.3.1. Setting up the policy and strategy: generating the idea and putting it into effect

This stage addresses the generation of the idea of the program and developing the institutional legal framework of the State to become ready for the implementation of the idea. This is through the development of a governmental protocol establishing the Industrial Development Authority (IDA) and giving it the power to implement the program. Then, it addresses the steps taking the program from idea to implementation through the preparation

¹ The researcher is not able to tell any details could lead to identify this IP as requested by its executive director.

² More details are provided in Appendix (III).

³ The last two stages; "Regulations and Legislations" and "Coordination, Networking and Participation" are already discussed and analyzed through the first four stages. Hence, they are not discussed again separately. Therefore results of these two stages are concluded in the part called “discussions and Conclusions” where they discussed comprehensively with the results of the other stages to bring out the final conclusion of this chapter.

of the executive framework of the program. This stage is characterized by the availability of the political will, achieving communication and good relationships among part of the involved parties, as well as creating the institutional legal framework and respecting the systematic way of thinking to some extent. In light of this, it was found, according to De-28⁴, the Executive Director of Al Tagamouat IP, that the program idea returns to early 2005 due to the interest that the former minister of industry showed and his relationships with businessmen that led him to her company. A dialogue was held about the nature of the idea of developing IZs by the contribution of the private sector. The former minister found it an unsuitable idea for implementation because the authorities of the General Authority of Manufacturing (GAM) as well as the Ministry of Trade and Industry (MTI) do not permit such idea. This led to the creation of the IDA with its authority⁵ which helped adopting the idea and thus opened communication channels with the developers. Detailing this, (De-28) said:

It was an individual personal initiative from [Ex] Minister Rashid. There was no Republic protocol at that time giving the IDA this power [the power of land allocation to private companies to develop them industrially] as the IDA was originally established in 2005 ... He [the ex-minister] heard about us in Jordan and we were in one of the working visits to Egypt via a businessman ... So, he told the businessman that he wants to meet us. We met in 03/2005 and he asked us to market the IZs in Egypt. We said that our work is not marketing, we develop and our product is to be marketed. He said that in Egypt the government is the only entity that establishes the IZs. We told him that we will be ready when the private sector is permitted to do so. (De-28)

With conviction of the Ex-Minister with the idea of developing IZs with the participation of the private sector, the Ex-Minister with the MTI sought to change the legal framework governing the GAM to be able to apply the idea. This led to the establishment of the IDA with its authority over the GAM entity in 2005 by Presidential Decree No. 350 of the year 2005 (Mubarak, 2005). Such a Decree was a start for the change of prevailing concepts towards private sector involvement in the management of IZs. The emerging authority IDA became qualified to study how to operationalize the program idea and taking it into effect. Also, the re-communication started again by the Ex-Minister with industrial developers as indicated by De-28, the Executive Director of Al Tagamouat IP, in the sequel to her previous talk:

⁴ An indication for an interview/ee, the code may contain some of the following abbreviations that mean: En = Environmental, In = Industrial, Ac = Academic, **De** = Industrial Developer or Development Officer in local administration units, Ju = Judge, G = Governmental position (it will appear if applicable), NGO = A member of environmental NGOs boards of directors, **Numbers** = Serial Number of the interview/ee

⁵ For more details, see Appendix (VI)

Concepts have changed after almost a year [she means from the date of the meeting with the Ex-Minister in March 2005]. The ministry contacted us again and asked us to come saying that they have made a protocol and lands are available. Then we met the group of the IDA. (De-28)

In an attempt to find out the role of the involved parties in the protocol preparation, De-43, the Executive Director of CPC, said: "No, this is the thought of the State and studies are made by the State". De-28 added to this, saying:

No, the protocol is a governmental Egyptian task. I mean it is a protocol whereby the government set up the IDA. The government put the decisions regarding industrial lands under the authority of the IDA through the allocation of industrial lands to investors or developers. It means it is a Republican decision to establish an agency which developers cannot interfere in. (De-28)

Regarding utilities, the Protocol setup included coordination between the Ex-Minister of industry and other ministers in charge of utilities to ensure providing the program with its needs. Specific quantities of electricity, water, gas, etc., were agreed to be adopted as the State limitations to the IPs. De-64, the Executive Director of IP3, agree with this adding that the role of utilities providers in the IDP is limited to the stage of the Protocol and at the actual extension of utilities at the time of implementation.

After the establishment of the IDA; Amr Assal⁶, its Ex-Head, sought to operationalize the idea through his series of visits to various industrial countries to learn about their experiences in creating and managing new IZs, and to attract foreign investors to the IDP. Officially it could be said that the IDP actually began in the mid-2006 with preparatory workshops organized by the IDA and sponsored by the former Industry Minister. They included 21 developers of different nationalities who have considerable experience in industrial development as well as international and financial institutions, and banks. The most important results of this workshop were the recommendations and proposals of global trends for the establishment and management of IZs using the concept of partnership between governments and the private sector. Another important result was the benchmarking between firms on the basis of expertise, financial capacity and final service level provided by the industrial developer, as well as the efficiency of development projects implementation and zone management (IDP, 2011c, Assal, 2010).

To conclude, the political will is represented in this stage in the former Industry Minister's will. His relationships and dialogue he conducted with investors, by virtue being one of them, had led him to be introduced to the IDP idea as well as his conviction with it. He then

⁶ Was a director of a major real estate investment company in Egypt before holding the responsibilities of the IDA.

overcome the obstacle of that the institutional legal framework does not permit the implementation of the IDP idea leading the cabinet-level to adopt issuing the decree No. 350 of 2005 establishing the IDA. His movement at the cabinet-level also allowed the inter-ministerial coordination to take place for ensuring the utilities supply to the IDP. Another role began afterward which is the role of the emerging IDA Head, who has administration and investment background allowing him to have networking with the investment expertise partners. He started with exploratory field visits to foreign IPs models to transfer the expertise and promote for the IDP. This was followed by inviting a large number of global experienced developers along with the financial institutions in preparatory workshops for the formulation of an operational framework for the IDP. Therefore this stage is depended on will of individuals who hold good relationships with the investors that allowed for generating the IDP idea and then taking it into implementation.

6.3.2. Pre-planning stage

6.3.2.1. *TOR, offering the program, qualifying developers and drafting the contract*

This part addresses the preparation of the regulatory framework of the program (TOR) that allows the administration to offer the program in its different phases to the developers. It also discusses how the companies applied to the program, how they have been selected to join the program as industrial developers and the way the administration used to draft the contract. In these steps, while the IDA was in charge of the TOR preparation as well as the program marketing alone without other stakeholders, it adopted interactive discussions with the applying companies in the qualifying step as well as in drafting the contract. The IDA aimed from this at reaching the best possible start for the IDP that ensures compatibility in visions between the administration and developers.

For the TOR of the IDP, the IDA, in the first phase of the IDP, intended to expand the market of the program (IDP, 2011c) aiming at attracting the most expertise capacities available in the field of developing IZs (IDA, 2008b). It for that adopted transparent and participatory approach with the expertise developers through the workshops made, as indicated earlier, for preparing the operational framework at the start of the IDP. Then, the IDA invited many developers again to study the workshops outcomes, and the program details before the announcement of the launch of the first phase and in the selection process of bidders of the first phase of the IDP (IDP, 2011c). Applying such approach is confirmed also by De-28, the Executive Director of Al Tagamouat IP, by saying:

As one of the models found in the Arab region, we have been invited to Egypt, to study the idea, examine the proposed plots of land and explore the whole topic. (De-28)

Thus, the IDA through the TOR for the first phase of the IDP broadened offering the IDP for marketing purposes and to measure the demand on it before implementation. It also benefited from the outcomes of these workshops to outline the TOR of the first phase of the IDP. However, as confirmed by In-G-06, Director of the Central Administration of the IZs in the IDA, the preparation and the formulation of such TOR is a task that the IDA made individually, saying “exclusively by the IDA” (In-G-06). It should be noted that the IDA has developed the method of offering the IDP and qualifying developers starting from the second phase of the IDP. The steps start by a public announcement for registration of companies, followed by a primary stage of qualifying in which the IDA selects a group of companies that are to be invited to progress and get the TOR. The chosen companies then present the full documents and their projects ideas for entering the actual qualification final phase (IDA, 2008b, De-64). Thus, the IDA opened registration for all companies to estimate the demand and attract a large number of companies that allow it to efficiently choose from. Then it restricted the use of the TOR only on the chosen companies.

After offering the program and announcing for one of the IDP phases, the IDA starts the qualifying step, see Figure (6-1) and Appendix (VIII) for full details and more evidence, and then carries out the final evaluation and choice of companies followed by preparing for contracting procedures. IPs developers confirmed and praised the dialogue formula and participatory approach adopted by the IDA in the qualifying step. It was in an attempt to reach the best possible models for IPs as well as to prepare a preliminary consensual draft of the contract (De-28, De-43). De-43, the Executive Director of CPC, adds that the IDA rejected some companies which had real estate perspective to insure real industrial development. Furthermore, with the presence of management experience in dealing with the program and also with the many companies wishing to obtain more lands; the IDA, starting from the second phase, uses criteria-based evaluation system to assess companies and chose from according to total points of each. Competitive criteria are: development activity, level of service, technical competence and financial efficiency (IDA, 2008b, De-64).



Figure 6-1: Qualifying Step in Detail

Reference: (IDP, 2011c)

From the above it can be inferred that the IDA took sole responsibility preparing for the TOR depending on experience it gained through the preparatory workshops made for preparing the IDP framework. The IDA also conducted the marketing for and offering the program without any partnership from any side. In addition, the IDA offered the IDP through a method which explored the demand on the IDP and attracted the needed number of qualified developers. After gaining the necessary expertise from the first phase of the IDP, the IDA developed the method through development of a criteria-based evaluation system. It is noted that the IDA tries to achieve the required industrial development from the IDP not real estate development. The IDA also adopted, during the qualifying process and the preparation of a preliminary version of the contract, interactive discussions with developers aiming at reaching compatibility in visions between the administration and developers to ensure realistic and smooth implementation.

6.3.2.2. Land allotment · signing the contract and receiving the land

The Egyptian Government aimed at guaranteeing the developer's commitment to achieve industrial development in the IPs, through a compliance contract. The lack of readiness of the Government to extend utilities to the IPs, as well as determining a low price for developers for selling their plots of land allotted for industry, are important elements that negatively affected the achievement of this aim. To explain how this happened, this part discusses how the IPs sites are allotted to the chosen developers and analyzes the contract and its influences on the development process. It also shows the contract signing step and its requirements followed by receiving the lands by the developers.

The IDA aimed at reaching balanced contracts that are for the interests of their parties taking into account the objectives of the IDA. This is as well as taking into account the dynamic

nature of the development and providing the necessary flexibility to the industrial developer for competition, and response to market changes and mechanisms (IDA, 2008b). We have indicated in the preceding section that the IDA, through exchanging ideas in workshops with the developers, has reached an initial formulation of the contract. Subsequent to this, the IDA contacted the accepted bidders to attend a meeting for primary allotment of lands according to the priority and competitive order of bidders. Then both sides proceeded to the contracting procedures in accordance with the regulations in the TOR. After the initial allotment, the founding of a joint stocks company is one of the most important steps undertaken by the industrial developer in the General Authority for Investment (GAFI) to be able to complete the contracting procedures and then sign it with the IDA (IDP, 2011c, De-28, De-43, De-64). About the nature of the contract and the opinions of experts and developers, we found general agreement on being a compliance contract for the Egyptian government. It is obliging the developers with implementation and management to ensure achieving industrial development, not just real estate development. In this regard, De-43, the Executive Director of CPC, from the developers of the first phase, explained:

The State feared that a foreign investor takes land with a specific price and sells it with another price. The State fears that public opinion says they are selling Egypt's land and they do so and so, and so on. For this, they have put a very strict contract committing us with implementation and management. (De-43)

Based on the text of Section XIII of the development contract of an IP, which states that “in case of delay of the IDA in extending the utilities according to its commitment in this contract, the developer is granted an additional period consistent with the impact on the timetable for the project” (IDA, 2008a, p.27). De-64 on behalf of company IP3 from the second phase, agreed with what proceeded but argued that this item is an important point in favour of the developer, saying:

There is nothing in the contract, as a compliance contract, against the interest of the IDA where all terms and fines are on the developer who does not conform. However, the only point in favour of the developer is that he/she can proof any delay he did not commit. This delay will be omitted from the period stipulated in the contract. (De-64)

To illustrate the importance of this point and its influences on the industrial development process transferring part of it to real estate development, Ac-G-03, Consultant of the IDA Head, quoting one of the largest developers in Egypt, who confirmed on the above as a whole, but he feels that the contract stands, as it is, in his favour. Therefore, this point helped some developers who intend to enter the IDP from a real state investment perspective, not keen to achieve real industrial development. In this context Ac-G-03 said:

Look, I will give you the words of Kareem Sami Saad, one of the largest developers. He said: "When you read the contract made by the IDA, one should throw it out on the street. It has so many mistakes, but all these mistakes are in my favour. If something happens and we raise a case for trial, we are the ones who will win". For this he takes land as much as he wants. He endorsed the land. However, when you ask him did you develop or not he will have much to say.... If the developer did not commit, the first thing he will say is: the IDA is supposed to provide the utilities to the head of the land, where are they? The IDA is the one not to fulfil first. (Ac-G-03)

Meanwhile, De-64, the Executive Director of IP3, finds another mistake that the IDA committed in the contract by putting limits for the factories land prices. This prevents the developer from spending money on the project in the way which guarantees providing the highest possible service for manufacturers and therefore achieving faster marketing and selling of land plots. That is due to the fact that the developer counts it economically. Therefore, the developer decides on the amount of money he/she will spend according to the selling price. De-43, the Executive Director of CPC, also agreed on this proposition. He saw that putting low limits for the factories land prices was a major reason for the reluctance of international developers from applying to the IDP. The international developers present high quality services which they will not be able to commit with within the limits of the land price put in the contract. So, they refused to apply to the IDP (De-43).

The question poses itself now is why the enrolled developers accept such prices. It can be claimed that there is a number of scenarios could explain the reasons and answer this question. First, it may be due to the real purpose of the developers is not in industrial development but in real estate investment through speculation on the whole land of their IPs. Thus, they are not interested in the issue of the factories land price within the site. Secondly, it also may be due to the intention of the developers to decrease the services level they will provide, compared to the level of the international developers, to maintain their profit margin. Therefore, reduction of the services level and accordingly the expected level of manufacturers who will settle in these IPs, is logically expected. Thirdly, it may be because of the nature of the developer and whether manufacturer or a real developer. Big manufacturers, like the case of CPC and according to what its executive director said: "we agreed as we have investment goals in Egypt" (De-43), accepted the contract terms and conditions because they will maintain most of the land plots for their companies. In this case, the percentage of the land plots they will sell is relatively little. Therefore and to achieve their goals in the expansion of their industrial base and to open a new market, they may not be fully concerned with the

factories land prices. This is especially when “the offered area for sale is below 30% of the total area” (De-43) of the IPs like in the case of CPC .

According to the contract between the IDA and the developer, after completion of the contract in an official form and paying the contracting instalment, the IDA delivers the land to the developer (IDA, 2008a). What actually happens differs from this, as the IDA receives the land from the city council, owner of the land, and delivers it as it is at the same time to the industrial developer (De-28, De-43, De-64). De-64, the Executive Director of IP3, in the second phase, added that the IDA does not do what is supposed to be done regarding receiving the land and ensuring its readiness, saying:

Currently, receiving the land from the city council is by the IDA which receives from the council and delivers the developers at the same time ... The IDA tried again to deliver the land to developers with the hills of landfill from neighbouring sites and in its unaccepted state with a promise to settle down the land to them later. But the investors learned the promises lesson and refused to receive the land until it is settled down, what has actually happened. (De-64)

Furthermore, it could be understood from the previous text, as well as the failure of the IDA to fulfil its responsibilities in the light of the contract, that the IDA has already promised the developers with things that it did not commit with. It, by doing that is interested in the completion of the procedure quickly with exporting the emerging problems to the future time even if this is at the expense of work efficiency and interest of the developers. Or that the IDA lacks the appropriate powers on the ground to do what it promises to do and the authority is completely for the cities councils, incoming sections examine this issue.

To conclude, the contract in its entirety is a compliance contract to the Egyptian Government in which it guarantees the developer's commitment to achieving industrial development on the allotted land. However, the lack of readiness of the Egyptian Government to extend utilities to the land borders is an important factor for the developers' non-compliance with the agreed timetables with the IDA. This situation helped some companies to enter the IDP for a real estate investment aim, not for achievement of industrial development. Another matter, which is considered as a disadvantage, referred to by the developers, is the determination of the factories land plots price in the contract. This led to; first; the reluctance of international developers from applying to the IDP for what they see from the inadequacy of prices with their distinctive services. These services can achieve quick marketing and sale of land and thus reach the aspired profit, what also accelerates running the factories and achieve rapid industrial development. However, this did not happen. The second thing is; lowering the service level by the enrolled developers compared to the international level to achieve a

balance between cost and revenue. This might give an indication of the nature of the settled industrialists in the IDP and gives a negative indicator for the achievement of the objectives of the IDP as a whole.

From another side, the IDA might lack the authority on the ground over the city councils that make it unwilling to reform the lands in the new cities and make them suitable for delivery to the developers. The IDA also might have the interest to accelerate the implementation of the IDP even if not in a proper way.

6.3.2.3. *Providing utilities*

According to the IDP website, the IDA is responsible for the coordination with the governorates and other governmental bodies or the private sector, which manages the IPs and provides utilities to the investors therein (IDP, 2011a). In this context, the contract at its item No. 13 under the title of providing utilities, mentions that the IDA is obliged to provide major utilities and infrastructure of water, sanitation, roads and electricity to the borders of the land according to quantities⁷ and dates set out in annexes of the contract (IDA, 2008a). In-G-06, Director of the Central Administration of the IZs in the IDA, interprets this role of the IDA as a ‘facilitator and coordinator’ between the utilities authorities and the developer to facilitate the utilities supply to the IPs. However, the role that the IDA played in reality is seen by the developers as far from what is mentioned before. De-64, the Executive Director of IP3, does not see the role of the IDA more than a Secretary and finds it contradicting the provisions of the contract, saying:

With regard to utilities and its delivery to the site, it is no more than the IDA taking the role of being a secretary. It receives requests from developers and turns it into utilities sectors and vice versa as well, without any action or intervention to resolve or whatever.... which is contrary to the contract between the developer and the IDA. (De-64)

De-43, the Executive Director of CPC, agreed with De-64, adding examples of tiring and bureaucratic problems he faced with the utilities providers especially the New Urban Communities Authority (NUCA) without effective intervention from the IDA to facilitate or coordinate to sort out these problems. According to him, in addition to lacking commitment to provide the IPs with utilities, the IDA lacks transparency in dealing with the developers as they know nothing about when they can get the utilities. This of course, as De-43 said, negatively affects the developers’ thought and timetable and their contracts with other parties, saying: “then the developer gets lost and consequently everyone after him.” (De-43). The

⁷ The capacity of utilities provided to the IPs has been decided at the beginning of the IDP by the Cabinet as stated in Section (6.3.1).

causes of the failure of the IDA to commit with the contract are explained by Ac-G-03, Consultant of the IDA Head. While the commitment lies on the IDA as a mandate authority for the IZs, it does not have the authority to extend utilities, nor the authority over the NUCA, as the owner and dominant over the new cities where the IPs lie, to do so. In details he said:

Regarding the new cities, I gave you the brain which is the centre of businesses, the IDA, while I did not give you the arteries which is the NUCA, how come! They handed IZs to the IDA, but the whole infrastructure is subordinated to the NUCA. In the first stage [of the IDP], the NUCA partially extended the needed infrastructure to the IPs. When the industrial extensions took place, the NUCA asked the IDA to pay for the infrastructure saying that we have no budget for these extensions and they are not in our plan. The IDA asked: Pay! Pay what? I am not in charge of paying for the infrastructure. That is it. I mean, you gave me a body without blood vessels, how could the blood feed the body? So, it is a big problem and the situation is very bad. For this reason the IDP will fail. (Ac-G-03)

Yet, the IDA is legally competent in coordination with the utilities authorities as mentioned in the previous chapter as well as in this section. Even if the IDA lacks the power of utilities supply and that power is in hands of NUCA, the question that poses itself is; what is the reason behind the failure of coordination between both bodies, the IDA and the NUCA, causing lack of utilities supply to the IPs? De-G-57, Director of the Projects Administration in Sixth of October City Council that contains a group of IPs, answered this question stating that the industrial land allotted to the IPs was not part of the current NUCA's nor the cities councils' plan although they are trying to feed the IPs up on stages. In details she said:

The IDP was not in our plan. It put us in jam, because our plans for providing the utilities for its area are in the future plan. We did not consider this in our calculations now and it became a status quo for us. Of course, we provide them but on stages and we are not able to provide them at once. We have planned the city this way for now and for the future, now suddenly it becomes another way. So we are obliged to give but on stages. (De-G-57)

Therefore, the coordination is not the only problem between the IDA and the utilities authorities; the NUCA particularly, but also the institutional setup suffers from unbalanced powers system as well as planning problems regarding the joint projects between institutions like in our case of the IDP. What confirms this more is that a contract between the IDA and the Holding Company for Natural Gases was signed at 28/10/2010, after nearly three years from signing the contracts between the IDA and the developers, as a first phase for supplying the IDP in Sixth of October and Tenth of Ramadan cities (eg.2lex.org, 2010). Within this timeframe, developers, according to the contract, were supposed to finish operating 75% of the whole area of their lands not only waiting for the governmental authorities to sign utilities supplying contract, as exactly happened. For that, De-43, the Executive Director of CPC,

highlighted the importance of that planning, preparing, coordinating for and providing utilities must be prior to the implementation of the program and before inviting developers to join it, what did not happen. He showed anger from the way the Egyptian Government handled the IDP added: “this way is not suitable or acceptable for the companies coming to invest here in Egypt.” (De-43).

To conclude, although the IDA is legally obliged to provide utilities to the IPs, this does not happen in reality. The IDA works in the best cases as orders delivery secretary, while the developer finds him/herself compelled to take action, make effort and spend time and a lot of money to push the utilities competent authorities to do their job. The utilities providers excuse by the weak capacity they have and that the IPs program is not within their existing plans. This confirms what is indicated earlier in the stage of setting up policies that coordination at the inter-ministerial level did not address the plans details nor discuss the compatibility between the IPs program plans and the concerned utilities ministries plans. Now, the role the IDA is supposed to do in the preparation phase of the IPs program did not take place due to two reasons. First, the IDA lacks the needed authorities to provide utilities or coordinate with utilities providers to do so, what shows unbalanced powers within the institutional setup confirming what is indicated in the previous section in that the power in new cities is for the NUCA. Second, this happens because of the weakness of the sectoral plans preparation as well as weakness in the coordination between the competent authorities in studying and planning for joint projects.

6.3.3. Planning stage

As classified through the analytical study of the official framework in the previous chapter this phase discusses; choosing the IPs locations⁸ and activities⁹, the marketing plan¹⁰, the urban planning as well as the environmental planning of the IPs sites.

⁸ Choosing the IPs locations is a step that the IDA did with other steps before announcing the launch of the first phase of the program what means it is supposed to be discussed in the pre-planning stage not here in the planning stage. But as choosing the locations for industrial projects is a planning task and it is supposed to be done by planners, whoever they are governmental or not, as well as this step not discussed in the official framework of the state in the previous chapter in the planning phase, so, the researcher, for these reasons and to facilitate the analytical comparison between the official framework and the applied framework of the IPs Program, preferred to deal with this step in the planning step.

⁹ Choosing the IPs activities is a task that the developers did before signing the contract and are supposed to be in the pre-planning stage. However, since this step is linked in its relationships and effects to the rest of the steps of this phase, the researcher preferred to discuss it here in the planning phase.

¹⁰ Marketing plan, which the developer does, is separated from offering the IDP that the IDA does, that we already discussed within the Pre-Planning phase. This is because the marketing plan timing is considered to be a part of the Planning phase with its relationships and impacts linked to the other tasks of the planning phase.

6.3.3.1. *Choosing IPs locations:*

Choosing the IPs locations is a task that has been done by the IDA alone in a short time period away from the planning experts and basics of the systematic planning studies.

Choosing sites for IPs, which the developers will compete to acquire any of them, was required to reach a framework for the IDP leading to the launch of the first phase of the IDP. The IDP website mentions that after the preparatory workshops, which were in late July 2006, the announcement of the launch of the first phase was in mid-October 2006 (IDP, 2011c). It means that it was after just two months and a half from the preparatory workshops the IDA conducted to put the IDP framework. The question arises here is about the shortness of this period compared to the expected tasks supposed to be done to launch the first phase of the IDP. They include; first, the preparation of various studies including the site selection studies and the preparation of the IDP. Ac-G-03, Planning Consultant of the IDA Head, answered and denounced the way that has been used for the sites selection. He explained that this step was marred by a lot of confusion and was carried away from the experts' eyes as well as the planners who updated the planning of the new cities where the IPs located. He gave an example about Sixth of October City where the CPC exists, see Appendix (III) for the location map. In details he said:

There was an IZ in Sixth of October City with a green belt in the east. The NUCA made an extension and then added another area as stores zone for the needy investors in this IZ. The NUCA then said there is a demand on factories so it put the new factories on the stores zone and so on.... The NUCA then worked on the western extensions as well as the northern ones where the IPs were located later on. (Regarding participation of other stakeholders specifically the city planners, he added) No, no, not at all. Nothing to do with this, as long as the land is in the 5 km as the city campus¹¹, the NUCA can do whatever it want.... It is true without any exaggeration; this is what happens ... The NUCA gave that land already divided into plots to the IDA. The IDA alone, without consulting the planning experts, allocated the developers on those plots ... I mean the NUCA gave us a number of plots around few million m² each ... one plot for each developer. (Ac-G-03)

In-G-06, Director of the Central Administration of IZs in IDA, confirmed on that way of selection mentioning a difference in the role of selecting the site and dividing the land into plots, being the IDA's role not the NUCA, saying:

The extension of the industrial zone within the campus of October City is the responsibility of the NUCA since 1979 ... There were 8 million m² as an accredited extension within the master plan of October City, how can we develop this extension? ... It is already accredited as an industrial zone but it is also still

¹¹ Every new city in Egypt is established by a presidential decree that determines its location and boundaries in addition to a 5 km as a campus around its boundaries to be used for the city extensions.

desert without any kind of development, and there is no infrastructure. We decided to apply the IDP on this extension. (In-G-06, In-G-29)¹²

De-G-57, Director of the Projects Administration in Sixth of October City Council following the NUCA, addressed the same way including the confirmation on the role of the IDA in selecting the site and dividing it into plots not the NUCA. She confirmed also on that this happened through the consultations between only the leaders in both the IDA and the NUCA (De-G-57). From another side, Ac-G-60, the planning expert, the member of the FSEEDIZ¹³ board of directors and the member of the SCPUD¹⁴, in his answer about the participation of the concerned parties in the planning process whatever they are investors, governmental bodies, environmental bodies and so on. He answered briefly and strictly “no they don’t participate” (Ac-G-60). De-43, the Executive Director of CPC, added that the environmental dimensions have not been considered in the sites selection, saying:

The sites have not been selected in the way that could achieve the maximum environmental protection because it is early for Egypt, very pre-mature to do so, it is too early. (De-43)

To confirm on what has been said by De-43 regarding avoiding taking the environmental dimension into consideration, De-64, the Executive Director of IP3, confirmed on the lack of any role of the Egyptian Environmental Affairs Agency (EEAA) in this process from the beginning of the IDP, through formulating the protocol and the contract, to selecting sites and activities (De-64).

It could be said now that the selection of the IPs sites did not happen on the basis of proper planning methodology. It was away from the experts’ eyes as well as from the planning teams responsible of the planning of the containing cities of these sites. What makes this conclusion more sensible is the shortness of the time period available for that process along with other steps, what in total have been achieved in no more than two months and a half. Sites selection is also a role that the IDA is legally and practically in charge of, in coordination with the NUCA as the land owner, away from the other concerned parties including the EEAA. In the previous chapter we also proved, from a legal point of view, that this process lacks any effective role of the environmental bodies. It is confirmed now that the sites selection process did not consider the environmental dimensions applicable in this regard. This is discussed later in this chapter. Therefore, environmental imbalance in the IPs is highly expected.

¹² KN, the Technical Advisor of the IDA Head, confirmed on the same as told by In-G-06, Director of the Central Administration of the IZs in the IDA, while the words are for the latter.

¹³ Fund for Supporting the Establishment, Extending public utilities and Development of IZs

¹⁴ Supreme Council for Planning and Urban Development.

According to what is mentioned above, it is plausible to argue here that the IDA overcomes the roles of other partners by which the implementation of the IDP could be delayed or amended away from it. It speeded up the process targeting economic or socio-political gains. In this context, in a way confirming this argument, De-28, the Executive Director of Al Tagamouat IP, suspended on that speed made by the IDA and the pressures exerted by it on the developers in order to speed up the construction works. She confirmed on that the IDA aims from this attitude to improve its image in front of the Egyptian public opinion showing that the lands were distributed, and that developers began to work (De-28). Similarly, Ac-G-03, Consultant of the IDA Head, confirmed on the previous conclusion pointing to political motives that are behind the actions of the government like this matter. In his response to a question about his opinion on the announcement by the Government on the completion of the first three phases of the IDP in a short time he said:

All of this is just propaganda, all of this is governmental rhetoric but we know the entire story. Talk of propaganda like the 1.000 factories that the IDA established [he meant one of the elements of the electoral program of the former president what is entitled 'the Thousand Factories program'], when you have a look at them you will discover that those thousand factories are just plots of lands with no productive factories or constructions on the ground. You applied for a textile factory, you became one of the thousand factories, go and feel happy! (Ac-G-03)

Vision of Ac-G-03's on governmental rhetoric is confirmed by a large number of statements by the Government and opponents of the previous regime. Come on top of these statements is for Ahmed Nazief, the Ex-Prime Minister, see for example (Alnahar-egypt, 2008, Elyoum7, 2010). Such rhetoric clearly stating that the Ex-Government has succeeded in achieving full implementation of Mubarak's electoral program, the deposed president by 25th of January revolution. In addition to the propaganda, several local, international and governmental reports, see for example; (BBCArabic.com, 2010, Transparency-International, 2010, ar.wikipedia.org, 2011), indicate on the increasing corruption in various governmental bodies and authorities in Egypt in Mubarak's era what paved to the explosion of the 25th of January Egyptian Revolution.

To conclude, the selection of the IPs sites was not conducted on the basis of proper planning methodology. This is confirmed by the shortness of the time period it took. The IDA, in coordination with the NUCA, was in charge of this task away from other concerned parties on top of which; the EEAA. The selection process therefore, did not consider the environmental dimensions and accordingly environmental imbalance in the IPs is highly expected. Speed and lack of proficiency through which this important step was conducted to

show constructions on the IPs sites, is reasoned by corrupted political agenda of the previous Government aiming at publically improving its image.

6.3.3.2. *Choosing IPs activities*

The way by which the IPs activities have been chosen expresses that these IPs, after full implementation and operating, are subjected to environmental imbalance. Lacking of the appropriate activities distribution that considers the environmental dimensions, in addition to giving the developer the freedom of selection based on his/her economic and marketing studies; both factors are behind this expectation. This section justifies this step in details.

The contract between the IDA and the developers doesn't oblige the developers by specific kinds of activities they should choose from according to a proper planned vision. It gives the developers the freedom to decide according to his/her market and economic studies to choose the industrial activity to be mentioned in the contract. After this, the chosen activity becomes obligatory on the developer not to be changed without the permission from the IDA (In-G-06, IDA, 2008a, Subject 2). The developers' answers confirmed this understanding on the official context stated above while the developers' methods to choose the activity type vary from one to another. De-28, the Executive Director of Al Tagamouat IP, from the first phase, in an answer on a question on how they chose the activity and if it was mandatory or not, said:

No, it was not mandatory.... The foreign industries that settled in our zone in Jordan were clothes industries. So, we have strong relations with the clothes industrialists around the world. For that we said as we will go to Egypt, it is better to start with what we know (De-28)

De-64, the Executive Director of IP3, from the second phase, confirmed on the selection issue as for the first phase and added that the IDA put two conditions the developers have to take into account in their selection, saying:

Type of activity is not selected based on a national, regional or even local vision from the IDA. All its conditions in this regards are: not to be heavy use of energy and not from the black list of severe polluting industries such as cement and compost industries and so on ... Type of activity is determined by the developer only through his/her economic and marketing studies... (De-64)

This may raise so many questions about the nature of homogeneity between the various activities within the IP, between one IP and other IPs or between this new IPs configuration and what is around it, whether they are old industrial sites adjacent to the new one or residential areas. As with the availability of choice given to the developers in the activity selection, the question to be asked is how the IDA ensures homogeneity and lack of risks exerted from one area on another. Ac-G-03, Consultant of the IDA Head, addressed the lack

of environmental awareness inside the IDA and his objection on the way the IDA followed in this regard. This was in his answer to a question on how were the IPs activities selected, saying:

Nobody knows anything or interested to know, is this incompatible with that or not? Nobody knows. Each developer selects in a wrong way according only to the market and as the customer comes. (Ac-G-03)

What increases the importance of the previous questions is the way the developer followed in light of the freedom of choice they have been given. CPC for example gathers in one zone the building materials industry as a major activity, what is a polluting activity, and the food industry, what is supposed scientifically to be away from any source of pollution. About this De-43, the Executive Director of CPC, said :

We divided our zone into 3 activities: the major activity is for building materials which is 60% or 65%, and the rest is for food and textile industries depending on the industrial demand. During marketing we found that there is no demand on the textile industries so we asked to change it. (De-43)

Therefore, the proportion of food industries is expected to increase after the low demand on textile industries what means exacerbating of the problem. For IP3, the company's approach was to widen the scope to attract a diversity of activities what also means increase in the expectation of mixed polluting industries with others supposed to be away from the pollution. This could happen especially with the existence of the engineering industries as a main activity what are, of course, polluting activities. In this, De-64, the Executive Director of IP3, illustrates the basis on which they chose their approach, saying:

The company has expanded the marketing scope by choosing the engineering industries as a major activity that has 60% of the industrial area. This was because the engineering industries contain large range of industries. We also chose the diverse industries as a complementary activity of the ratio of 100%. Therefore almost everything is available within my site. (De-64)

So, the philosophy of IP3 in deciding the type of activity they will attract is; to have everything available in their site! Therefore, it is clear from now that the environmental standards have not been taken into account in the developers' choices of industrial activity, neither by the companies nor by the IDA or even taking the approval of the environmental bodies before accepting such choices in the contract.

It is well known now that IPs activities selection is prior to signing the contract and therefore, the stated activity in the contract is binding to both sides of the contract, the IDA and the developer. With the possibility of modifying these activities if the developer wanted after the IDA approval, the questions that arise here are: Whether the IDA requires the approval of the EEAA on the developer's choice? Is this environmental approval, if any, prior to the IDA's

adoption and agreeing on it in the contract? Does the IDA request this environmental approval from the developer in case of any modification? Is there any way the IDA follows to involve the environmental bodies into the process to ensure that the selected industrial activities are compatible with the environmental standards? The answers¹⁵ from a number of developers, experts and governmental officials in their entirety deny any role of the EEAA. In details, NGO-30, the Environmental Expert and the Vice Dean of the Institute of Environmental Studies, said:

The role of the environmental bodies, whether the MSEA¹⁶ or the EEAA is limited to expressing an opinion regarding the environmental impact assessment (EIA) and does not interfere at all in the various stages of the planning process. However, the role clearly appears later in the control over operating.... The nature of the laws in Egypt and the nature of the MSEA as a ministry of State do not give it powers or authorities over other ministries and bodies. (NGO-30)

Ac-G-03, Consultant of the IDA Head, who is responsible for reviewing the developers' schemes, adds, to that the environmental bodies lack the appropriate authorities to intervene in the process, another dimension which is the lack of coordination between state agencies, saying:

As a reviewer, I have no authority to check the activity selection or any other topic, no authority at all. [About the role of the environmental bodies he said] There is no such role or anything like this, everyone works alone in his own island. (Ac-G-03)

To conclude, the IPs are highly subjected to environmental imbalance; within the IP itself and in relation to their outer surroundings with their full implementation. The reason is the absence of accredited regional or local planned vision for activities distribution that the developer has to comply with to ensure compatibility with the urban surroundings and taking the environmental standards into account. With the absence of such vision, the developer takes sole responsibilities in deciding the industrial activity based on his/her economic and marketing studies. Hence, the outcome is from a purely economic marketing perspective and therefore do not take into account any environmental standards. This is commonly demonstrated by the combination of polluting activities with other activities that are supposed to be away from pollution. Lastly, the environmental bodies are kept away from interfering to correct the course of this process¹⁷.

¹⁵ We have already mentioned some of them earlier in this chapter such as the one told by De-64, the Executive Director of IP3, saying: "There is no role of the MSEA or the EEAA in the process from the beginning of the program through formulating the protocol or the contract, or selection of sites and industrial activities.

¹⁶ Ministry of State for Environmental Affairs.

¹⁷ It is worth mentioning, and to make sure from what has been inferred here, that the research and during the discussion of the preparation of the IP planning as well as the adoption of planning, will re-examine this points.

6.3.3.3. *Marketing plan*

The industrial developer by virtue of his contract with the IDA is committed to submit detailed marketing plan, during three months from the date of signing the contract, to the IDA for its approval (IDA, 2008a, paragraph 2-6). What is meant here is the detailed plan for marketing of land plots while the marketing and economic studies are set up by the industrial developers in advance of the contract, as stated before (De-28, De-43, De-64).

It is worth mentioning that, according to the developers, the marketing plan continues for a long time even after the delivery and adoption of the IP master plan as well as the detailed schemes. Therefore, master plan and accordingly detailed schemes are highly subjected to modifications according to the outcomes from marketing (De-28, De-43, De-64). Modification in planning is confirmed also from the standpoint of the government; De-G-31, Head of the Central Administration of the Industrial Developer in the IDA, on a question about the nature of the marketing plan and its impacts on the rest of the steps of the planning process he said:

Marketing is as for example; you have textile zone here, chemical zone here and metal industries zone here and so on. After the accreditation of the master plan, the developer found that the demand on chemicals is higher than the others so he becomes in need to cut from the textile to add to the chemicals. This is because marketing for this activity is going better than other kinds. And that is why he/she changes the master plan according to the direction to which the market is going . (De-G-31)

The question posing itself now is for how long will the marketing be allowing developers to change? What about the time limits agreed in the contract regarding implementation and operating? Analyzing cases of IPs answers these questions. In the case of Al Tagamouat IP, for example, they received the land in February 2008 and until the date of the interview with its Executive Director; De-28 in December 2009, after nearly 22 months and the company had no idea about the settled factories in their IP. In a question about how to take advantage of industrial waste internally between factories, her answer was as follows:

I still don't have factories and I don't know what I will have, but definitely there will be if there are wastes. However, until now I don't have 3 or 4 actual investors who I can say they could benefit from each other. (De-28)

Then when De-28 was asked to justify that delay in marketing she referred to the delay of the IDA committed to supply the IPs sites by the needed infrastructure¹⁸. In details she said:

As perhaps the IDA and the environmental bodies have any other mechanisms allowing them to ensure the compatibility of the selected activities environmentally.

¹⁸ This issue is discussed and proved in Section (6.3.2.3)

I am not a land seller so I cannot bring people telling them: come and buy land and hopefully you get the infrastructure this year or the next year. What I mean is that when we first came to Egypt our plan was that in September 2009 we will be operating. Now, we are in December 2009 and have not finished the infrastructure yet. So, 'when we sell, we sell commitment'. When I sell you a land I ask you that within 19 months you should have a building suitable for operation. If you come, took the land and built a building without utilities, I will be committed to provide you with the infrastructure. But, if the government does not provide me the infrastructure, what will I do then? (De-28)

Therefore, it is understood from the foregoing that the failure of the government to fulfil its commitments to provide the IPs with utilities makes the marketing process harder and it takes longer time. This also leads to instability in the developers' thoughts and marketing, and hence continuous change in the activities distribution. Thus, how could it be accepted that the developers complete their master plans and their adoption including adoption of the EIA, as well as the completion and adoption of the detailed schemes which include detailed maps of networks¹⁹, while the marketing is not yet finished. Accordingly, the types of industrial activities are subject to change from time to time. Next section discusses these steps in details to investigate how the administration of the IDP avoided such modifications, if they did.

6.3.3.4. Urban planning preparation

This part addresses the step of the physical planning preparation for the IPs sites. It has been found that it is the role of the developer to do such task through his/her own choice from the consultancy offices. The IDA did not put any restrictions on the offices level of efficiency. Therefore, the quality of the planning depends on the developer's level and the extent to which he/she wants to do it in a proper way. It also depends on the extent to which the planning regulations are respected, what the IDA is not fully applying.

After signing the contract and receiving the land, the developer begins directly to prepare for the urban planning of the IP and then comes up with the master plan so that it can be adopted. As the developer by virtue of the contract with the IDA, is committed to submit the general and detailed planning to the IDA during a period not exceeding six months from the date of signing the contract. This is then for approval and issuance of the adoption resolution on planning and zoning. The developer is also committed not to make any amendments or changes to the approved plans without prior written consent from the IDA (IDA, 2008a, paragraph 2-6). So, it is understood now that the preparation of the urban planning of the IP is the responsibility of the developer. How does the developer do this role? De-28, the

¹⁹ Each of these steps will be discussed later in this chapter

Executive Director of Al Tagamouat IP, confirmed on the above, and explained the details of the steps²⁰, saying:

After signing the contract we received the land from the council of Tenth of Ramadan City on February the 24th, 2008. Then, we started directly with the planning and the master plan for the entire zone ... by Dar Al Handasa up to schematic level. They also gave us an architectural project, zone regulations, all architectural designs and regulatory regulations of the project as well as the infrastructure plans up to schematic level. They recommended other designers for the detailed infrastructure design. (De-28)

On the nature of the relationship between the company and the consultancy office, and their respective roles in the planning process, De-28 identified this nature in the fact that constructive networking discussions were conducted by the consultant to know our needs and desirable visions. The consultant then put the planning perception that was reviewed by the company technical team through debate between the two sides to develop it until it reaches the optimum position, achieving the company's visions in the best possible scientific way (De-28)²¹. Many confirmations²² on the same process have been received from government officials, developers and planners, while the planning teams' levels varied according to the developer desire and financial ability. While CPC and AL Tagamouat selected Dar Alahandasa as one of the best consultancy offices in the world in this discipline²³, some others chose lower level offices depending on the absence of restrictions on the degree or efficiency of the consultancy offices what the IDA did not consider unlike what many governmental bodies do in similar issues. These bodies announce a list of authorized and licensed consultants that investors have to choose from to ensure a minimum level of efficiency. Ac-G-03, Consultant of the IDA Head, criticizes this issue in his response to a question about the responsibility and freedom of the developer to choose his/her planning team, saying:

Yes, the developer is free to choose, he can go to Hamza's office or Dr. Sahar's. There is also one called ZZ²⁴ who I don't know at all. His master plan was just presented to me this day ... I even found him incapable at all of doing such planning. You can say that he gave it to a student in primary six to do it for him. I refused it and returned it all back to him. (Ac-G-03)

²⁰ Same steps were approved by the other two developers.

²¹ Same process happened with CPC as the consultant, Dar Alhandasa, is the same for both IPs; CPC and Al Tagamouat.

²² Ac-01, Ac-08, Ac-44, De-64, De-G-31, and In-G-06

²³ According to De-28 and De-43 the executive directors of Al Tagamouat and CPC respectively, as well as to Dar Alahandasa website: http://www.dargroup.com/flash/index_flash.php?isvars=false

²⁴ To avoid causing any harm to this Consultancy Office, the Researcher preferred not to mention its real name or data.

The problem appearing here is in giving the developer the choice to choose their consultants whatever the efficiency level is. Another problem also appears; given that the revision on the urban planning is made by only one consultant²⁵ who is Ac-G-03, it is plausible to suggest that depending on one vision only is doubtful in its outcome in terms of the efficiency degree. That is unless this vision is governed by a clear and comprehensive code of planning regulations what could decrease the doubts on the outcomes to some extent. Actually, there is no special code for planning IPs and the revision depends on some chosen regulations from the Unified Building Law²⁶. Yet, it is known, according to De-64, that even that chosen regulations are subjected to be overcome by the IDA. Regarding the planning and the land division, De-64, the Executive Director of IP3, said²⁷:

To divide the land within the plan and as an advice from the IDA for the developers to do the division of land into small pieces, which the law allows their collection in future, and avoid large pieces that law prohibits their division after adoption of the master plan. That is to benefit from this information to respond to the industrial request according to the marketing study. (De-64)

Therefore, it is understood that the IDA is aware of the law and also aware of how to overcome it. Changing the layout of the project, whatever the type of change is, has different implications on the built environment where it is supposed that the entity that has to care about such implications and respect laws related to IZs is the IDA more than other entities. Yet, it is now known that the IDA advises developers in how to override the law. The goal behind this could be that the IDA tries to overcome some of the deadlock in the law. However, the researcher can reasonably say that this kind of attempts must be done in a legal way. It also should be done in coordination with competent authorities, particularly environmental authorities to avoid any negative effects that could happen. Therefore, depending on further evidence where a number of them were exposed in this chapter, we found that the most likely is that the IDA aims by overriding some provisions to speed up the process driven by the government political desires to produce something on the ground to use as propaganda for itself.

To conclude, the IDA does not place restrictions on the efficiency level of consultancy offices that the developers should refer to when choosing their consultants as many governmental bodies do in similar issues to ensure a minimum level of efficiency. Therefore the outcomes;

²⁵ This issue is discussed and proved in Section (6.3.4.1).

²⁶ This issue is discussed and proved in Section (6.3.4.1).

²⁷ In addition to De-64, the researcher knows as well as his fellows through their experiences by virtue of being urban planners that the governmental bodies can overcome some planning regulations to speed the process of some projects especially those achieving political gains.

the urban planning, from such offices vary according to the developer desires and financial ability. These outcomes are then reviewed in a process that increases the doubts on the efficiency of such outcomes. The revision process, discussed in full details in Section (6.3.4), depends on one consultant doing his task without a special code for planning IPs but depending on chosen regulations from the law that the IDA advises the developers on how to overcome it! The IDA by doing so, supported by evidences exposed in other areas in this chapter and the one after, targets speeding up the planning process for achieving political gains. It was also found, according to the case studies discussed, that the process through which the IP urban planning is prepared, is governed by constructive networking discussions conducted by the consultancy office with the developer and his/her technical team aiming at developing the best possible scientific planning that could achieve the developer's desires.

6.3.3.5. *Environmental planning preparation*

The relationship of the IDP with the natural environment and its protection is restricted in the contract between the IDA and the developers in interference of the EEAA to review and then approve the master plan and detailed schemes of an IP. The developer, by the contract, takes sole responsibility for any damage that may occur to the environment (IDA, 2008a). Therefore, the questions arise here are what is the process to be followed, what standards the developers are asked to achieve, how the environmental study is prepared, and finally how the schemes are accredited. All of these questions are about important steps that the contract had not specified. This, at first place, gives an indication for the low importance that the environment takes in this contract and by the authority that formulated it which is the IDA.

Regarding the environmental standards/regulations that the developers are required to comply with in their studies and their source; De-28, the Executive Director of Al Tagamouat IP, emphasized on that the only role of the EEAA is to revise the environmental impact assessment study (EIA) that contain the master plan and detailed schemes of the IP. She also explained that the regulations that the EEAA depends on in this revision are those stated in an appendix attached to the contract which are chosen from the environmental law (De-28). Yet, reviewing the contract and its appendices shows that the appendix referred to by De-28 is only for a list of maximum allowed limits for waste water. This is a small part from the regulations and standards specified by the Egyptian environmental law and are not all the standards and conditions that should be taken into account in environmental planning (IDA, 2008a, Mubarak, 2009). En-G-13, an Environmental Consultant in the EEAA, confirmed on that industrial zones must be environmentally planned according to regulations and standards

of the environmental law (En-G-13). De-43, the Executive Director of CPC, agreed with En-G-13. He also added that applying the law with its general standards on the IDP is difficult due to the case specificity of the IP that differs from other IZs. This implicitly means the lack of suitability and consideration of the nature of the IPs, due to the multiplicity of their industrial types, their requirements, and their ways of compatibility with the environment inside and around these areas. That is why every factory is required to submit an EIA to describe in detail its commitment to these general standards (De-43). Ac-G-03, Consultant of the IDA Head, added two important factors that could explain more the difficulty facing the application of the law standards not just on the IDP but in general. He said:

Protecting the environment lacks priority in our case. Yes, I swear I am very honest with you.... Today, if you are already unable to provide a good investment atmosphere to a factory, you tell me, as a small factory with space of 2000 m², I want you to install a waste treatment device. I will refuse and leave. This is the problem in Egypt today. Today, small factories are not able to provide separate waste treatment. It must be central and to be so they must be gathered in one cluster in one place so that their wastes are to be treated together not everyone with its own treatment technique. When you bring a treatment station suitable for their cluster in size, type and economies, the cost is distributed on everyone. Therefore, you have made something good but who thinks in this? No one does. (Ac-G-03)

So, the environmental protection in Egyptian lacks priority of caring and it is difficult to be addressed in light of the problems that the investors suffer from²⁸, mainly the lack of good investment atmosphere. The second factor is the chaotic distribution of industries (Shalaby, 2003b) that prevents the application of modern environmental techniques like central treatment infrastructure. In light of such difficulties facing the environmental protection, importance of the EIA studies as the only tool available to the environmental authorities to direct IZs to protect the environment, is increasing. Examining EIAs and their feasibility are addressed in the phase of approvals and licensing in Section (6.3.4.2).

To conclude, the role of the EEAA, which is the governmental authority competent to guarantee that development does not harm the environment, is limited in the IDP to revising the master-plan and detailed schemes within the EIA that the developer submit. Environmental law regulations and standards are supposed to govern this revision. Yet, the responsibility for any environmental damage is on the developer. So, the developer has to refer to the law as the only source to use to environmentally prepare the IP planning.

²⁸ It is worth mentioning that many scholars, experts, investors and governmental representatives have the same understanding about the priority of caring for the environment in a country like Egypt that suffers institutionally, economically and socially. This issue is discussed in detail and proved in Chapter (7), Section (7.5.1).

However, applying the regulation of the law, which has been formulated prior to the IDP, on the IDP faces some difficulties due to its specificity as a case that differs from other IZs. What also increases the difficulty of applying the regulations of the law not only in the IDP case but also in general is the common understanding dealing with environmental protection with indifference, discussed in Section (7.5.1). This is due to the problems plaguing the country as a whole, and investors in particular suffering from lack of good investment atmosphere. Furthermore, the chaotic physical distribution of industries in the IZs containing the IPs is another important factor. How can industrial distribution on environmental basis be applied to an IP that is located within or on the edge of an IZ characterized by such chaotic distribution causing multiple environmental problems inside and outside its boundaries? This is explained later during discussing the EIA, the only tool of the EEAA to control and direct the planning process to ensure compatibility with the environment.

6.3.4. Approvals & Licensing stage

This section discusses the details of the stage of approvals and licensing. It starts with the procedures of the approval process of urban planning and then the EIA studies. It then discusses the licensing procedures.

6.3.4.1. *Urban planning approvals*

This section addresses the details of the approvals procedures of the general and detailed urban planning including the adoption of the detailed utilities plans. It discusses responsibilities and roles of different actors as legally stated in the contract between the developers and the IDA, and realities of these roles through addressing different viewpoints of the involved parties. It also discusses the regulations and their sources on which the revision and thus the accreditation of the schemes are based. It is found that the IDA is responsible for reviewing and accrediting the IPs urban schemes. The utilities authorities, each with its specialization, share the IDA in accrediting the detailed plans of utilities. Industrial activities distribution shown in the master plan is also adopted by the EEAA²⁹ after the adoption of the IDA. The approval process is characterized by a number of defects mainly including limiting the revision to one consultant with lack of special code of urban planning for IPs. Moreover, rather than depending on comprehensive regulations for revision, the IDA has overcome some of the regulations stipulated in the laws.

Starting with the legal obligation, the developer is required, during a period not exceeding six months from contracting, to submit the master plan and detailed schemes plans for approval

²⁹ This is included in the EIA study discussed in the next section.

and adoption to the IDA to revise and then issue the planning and zoning resolution. The developer is also obliged not to make any modifications on the approved plans without written consent from the IDA (IDA, 2008a). From practice and according to the Governmental view, De-G-31, Head of the Central Administration of the industrial developer in the IDA, confirmed on the contract context with regard to the role of the IDA in accreditation, including the re-adoption of the plans by the IDA in case of any modification, saying:

We as the IDA adopt the plan ... Also in case of amendment ... The developer must return the master plan and bring it to me for adoption and redo the environmental approval to be able to complete. (De-G-31)

From the perspective of industrial developer, all developers of the case studies confirmed on the role of the IDA in adoption of the plan and also the approval of the EEAA on the distribution of industrial sectors within the master plan. However, they added that there is coordination between the IDA and cities councils, as they are the competent administrative authorities and owners of the land of industrial developers' sites, in adopting the plans after the IDA adoption although the IDA carries alone the responsibility and dealing with developers. Detailing this De-28, the Executive Director of Al Tagamouat IP, addressed what the developers agreed on by saying:

We submitted the master plan to the IDA that adopted it in a month. The IDA revised internally with the city council but the IDA carried the responsibility for that. After that, we submitted the detailed plan for adoption first by the IDA and then by the city council. (De-28)

On the nature of the accreditation procedures by the IDA; the developers stated that the step is easy and quick on the IDA side which is a sign of the IDA's desire to speed up the process and remove the obstacles in front of investors. In this context, De-28 said:

Overall, there were no problems with the IDA in adopting the plan.... to be honest they have an excellent engineering team in the IDA with good experience in urban planning.... The story was not complicated so we presented the plans in May and within a month it was completely adopted, just very simple amendments. (De-28)

As for the involved parties in the procedures of adopting the utilities detailed plans; the contract has obligated the developer, and during the same six months period, to adopt them by the competent authorities so that the drainage network concept is approved by the EEAA prior to obtaining the adoption of the Water and Sewerage Authority for the drainage network (IDA, 2008a). In this context, De-43, the Executive Director of CPC explained that the decision of the approval of the utilities detailed plans is for the utilities authorities, saying:

The plans adoption authorities; part of which is the IDA, but we go to the utilities authorities.... I refer to the IDA in things but the utilities authorities decide ... For example, regarding the effluent drainage ... Each factory is responsible for its sewage treatment, takes approvals and after that it can drain ... Liquid waste if not thrown in the sewage, it is to be thrown in another place specified by the EEAA. (De-43)

Therefore we can conclude that the adoption of the IPs is being handled in the first place by the IDA so that the EEAA approves afterwards the distribution of industrial activities and approves the designs of effluent drainage network of the IP. The same happens with the respective utilities authorities each in its specialization.

If we linked between the ease and speed of accreditation, and what was said earlier about the excesses of the IDA in a similar case³⁰, it can be concluded that the IDA is aiming here to reach the implementation of the IPs to show constructions on the ground for political gains even if it is at the expense of efficiency. Discussing the bases that the IDA depends on for accreditation, could explain why efficiency is lacked. De-G-31, Head of the Central Administration of the industrial developer in the IDA, answered a question about the planning regulations on which accreditation is based, saying:

Regulations are the general regulations of urban planning of industrial zones; street width, spaces of free areas, spaces of green areas, which are found in urban planning not from me ... The planning consultant is responsible of that not us. Here we are interested in industry as we are basically industrialists. For planning we brought a doctor of urban planning who revises the planning standards ... So, for urban planning, I have only Dr. Ac-G-03. (De-G-31)

The answer was general regarding the planning regulations to some extent where De-G-31 tried to throw the responsibility of revision on the planning consultant. Similarly, In-G-06, Director of the Central Administration of the IZs in the IDA, refers to the absence of specialised code in planning for IPs/IZs, stressing on his conviction with that the right thing is to depend on the planning consultants like Dr. Ac-G-03 (In-G-06). By directing the same question on the nature and origin of the regulations to Ac-G-03, Consultant of the IDA Head, the only urban planning consultant of the IDA, and who revises/accredits the urban plans for IPs, he replied that these regulations have been formulated in a session by his consultancy but the IDA overrode them, saying:

Regulations are partially chosen from the Unified Building law.... The problem is that The IDA raised the ratios somewhat for the sake of the developers so as to encourage them as it claims, although this is against the law? ... When the developer submits the master plan, I only revise the planning whether the ratios

³⁰ Overtaking the regulations by the IDA for the sake of the developers and avoiding putting restrictions on the nature of the consultancy offices.

are achieved or not based only on the regulations stated in the contract and not more than that. (Ac-G-03)

Therefore, the IDA violated the law for the benefit of the industrial developer. The role of the reviewer is limited in checking whether ratios and regulations stipulated by the contract only are applied.

From another side, the developers' consultants prepare the zone regulations and specifications of building which all manufacturers must comply with within the IPs. The zone regulations have to meet the terms and general regulations put by the city council (De-28, De-43).

To conclude, the IDA is legally and practically responsible for reviewing and accrediting the urban planning of the IPs. It is found that the IDA coordinates with the city councils in such task as they are the competent administrative authorities and owners of the land of industrial developers' sites. Developers are legally required to have a written consent from the IDA on any modifications they made on the master plan. The EEAA after that approves the main sectors of activities distribution of the IPs within the master plan. Detailed schemes of utilities after being accredited by the IDA are reviewed and accredited by the utilities authorities. This process has proved to be defective. The IDA only depends in revision on one consultant in a context that lacks a special code that guarantees efficient planning of the IPs. In addition, the regulations on which the revision is based, as stated in the contract, are chosen from the general regulations of the law in a way not covering all fields of urban planning. What increases the problem is that even those partially chosen regulations were illegally modified by the IDA for the benefit of the developers to encourage them. Therefore, we are here in front of another overtaking of the law and confirmation on what the IDA does in this regard. If it is to be formulated along with the rest of the IDA actions discussed in the rest of stages, it is found that the IDA aims from that to decrease the obstacles in front of the developers in order to speed up the emergence of the projects constructions, even if it was at the expense of efficiency, to achieve political gains.

6.3.4.2. *Environmental planning approvals (EIA Studies)*

The EIA study is an important step that the developer should 'legally' complete. Appendix (IX)³¹ discusses in detail this study and analyzes with evidences what has been done in the three case studies of the IDP. This section therefore, synthesizes the nature and type of the

³¹ To avoid interrupting the reader and his/her focus away from the discussed line in the chapter, the researcher preferred to put the analysis study of the EIA in an appendix. The EIA analysis is found to be very long, more than 5000 word, to be put in its detailed form.

EIA and how it is prepared, approved, the parties involved and the role of each partner. It addresses the application problems of the procedures and their impact on the actual feasibility of the study, and finally whether the study achieves its purposes.

The legal obligation of the EIA

The contract between the IDA and the developer obliges the developer to obtain an approval from the EEAA on the master plan presented through the EIA prepared by the developer via specialized technical offices (En-G-36)(En-G-36)(En-G-36)(En-G-36). The EIA is to be submitted to the competent administrative authority, which is in our case the city council that ensures the fulfilment of the study before sending it to the EEAA for revision and then taking the decision (De-28, De-43, De-64, De-G-31, En-G-36)

The nature of the EIA

The EIA is divided into 3 sections: basic data of the project, description of the project and its details, and the environmental management and monitoring plans (En-G-36). The industrial developer is required to make an EIA for the IP as a whole with its three divisions what is called level (C)³² (En-G-36, En-G-52). Then each manufacturer wishes to settle in the IP makes a further study for his factory containing the second and third sections what is called level (B) without the need for the first section, as it had already been submitted in the IP one (En-65, En-G-36). The main reason behind demanding the IPs to present a complete study is the shift from IZs owned by the Government to involving the private developers as partners in the process. As the EEAA performed pressures on the developers, taking benefit of their eagerness for speeding up their lands marketing and attracting investors, in imposing making the study for the IP as a whole (En-65). This was applied through an agreement made between the EEAA and the NUCA (En-65, En-G-16). It is worth noting that this is an undeclared policy and not based on legal obligation. Or at least there are legal loopholes to prevent its application otherwise the EEAA would not have resorted to a separate contract to guarantee its application. Therefore the competent administrative authorities, including the IDA and the NUCA, do not deal very seriously with this study and perhaps the absence of legal obligation, together with dealing with indifference with the environmental protection are behind the lack of respect for the EIA study as well as the attempts of neglecting it conducted by those authorities.

³² The assumed level of the study that the investor provides is linked to the level of his own project and its classification according to its negative impact on the environment according to the declared lists and enacted in this regard ranging from the white, gray and black lists offset respectively by the level of study to be done, starting from level A, then B and then C.

The problems facing the study and its impact

The problems start with that the revision depends, according to the contract, only on a master plan, which does not display more than the sectoral division of the industrial activities without actual allocation of factories (En-G-36, De-43, In-G-06). This leads to expand the range in front of the developer regarding choosing activities types which could not be environmentally compatible with each other or with neighbours. This happens due to responding to the industrial demand in marketing³³ and thus the image varies from that approved by the EEAA, as it is proved that this approval is made only for one time (De-43, De-64). Therefore, this means that such study is just a form that lacks real feasibility (En-G-36). What confirmed this more is the non-legal obligation (according to the contract) for the developers to take consent of the EEAA in the case of any amendment or change (IDA, 2008a). Any change to the plan means practical change in carrying capacity measurements of the IP contrary to what had been approved by the EEAA. In addition, contradictory statements from officials of the EEAA (En-G-36) led to the understanding that developers are not bound basically to doing carrying capacity measurements.

Other administrative and legal problems are clear in weakening this study to reduce the obstacles in front of the developers. It is found that while the project is implemented or operating without obtaining the approval of the EEAA, the EEAA is surprised by receiving the project EIA study³⁴ (En-G-36, En-G-16). This means putting the EEAA in front of existing condition and therefore it becomes impossible to change the location if it is inappropriate or avoid its impact either internally or on its surroundings (En-G-36, Ac-09, Ac-15, Ac-G-11). This common problem happened due to the disappearance of fines from the law. Moreover, it continued to happen despite adding fines to the amended law³⁵, owing to

³³ See Section (6.3.3.2) for more details.

³⁴ See Appendix (X) for a copy of some of official letters, as examples of a lot of letters, directed to, En-G-16, the Director of Legal Administration in the EEAA, from many local administrations (Sixth of October and other cities councils and local administrations) reporting cases on operating factories that did not gain the environmental approval.

³⁵ A fine has been developed on offenders in the amendment of the Environment Law, which was in 2009, but has not been activated to the time of the research interviews, and still seriousness is lacking in the transfer of offenders to court. This is affirmed by the Director of Legal Department of the EEAA in his answer to a question from the researcher on the movement of the environmental legal records after amending the law, he said:

I did not make legal records yet and I refuse doing them ... Because what do they send me? Pulp toaster- plastic crusher — I will show you the models [see Appendix (X) for some of these models] they sent to me and you will laugh. I mean they (Department of environmental assessment) sent me things I'm sorry will bother you psychologically.... Heavy factory are not sent, these kinds enter on Saturday and take the approval on Thursday. On the other side they send me to complete for a restaurant; the chimney is retort or non-conforming, or the model was not

the lack of the seriousness of the Government in activating these penalties especially on big/important investors (En-G-16, En-G-36). Adding to the above and confirming on marginalizing the role of EEAA and its only tool, the EIA, what is stated by the EEAA from complaints from the competent administrative authorities in non-transparent dealing and not providing correct information about the projects to push the EEAA to approve the projects (En-G-16). Furthermore, these administrations lack the necessary seriousness in reviewing the studies assuring their fulfilment and correctness before being sent to the EEAA (En-G-16, En-G-36). This leads to the EEAA request of completing which means prolonging the duration of the process on the project owner (En-G-52).

6.3.4.3. Licensing

With respect to the licensing procedures, the contract stated that the developer obtains all licenses required for the implementation of his commitments where the IDA within its powers issues all approvals and permits for construction and operation. The IDA assists the developer to obtain the necessary licences from other concerned governmental authorities. In case of refusal to issue a licence the developer has applied for; the IDA is committed to assist the developer in getting this license within the legal powers of the IDA and in accordance with the provisions of the law (IDA, 2008a). In practice, the role of the IDA regarding licensing utilities is restricted to receiving and sending the developers' requests like an intermediate/mediator which is contrary to the previous text (De-64, De-43). De-64, the Executive Director of IP3, explained the nature of the licensing procedures in the IDP. Due to lack of coordination between State authorities, the program was not known to the various authorities and they used to deal with it as a factory which caused many bureaucratic problems, but they disappeared in the second phase of the program with the start of the implementation of the Unified Building Law. In details, he said:

The developer used to prepare his drawings and take them to the IDA as well as to other concerned authorities such as utilities and he doesn't find who accredits it. Everyone evades because the program is unknown to the authorities ... Also there is no coordination or program definition from the IDA to the authorities that deal with the developer as a manufacturer and ask for the same regulations that do not fit with the developer. They seek for several details when the developer is far away from them such as types of factories and their operating rates and etc which are difficult to apply.... This problem was resolved in the second phase of the program where Unified Building Law is applied where the IDA adopts the drawings as long as the project consultant adopts them, and then for some

clear, oh he sent to the district council not to the General Secretary and so on, while they don't send the heavy and important factories.

drawings such as electricity a second accreditation is taken from the electricity authority. (De-64)

This is consistent to a great extent with what was followed in the IDA regarding the policy of One-Stop Window³⁶ where the investor hands over the license applications to the IDA window where initial approvals from various authorities are obtained in the same place (IDA, 2009). This initial approval is valid for one year and the investor is obliged within this timeframe to obtain all the necessary special and general approvals as required by laws and regulations (Rasheed, 2008c). This is considered as a sort of simplification of procedures to some extent according to De-43's statement, the Executive Director of CPC, where he said:

Before that One-Stop Window, for you to get a formal sheet you go to 7 different authorities located in 7 different places. They are to be thanked for simplifying it.... Those 7 are now in one window not in 7 different places, only in one place. (De-43)

A number of articles discussing problems of the IZs addressed the licensing issue and the complaints from investors regarding the licensing procedures and the ineffective nature of the one stop window (for example see (digital.ahram.org.eg, 2011)). Emphasizing on this, the field observation of the IDA window through multiple visits; it was found that there is a general form of grumbling from procedures and a number of investors say terms carrying meanings of "why is it one window then, since we also have to go to the utilities authorities?" (Shalaby, 2010b). This is confirmed and the reasons for its occurrence are explained by De-43 where he blamed the lack of competence of the staff at this level for decision-making what makes the one window a form more than a function by saying:

When you go to submit your papers, it has to be clear that the most important thing is that the 7 who are sitting have the authority to sign. This is the most important thing, not to find one telling you for this it is necessary to go somewhere or something of this sort. This is related to the administrative level, level of the employee himself and the power available to him. (De-43)

Ac-G-03, Consultant of the IDA Head, confirms on the above considering the one-stop window as governmental propaganda without enabled application on the ground because of the corruption plaguing Egypt, saying:

For you to enter Egypt as an investor you have to know the big head and the small head as they enter as partners with you at the first place to allow you enter Egypt. Forget about it, I am talking to you about something else and forget about the one-stop window or one window or such nonsense deceitful talk as it is just newspapers talk. As any investor comes they cut him his hair [slang expression: being deceived], sorry for the word. (Ac-G-03)

³⁶ See Section (2.3.4.3), Chapter (2), for more details.

Added to the fact that the One-Stop Window did not achieve the goal of its existence; the IDA assigned some of the licensing tasks to other authorities by virtue of the authority granted to it by law. This authority over the industrial lands was granted to it by the presidential decree No. 350/2005 (Mubarak, 2005) what obligated the NUCA to transfer all of the authorities and competences of its ownership of the industrial lands in all the new cities where the IPs locate to the IDA (Al-Maghraby, 2006). So, regarding licensing for industrial projects; the IDA authorized the NUCA to do such task (Assal, 2006). On the ground, this was confirmed by several specialists of different natures as well as the field visits to the new cities (Shalaby, 2010c, De-43, De-G-57). De-43, the Executive Director of CPC, confirmed on that and explained the reason behind it, saying:

The IDA gave the NUCA through the cities councils the authority of licensing like building licensing, why? This is because the IDA does not have the staff for doing this.... Also, the law permits it to do so. (De-43)

The role of the NUCA is not restricted onto the size of building licenses only, but more importantly is the total control in the public utilities licensing, in which the role of the IDA is completely confined. This is reasonable as the control over extending the utilities is for the NUCA, as proved in Section (6.3.2.3). This is due to the fact that the NUCA is the owner of land where the IPs are located. Ac-G-03, Consultant of the IDA Head, used a metaphor for the IZs in this case as the body with a head represented by the IDA while this body is missing the blood arteries that feed the body which are the utilities in reference to the NUCA³⁷. He mentioned this metaphor in his criticism of the conversion of the responsibility of the IZs with their different locations to the IDA. This conversion has caused many problems in practice which is illustrated by De-28, Executive Director of Al Tajamouaat, in response to a question about licensing problems and how difficult it is to be done, where she replied:

Our big problem is the 10th of Ramadan council.... These councils do not understand what happened. They used to be decision-makers and they used to have the authority over the land; suddenly someone came, took the land and started giving it to the developers. Now they are dealing with me as a factory while I am very different from being a factory. You can't bind me by the restrictions given to a factory. There are regulations imposed on me which should not exist because you are not dealing with a single project. (De-28)

Then she mentioned a number of examples of the obstacles put by the city council in front of them from; treating and tying them with what a factory was tied to. Also conflict and hiding information from them³⁸ and exploiting their power in licensing in amending the project

³⁷ For more details see Appendix (VI).

³⁸ The same complaints of bureaucracy of cities councils in dealing repeated from both, De-43, the Executive Director of CPC IP and a number of planners and engineers who the researcher interviewed; (Ac-66, Ac-08, Ac-

based on further suddenly emerging information. Example of problems that De-28 reported is in providing information about surrounding roads levels so that the engineering team can complete the utilities detailed plans and begin implementation. Obtaining this information delayed nearly nine months because of a piece of paper that is already available at the city council. In addition, the council pushed them for executing incorrectly or by changing the inputs in a conflicting way and demanding an amendment, which caused to them both financial and time harm³⁹.

Therefore, it is understood from the foregoing that the transfer of the authorities of the IZs from the NUCA to the IDA which means withdrawing jurisdiction of such power from the NUCA working teams in general and the new cities councils in particular after they were in charge of it since its inception of new cities, was considered by them as derogation from their rights. More specifically; their financial rights which used to benefit the work teams of the cities councils. This was as a result of the operation of projects of the size of the industrial zones being transferred to the IDA. In this regard; De-64, the Executive Director of IP3, summarized this problem and confirms on it by saying:

Of the most important obstacles facing the developer with the cities councils is that after the transfer of the jurisdiction over the land from the cities councils to the IDA and therefore moving the benefits, which used to return to the staff working in the councils when running the factories, to the IDA. The cities councils staff worked on becoming hostile to and impeding the IDA and the industrial developers program by delaying the papers, drawings and accreditations and ... (De-64)

De-28, the Executive Director of Al Tajamouat IP, also confirmed this in her response to questions about the reason behind the cities councils dealing with them negatively, how to solve these problems, and the role of the IDA in this especially as the contract obliges it to help the developer in case of not receiving any of the licenses. She said:

The IDA intervenes BUT at the end, 10th of Ramadan council is the one which deals with you ... They have internal anger inside them as the IDA took their role. They insist on hiding the information. For example the pumping plans, not the road level, it took us 11 months and they do not want to give them to us. Only when the Minister of Industry intervened with the Minister of Housing we took them. It is unbelievable that in 4 days they have made the complete plans, all what they have done is that they opened the drawer and gave them to me. Then why were they hiding it from me? It is unjustified. (De-28)

15, ... and others) as well as personal experiences that can confirm the same complaints of a number of cities councils and in particular 6th of October and 10th of Ramadan where case studies of industrial developers program lie.

³⁹ See Appendix (XI) for full details of such problem told by De-28.

Therefore it is understood that the intervention of the IDA is weak and ineffectual because of the presence of the actual authority on the ground for the city council and that the problem was solved only with the intervention of the Minister of Industry with Housing Minister personally. Concluding from the foregoing, we can confirm the opinion of Ac-G-03, Consultant of the IDA Head, saying that the IDA does not have actual authority over the IZs following the new cities and that the power is for the NUCA. We can also conclude that the management and work atmosphere of the official authorities represented in this case in the IDA and the NUCA is governed by other dimensions than the Public interest. This makes the action of each party within the scope of its powers on the ground in isolation from others, which is more like isolated islands as characterized by Ac-55, Assistant Professor at the Faculty of urban and regional planning at Cairo University (Ac-55). By saying so on one side, with De-28's statement in her last comment that the problem was not resolved until the intervention of the ministers of the two authorities along with De-43's former comment on the lack of decision-making powers for the staff on the other hand, we can confirm the centrality⁴⁰ controlling the work within the institutional framework governing the production of the IPs. De-64, the Executive Director of IP3, summarized what is concluded above, saying:

Of the major institutional and administrative problems; is the centrality where the developer can't solve it with the medium and lower levels of officials in the IDA. Not a lot of things can be solved except through addressing the Minister personally by developers to take action to resolve them; in particular with regard to the relationship between the IDA and cities councils where there is no authority for the IDA on cities councils and thus it cannot carry out its promises nor what is agreed upon in the contract. This is due to the councils putting obstacles in front of it. Hence developers resort to the Minister of Industry to deal with the Minister of New Communities to solve the problem. But developers can't work and repeat these means continuously and therefore it is a problem. (De-64)

To conclude, although the contract between the developer and the IDA obligates it to assist the developer in difficulties of licensing, but the reality on the ground proves lack of validity of the IDA with regard to the IPs in new cities (knowing that all IPs locate in new cities so far). It also proves that full validity over there is for the NUCA and in particular with regard to public utilities licensing. It is also found that the IDA authorized the NUCA to conduct the building licensing procedures due to its lack of appropriate work teams. The industrial

⁴⁰ The comment on the centrality of decision-making and the interference of the upper levels of the administration to resolve minor problems at the lower levels, has been repeated in more than one interview with different interviewees, as well as numerous newspapers articles which we have studied in the first chapters of the research.

developers' experience with new cities councils regarding licensing emphasizes on the foregoing and also confirms on the many obstacles put by the councils in front of the developers. Hiding information and giving contradictory information are examples of such obstacles that cause delaying of projects despite the availability of correct information. Specialists explained this work atmosphere as a result of withdrawal of the competence of IZs within the new cities from the NUCA and thus new cities councils to the IDA. Consequently this led to a deduction of part of the powers of the cities councils on part of their lands as well as loosing financial benefits resulting from dealing with large projects, which used to be directed to NUCA work groups in general and cities councils in particular. This asserts a description for experts⁴¹ that they said about the governmental bodies' way of thinking in Egypt defining their strength in the land that they can possess and control. This added to a great extent to the difficulty the developers face in dealing with cities councils. That difficulty is already maximized by the overall shape of the institutional framework of the State which is already characterised by centrality in decision-making, lack of coordination, and conflict between institutions. The centrality characterising the institutional framework prevented giving authority for low and medium decision-making levels causing many simple problems, if we can say, that require the intervention of the level of ministers for their resolution. It also prevented achieving the goal of the policy of the One-Stop Window to the extent that specialists regarded it as shape without function aiming at governmental propaganda and no more.

6.4. Discussions & Conclusion

This chapter aims at analyzing three case studies (IPs) of the IDP in order to identify and form the planning process framework (the IDP actual framework)⁴² they adopt including the detailed steps of the process, key players, role of each of them and the nature of the relationships governing this framework. To reach this goal, detailed analysis of the planning process phases of the IPs has been conducted where each phase has ended by a conclusion explaining its framework; its nature, the key actors and their respective roles and relations among them. To complete reaching the goal, this section conducts an analytical comparison between the actual framework of each stage and its like in the official framework of the

⁴¹ Ac-G-03, Consultant of the IDA Head and other governmental authorities and Ac-55, Consultant of many governmental authorities.

⁴² The applied framework of the planning process of the IDP is abbreviated as "the IDP actual framework".

State⁴³ (the official framework) concluded in the previous chapter. This will allow abstracting the agreements and differences between the two frameworks, the reasons behind them and the implications on the planning process allowing to decide on whether the process is sustainable. This is discussed and displayed through a concluded description of each phase. It is worth mentioning that the concluded description of each phase will be put in the form of a flowchart diagram similar to what was done in the previous chapter to facilitate on the reader to follow-up the comparison and understand the results there in.

6.4.1. Synthesizing the IDP actual framework and its relationships to the official Framework

6.4.1.1. The Founding Phase of the IDP

Based on the previously studied and analyzed sections regarding the founding phase of the IDP in parallel with examining its flowchart, see Figure (6-2), with its like in the previous chapter, see Figure (5-1), as well as the concluded description there in, the following could be abstracted:

In total, it can be said that the founding phase is characterized by the presence of a political will – that is questionable in its purposes – and reformation of the legal institutional framework of the State to accommodate the implementation of the program. It is also characterized by applying networking and good relationships between the partners of the program, the administration and the industrial developer, with absence of the State concerned bodies in a clear contradiction to the official framework which negatively affected the guarantee of the components of the success and implementation of the IDP.

Generally, there is an agreement between the official framework and the IDP actual framework with respect to the role of the MTI and the IDA; where the MTI is responsible in both frameworks for the preparation of policies and strategies. The MTI has developed an industrial strategy based on partnership between public and private sectors and depending on the relations of the former Industry Minister with businessmen, by virtue of being one of them. He communicated and made a dialogue with the businessmen generating the idea of the IDP. The MTI accordingly moved to reform the legal institutional setup to accommodate the idea. They prepared for the protocol of initiating the IDA, which was adopted at the Cabinet giving the IDA development authorities that allow it to implement the IDP program. The IDA also endured the responsibility for policies implementation in both frameworks, and this is clear in the case of the IDP that the IDA sought for its implementation. To operationalize the

⁴³ The official framework of the State for the planning process of industrial zones is abbreviated as “the official framework”.

idea, the head of the initiated IDA conducted a number of exploratory field visits to global models for the transfer of experience as well as marketing for the Egyptian economy. He also communicated, based on his investment management background, with businessmen and financial institutions. Accordingly, the IDA involved a number of expertise industrial developers and financial institutions in a series of workshops that contributed to the formulation of an operational framework for the IDP.

For the relationships network between the MTI and the IDA from one side and other related parties on the other side, we find that there is a clear difference between the official framework and the IDP actual framework. It is found that the framework adopted by the administration (the MTI and the IDA) at this stage was characterized as a whole by networking with developers and financial bodies and they were in the centre of attention of the administration. On the contrary, and in violation of the official framework, the coordination with the State agencies in general was absent and the administration did not involve them in studying the program and its implementation components and requirements. On top of these bodies are the concerned authorities of utilities as the main constituent of the program. The coordination with them was lacking except on the Cabinet level where it was general, and did not address sectors plans details nor reconcile between them. This led to a lack of commitment from the IDA to extend utilities to the developers as it is legally obliged and as planned. On another hand, as the coordination with the EEAA is missing in the official framework, it is not surprising that the EEAA was not involved in the preparation and development of the program policies. This is what had an impact on marginalizing the integration of environmental dimensions in the thought of the program. Therefore; it can be said that the administration gave attention to ensuring compatibility with the developers' thought in order to attract them at the expense of ensuring the regulations and needs of the program practically. Thus, if we considered that the highest administrative officials⁴⁴ of the IDP are on trial in corruption cases at the time of writing these lines, the doubt in their purposes/intentions and accordingly the institution purposes from establishing a functionally successful program increases for the benefit of either personal or political interests of the government.

⁴⁴ The Ex-Minister of Trade and Industry, Rashid M. Rashid and the Ex- president of the IDA, Amr Assal.

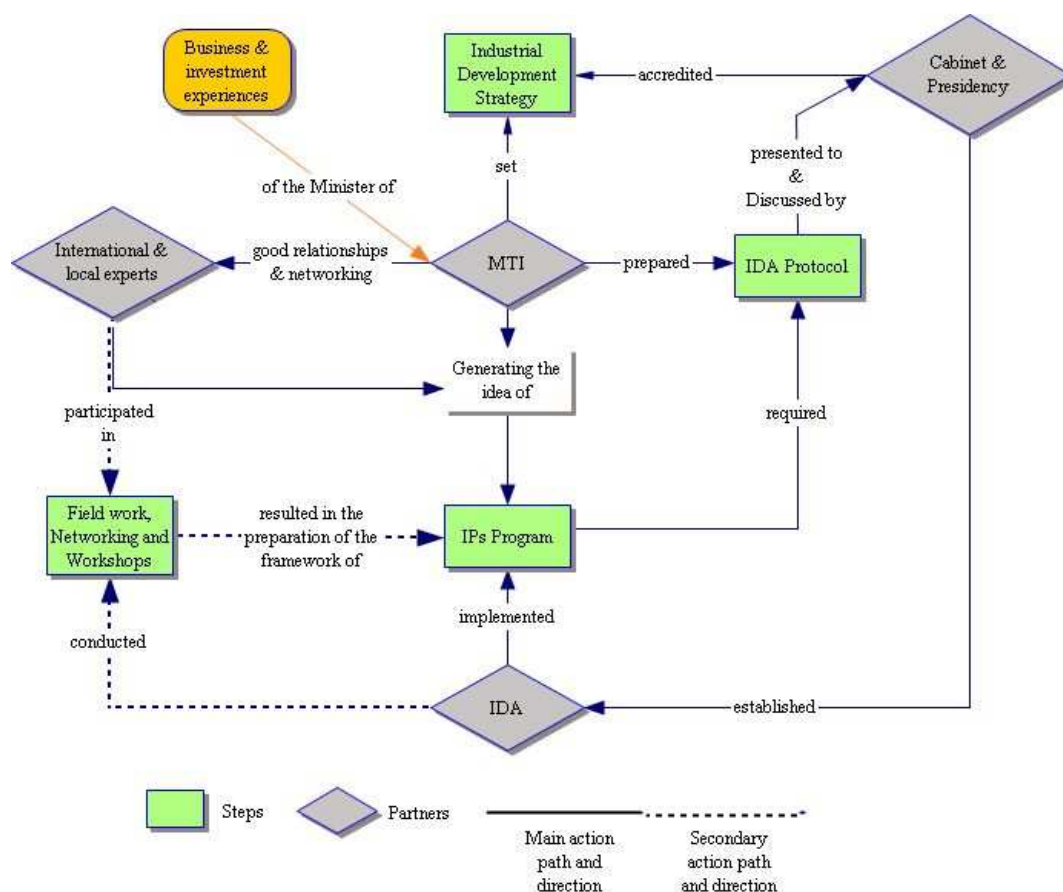


Figure 6-2: Simplified flowchart of the IPs setting up policy phase

6.4.1.2. The Pre-Planning Stage

Based on the previously studied and analyzed section regarding the pre-planning phase of the IDP in parallel with examining its flowchart, see Figure (6-3) with its like in the previous chapter, see Figure (5-2) as well as the concluded description there in, the following could be abstracted:

Emphasising on the opinions of some experts⁴⁵ who believe that the agencies in Egypt act regarding land by considering that their strength is in their possession of land that they can control; the IDA monopolized doing many steps in this stage starting from marketing of the program and determining the land prices or managing extending the utilities unlike to the way drawn by the official framework.

Starting from marketing and land pricing, there is a clear difference between the official framework and the IDP actual framework. This is for the monopoly that the IDA has adopted in such steps - away from the investment bodies of the State – leading to relatively decreasing

⁴⁵ Ac-G-03, Consultant of the IDA Head and other governmental authorities, Ac-55, Consultant of many governmental authorities.

the maximum limit of prices that the developer cannot exceed in selling the industrial land plots inside their IPs. This led to reluctance of the international developers to apply to the IDP because of the unbalance they felt in such prices compared to the services they provide. It is also expected from the Arab and local developers that they will decrease the level of services they will provide compared to the global level to achieve a balance between cost and revenue what may give a negative indication for the level of the settled manufacturers in the IPs and accordingly the bad effect on achieving the overall objectives from the IDP. Regarding the land allotment, it is found that the official framework - in a way lacking the understanding of the actual nature of the powers/authorities on the ground - has wrongly put the responsibility of land allotment for the IDA. This is because the IDA lacks any authority over the land that led to confining its role to be only as an intermediary between developers and city council. City council which is the owner of the land has full legal and actual authority over the land including the authority to reform the land for its delivery. That is why the IDA seeks the city council to implement such step.

Concerning utilities, it is previously indicated that the founding phase of the program lacked the reconciliation between sectoral plans to ensure the availability of the program requirements, especially the utilities. Instead of operationalizing the IDA role to compensate this shortcoming as decided by the official framework as well as the provisions of the contract between the IDA and developers; the role of the IDA came inappropriate stressing the isolation of the IDA from other sectors. Furthermore, the IDA loses any actual authority to manage this issue as the official framework entrusted it with the management of utilities and obliged it to coordinate with concerned bodies without granting it any authorities over those bodies which have full authority in this regard. The effort that the IDA should legally do, to manage and follow up this process and coordinate with the utilities authorities, to push them to discharge in their tasks was actually the developers' role. Therefore, the weak legal authority of the IDA with the deficiencies in the coordination regarding utilities led to the inability to provide the IPs with its needs. This deficit resulted in large delay, in the first phase of the IDP, in implementation according to the agreed timetables with the IDA based on the contract which obliges the IDA to compensate the developers for any delay they did not cause. Accordingly and based on the emerging knowledge on the government's inability to commit to extend the utilities, some companies joined the second and third phases of the IDP aiming at real-estate investment not at achieving earnest/reasonable industrial development.

For the regulatory setup of the program, the TOR, the IDA depended on the outcomes of the workshops conducted to prepare the IDP operational framework, to develop along the TOR. In qualifying bidders and contracting process, the IDA, although the official framework has

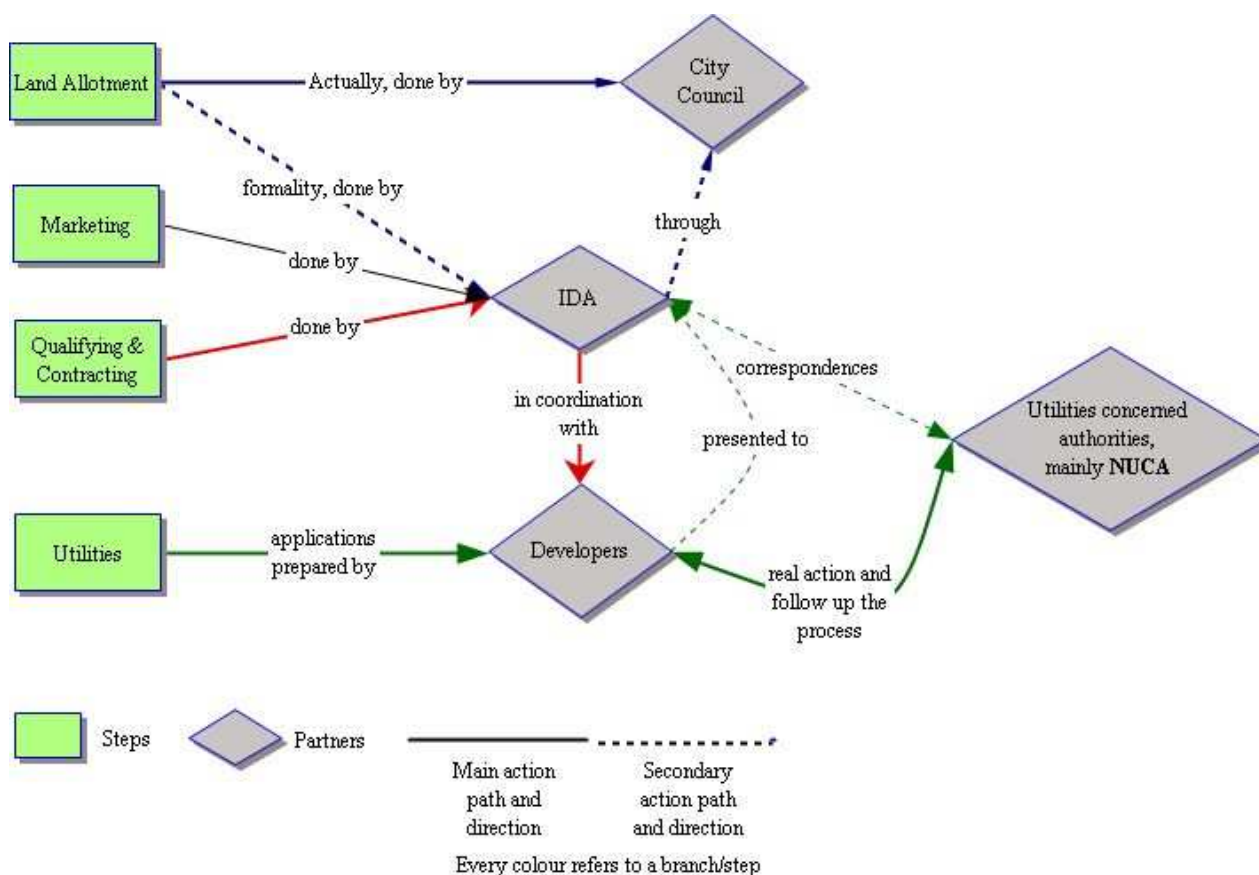


Figure 6-3: Simplified flowchart of the IPs pre-planning phase

not obliged it to involve any partners, redressed a part of this defect and involved the developers in this step through workshops. The IDA targeted from participating the developers to achieve compatibility with them in desires and ideas to ensure realistic and smooth implementation of the contract which has faced many difficulties and problems in the application. Therefore, it is plausible to say that the partnership reached in this step by the IDA, with its economic investment background, and the developers, who already have the same orientation, lacked the consideration of many other dimensions. More importantly, it highlights the doubts regarding the purpose behind involving the developers without the others, as previously noted. Some of the most important parties that were supposed to be involved especially in the qualifying and contracting steps are the utilities concerned bodies

and the EEAA. Those, for sure, have variant considerations and views that could enrich the foundations of the qualifying step and guide the developers to take into their account the environmental preservation and guarantee lower energy consumption activities. Furthermore, the utilities authorities and the EEAA should have a different contribution in the formulation of the contract to ensure avoiding mistakes in the implementation of the IDP, especially in extending the utilities that actually faced many problems.

6.4.1.3. *The Planning phase*

Based on the previously studied and analyzed section regarding the planning phase of the IDP in parallel with examining its flowchart, see Figure (6-4), with its like in the previous chapter, see Figure (5-3), as well as the concluded description there in, the following could be abstracted:

With respect to choosing the IPs locations, it can be said that; the governmental political corruption that aimed at improving the image of the former president and the government, was behind the rush that caused the failure to follow an appropriate planning methodology. The IDA, as being legally competent, monopolized adopting the idea of putting the IPs in new cities. Then, and because of the nature of land ownership, it has coordinated with the NUCA regarding the selection of sites within each city. Therefore, the IDA by this action has clearly transcended the official framework which obliged it to coordinate with the NCSLP to ensure the best selection of the locations as well the coordination with the other concerned agencies, but this is not what happened. The selection depended only on adopting the IDA's point of view which tend to the economic and investment thought driven by propaganda aiming at improving the political image of the government. This led to the easy and fast choice of implementing projects without thinking of applying real industrial development; where the IDA chose the areas already depleted by the State investment over the past decades and now these areas enjoy the availability of the components of industry. On the contrary, it ignored the remote areas rich in natural resources as developing such areas takes longer time. This caused not only delaying the development in these areas as the State cannot develop them easily as a matter of financial reasons and the misuse of natural resources for real industrial development but also wasting the public fund for the sake of the developers⁴⁶.

⁴⁶ Ac-G-03, Consultant of the IDA Head, confirmed on that conclusion saying: "The IDA came and said I will offer the new cities lands to the industrial developer. The industrial developer in the world is supposed to be for remote locations having potential natural resources and the State is unable to go to them. The State brings developers and gives them facilities to fully perform the process on its behalf. Today, the IDA brought them to work in the new cities that already have investment and good industrial movement.... Then if you want to develop remote areas, how will you? The industrial developer will never go there this way. You gave the best

In addition to neglecting the NCSLP, the IDA ignored the planning experts and planning teams who updated the planning of the cities containing the IPs in addition to the rest of the government concerned parties. The EEAA comes on top of these bodies, which also has been ignored by the official framework. This gives an indication on that the selection of the IPs sites did not consider the environmental criteria and principles.

As for the selection of the industrial activities of the IPs, the official framework gave this responsibility to the IDA and obligated it to coordinate with all relevant parties in general and the EEAA in particular but this did not happen. In light of: a) the absence of a regional or local vision for the IPs industrial activities that guarantees compatible selection with the urban surrounding and taking into account the environmental dimensions, b) the chaotic distribution of industries in the vicinities of the IPs. The IDA gave the developers this responsibility to do it alone based on their marketing and economic studies. Then the developer's selection is approved by the IDA without any coordination with other authorities including the EEAA. Thus, in light of these factors, this would lead to increase the expectations of having an environmental imbalance caused by a distribution based purely on marketing and economic logic away from the environmental considerations.

As for urban planning of the IPs, there is a match between the official framework and the actual IDP framework, where urban planning is prepared by the developer through his/her selection from the specialized consultancy offices. Discussions and dialogue construct conducted by the planning consultant with the developer was followed to reach the best engineering planning meeting the developers' requirements and wishes. The IDA agreed with the official framework in waiving putting identifying restrictions for the nature of the consultancy offices supposed to ensure efficient and proper planning of the IPs. Furthermore, it was noted that the IDA advised the developers on how to overcome some of the urban planning law articles targeting speeding up the process to achieve political gains.

With regard to the integration of environmental dimension in planning, it can be said that this is governed by a common understanding of specialists in industrial zones in different fields, whether investors or governmental, that protecting the environment in the Egyptian case is a marginal issue and it is difficult to be addressed in light of the problems that the country faces in general and those problems the investors suffer from in particular. The foremost of these problems is lacking the good investment atmosphere. This understanding led to that the role

pieces of land you have to the industrial developer because you do not have budget for supplying the infrastructure.... So they will extend the utilities and will sell the lands but there will be no industrial development. It became a real estate investment”.

of the EEAA, the State's apparatus entrusted with achieving this integration, was limited in reviewing and adopting the IP master plan and detailed design of the utilities in accordance with regulations. It is a role that is almost meaningless in light of the previous conclusions; IPs sites selection was on the basis of economic/investment logic and identifying the industrial activities were in accordance to the marketing foundations in a process that lacked considering the environmental dimensions. What increases this situation is that there is no special environmental code for planning the IPs and the reliance is on the general environmental standards stated in the environmental law; the main source of such standards.

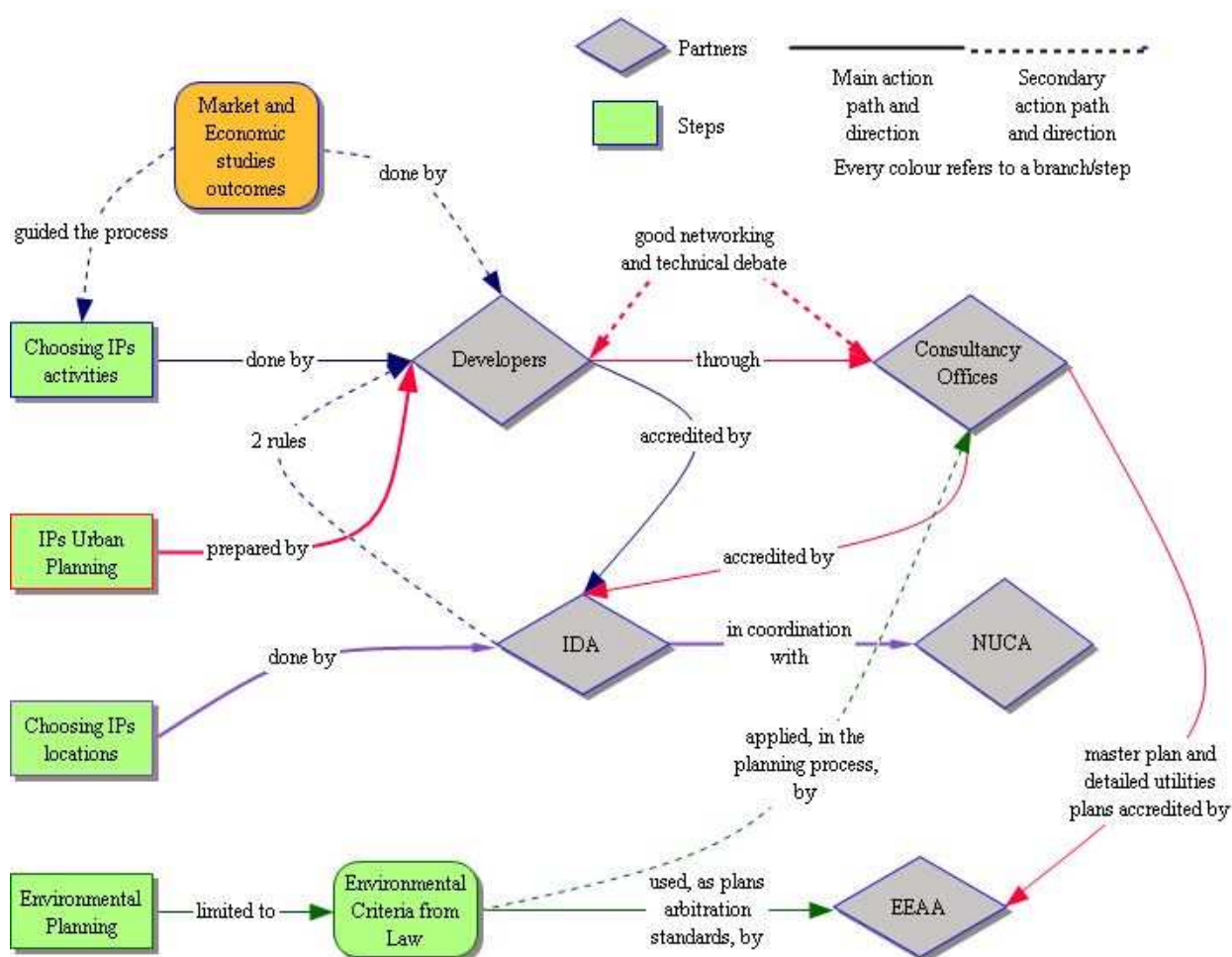


Figure 6-4: Simplified flowchart of the IPs planning phase

These standards were formulated in an atmosphere prior to the IDP what carries an implicit expectation of lacking relevance to and not taking into account the specificity of the IPs. This is because of their modernity on Egypt and their management nature that is controlled by the private sector thought. It is also because of the complexity/diversity of industrial activities types and their requirements and methods to reconcile with the environment within these

zones. What also increases the difficulty and the privacy of the case of the IPs which requires special regulations for each zone is that these IPs exist inside or on the outskirts of industrial zones characterized by a chaotic distribution of industrial activities. This means increase in the negative impact on each other, as well as the problematic carrying capacity of an environment of a new industrial zone that its planning is characterized - after the approval of the EEAA – by change in accordance to the market. This makes it difficult to control such planning without real monitoring in light of absence of the EEAA regarding this role.

6.4.1.4. Approvals & licensing phase

Based on the previously studied and analyzed section regarding the approvals and licensing phase of the IDP in parallel with examining its flowchart, see Figure (6-5), with its like in the previous chapter, see Figure (5-4), as well as the concluded description there in, the following could be abstracted:

Regarding the approval of urban planning and the adoption of the IPs master plans, the responsibility in the official framework is for the IDA alone without the partnerships of others what the IDA clearly implemented in the IDP actual framework. In light of the absence of a special code for the planning of the IPs as noted earlier, the sole consultant of the IDA reviewed and approved the IPs master plans in accordance with a number of regulations partially taken from the Unified Building law. By relying on one reviewer using regulations that don't cover various planning and environmental areas so, the probability of causing errors is high. In addition, the IDA exceeded the law regulations for the sake of the developers. Thus, it can be read again on the IDA side as an attempt to reduce the obstacles in front of the investors to encourage them to speed up the implementation regardless of ensuring quality to achieve political gains.

As for the approval of the EIA studies; there is no difference in the overall shape of the nature of the proceedings between the official framework and the IDP actual framework. In both frameworks, it is found that the developer is the one who prepares the study via the consultancy office he/she chooses. Then it is presented to the city council (the administrative concerned body) to be checked whether it is fulfilled and then to be sent to the EEAA for taking the appropriate decision thereon. The EEAA has the right to address a request to the city council to complete, update or correct information regarding the study. The EEAA then issues the approval decision to be sent to the city council, which in turn sends it to the developer to be able to start the implementation of the project. This is what formally happens but these procedures in the IDP actual framework have been affected by many changes and

problems that make the study as a whole just a procedure without true feasibility or function. The IDA initially works on marginalizing the EEAA role as it often permits the investors to begin implementation of the project and when they request the IDA for the operating permit, it asks them to consent the EEAA on the project through the EIA study. This puts the EEAA in front of existing condition that eliminates the study feasibility through the difficulty of changing the site in case it is inappropriate to avoid its impacts, either internally or on its surroundings. This happened as a result of the disappearance of the law fines. However, it continued to happen despite adding fines to the last amended law on 2009 because of the lack of seriousness by the government in activation of the environmental violations especially on big investors (En-G-16).

In addition, the competent administrative authorities are not serious in reviewing the studies and ascertaining their compliance and accuracy before being sent to the EEAA as well as dealing without transparency when providing information on the projects to push the EEAA to approve the projects. As for the study and its content, while the law requires projects of level C; the most polluting category, to submit a carrying capacity study to ensure that the project does not result in pollutants that infringe the environment capacity, it is found that the EEAA doesn't obligate the developers to do so, given that their IPs are in non-polluted sites, what is a misconception. In addition, the study is mainly based on a master plan for a distribution of the industrial activities types without real allocation of factories what expands the range for the developer to choose activities that could be incompatible with each other and with their surroundings. This happens as a response to the industrial demand according to the marketing and actual sales. Accordingly, the matter became different from the one approved by the EEAA. Furthermore, in cases of amendment, what happens frequently, it is sufficient to gain the IDA approval without the need to renew the approval from the EEAA. Therefore, the strength of the legal institutional position of the IDA is much larger compared to the EEAA position which was marginalized with its only tool by which it can intervene to environmentally adjust the planning process path. So; the EIA became a useless procedure without real feasibility or guarantee to make the planning of the IPs compatible with the environmental standards. This attitude is considered not only a product of the common culture dealing with the environmental issue as a non worthwhile file, but also the government aims from it to reduce the obstacles in front of the developers to speed up the pace of the projects implementation.

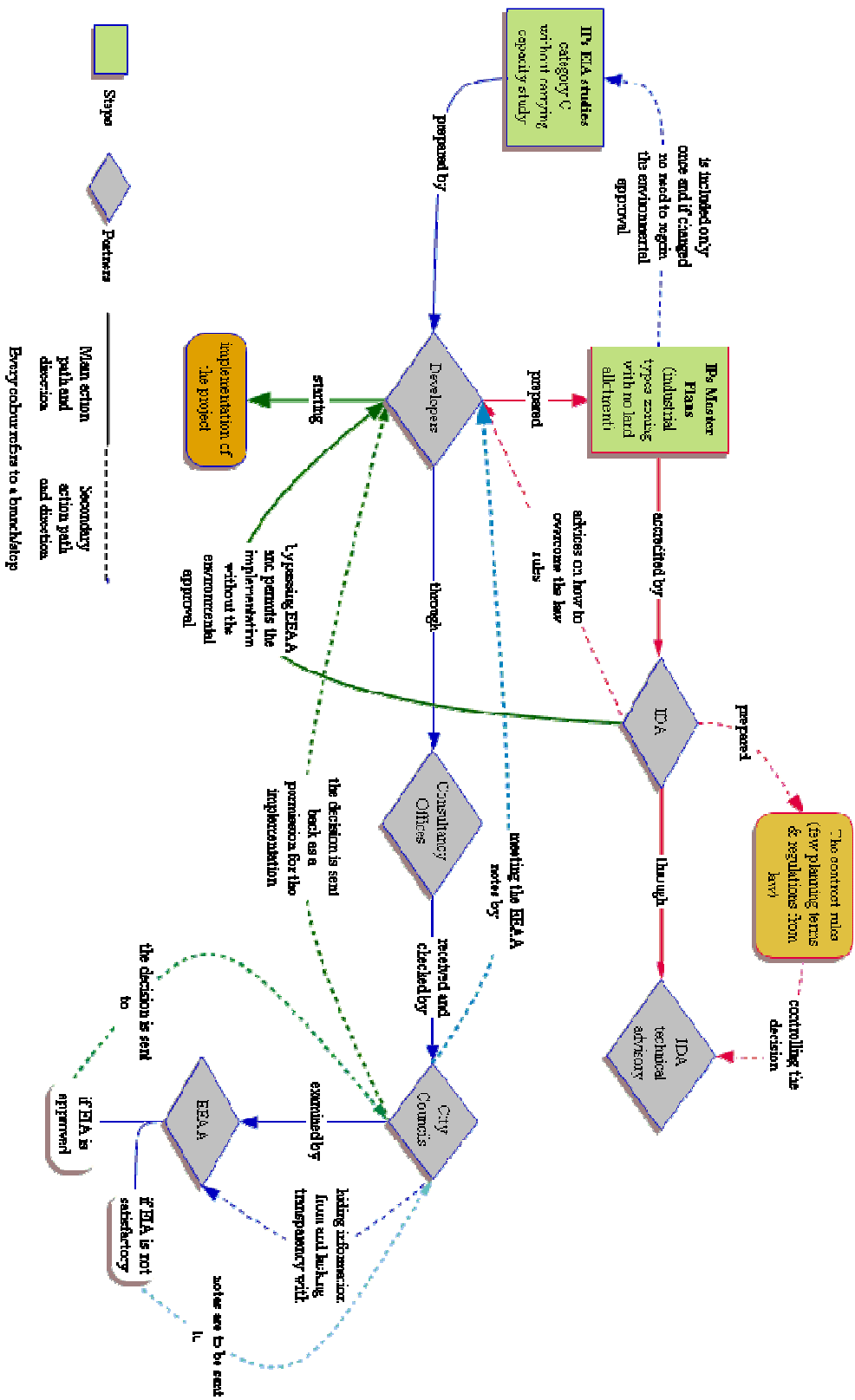


Figure 6-5: Simplified flowchart of the IP's approvals phase

With respect to the licensing of industrial projects, there are large differences between the official framework and the IDP actual framework. The official framework puts the full responsibility in this concern on the IDA including issuing the license rules and having the authority to delegate the competent bodies acting on behalf of it in licensing. In practice, given the multiplicity of licensing authorities, as shown in Figure (6-6), the IDA established the One-Stop Window, where developers/investors can submit their projects documents and apply for licenses. It includes representatives from all competent authorities of necessary licensing. However, the practical application of this window proved it is a figurehead that the Government targets achieving propaganda from it no more. That is because it practically does not give more than just a preliminary agreement that the developer afterwards needs to go into many bureaucratic procedures to get an approval from each of the concerned bodies especially with regard to utilities.

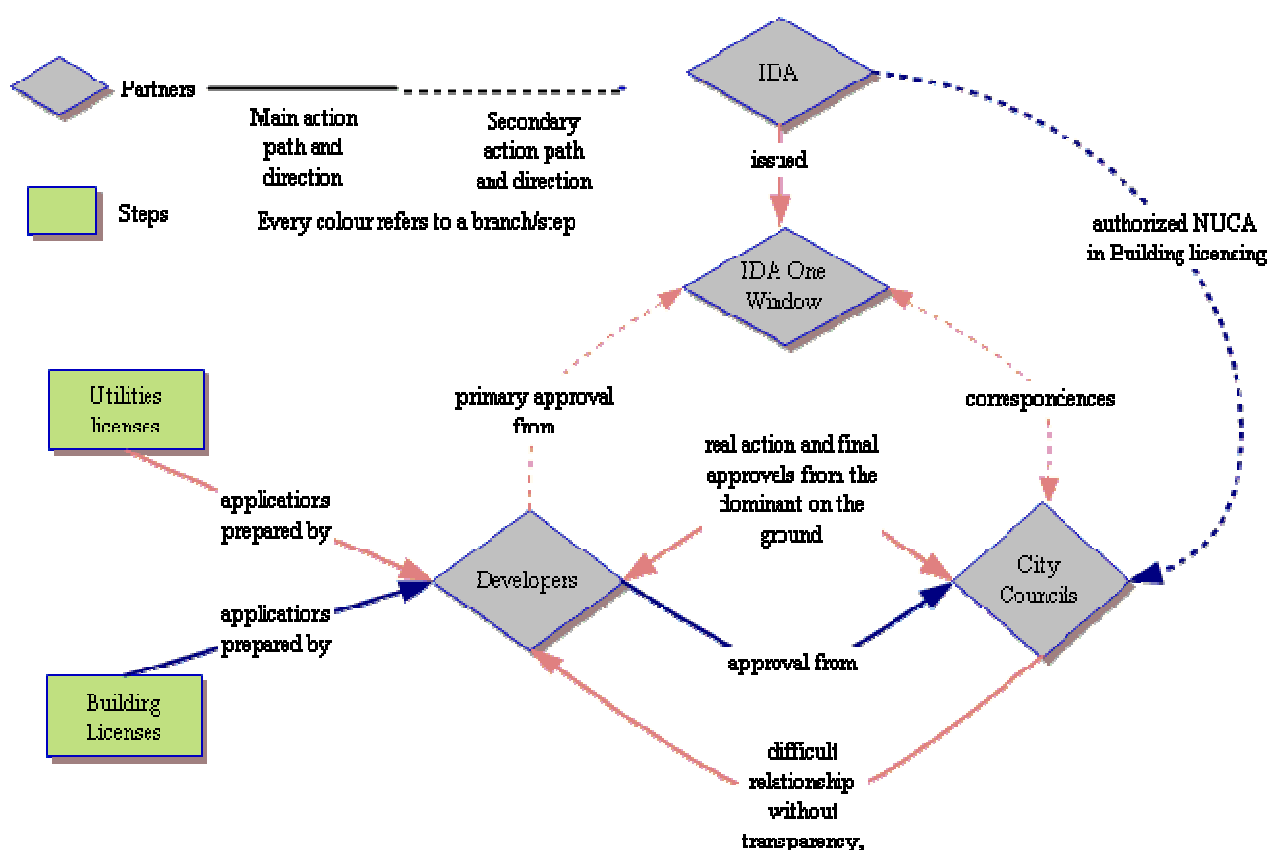


Figure 6-6: Simplified flowchart of the IP's licensing phase

This effort made by the developer happened although the IDA is legally obliged by the contract to facilitate on the developer getting the licenses what doesn't happen on the ground. Perhaps the most important reason behind the useless effect of the One-stop window is the centrality issue - which the institutional setup of the state suffers from - that made the representatives of the concerned bodies within this window lack the power to take decisions. It also affected the institutional setup making many minor problems requiring the intervention of the ministerial level to resolve them. In addition, the coordination is missing between the State bodies and each of them deals with isolationism and controls over its mandate. It has proven that the dominance on the ground on both permits for buildings or utilities is for the cities councils by virtue of being the owners of the land and responsible for utilities budgets. The cities councils also have the appropriate teams that can do such tasks of licensing which are, in addition to the previous factors, not available to the IDA. Perhaps the most important problems that the developers face in this regard are the slow procedures and that the cities councils deal in an inoperative and hostile way without transparency and with intention to conceal information. The reason behind this way of dealing is the transfer of the jurisdiction over the industrial zones from the cities councils to the IDA by the resolution No. 350/2005. This means that the cities councils lost part of their powers over the lands they own and accordingly they lost the financial benefits that they used to gain from such large projects as the IPs.

6.4.1.5. Regulation and legislation phase

Based on the previously studied and analyzed section regarding the regulation and legislation phase of the IDP in parallel with examining its flowchart, see Figure (6-7) with its like in the previous chapter, Figure (5-4) as well as the concluded description there in, the following could be abstracted:

Overall, it can be said that the prevalent thought of the industrial bodies; the MTI and the IDA, in most cases regarding dealing with legislation and regulation, adopts individual visions and lacks the coordination with other State sectors and agencies. This does not necessarily mean that the move was always wrong, where it depends on individuals not on a system so it seldom does the right thing while makes mistakes most of the times.

Beginning with reviewing laws and proposing amendments; it is found that the official framework places this responsibility on both the MTI and the IDA. Both have the right to review laws and legislations related to industry and to suggest modifications in either existing laws or proposals to new ones. In the IDP actual framework and due to that the emergence of

its idea was before the establishment of the IDA, the MTI worked on the amendment of the legal and institutional framework governing the development of the IZs. The MTI did so through issuing the establishing decree of the IDA giving it the development authorities that qualify the IDA to set up and implement the IDA. The steps followed do not differ between the official and the IDP actual framework in terms of the preparation of the proposal by the MTI, which the Minister submitted to the Cabinet for approval. In light of what we concluded before regarding the problems of transfer of jurisdiction over the IZs in the new cities from the NUCA to the IDA⁴⁷ as well as problems of coordination regarding utilities⁴⁸, it can be said that both frameworks made a mistake by not placing the appropriate mechanisms to ensure a thorough study of all dimensions, involving all relevant parties, prior to drafting the final proposal to be presented to the Cabinet for approval. However, what happened is the contrary to this, as the reliance was on individual efforts by the former Minister of Industry, or even the ministry without coordination with or study from all relevant parties to the IDP.

With respect to setting up regulations and governing rules of the development of the IPs we find that, the overall shape of both frameworks; the official framework and the IDP actual one, put this responsibility on the IDA but they differ in some bodies that both of them have intervened in the process. Beginning from the perspective of the official framework it is found that; matters related to investment and land pricing are tasks of the IDA in coordination with the State competent bodies like the FSEEDIZ and the GAFI as well as the land pricing committee, and then decisions are to be adopted by the Cabinet. Regarding setting up the governing rules of extending utilities, the official framework obligates the IDA to do so in coordination with the utilities competent bodies. Also with regard to selection of industrial activities, the IDA is obliged to coordinate with the competent bodies and with the EEAA on the top of them. As from the perspective of the IDP actual framework, it is found that the IDA is fully accounted for legislation and regulation for the IDP way from the government concerned agencies. However, the IDA instead of listening to the views of those bodies and considering them in the legislation for the program to avoid the above-mentioned disadvantages, it is found that the IDA involved the industrial developer partially in some actions aiming at achieving self interests. This specifically was such as; the involvement of the developer either to gain experience in dealing with the preparation of

⁴⁷ The treat with hostile by the city councils is through putting obstacles against the developers towards the implementation of the program.

⁴⁸ What resulted in the incompatibility in plans and programs between the NUCA and the utilities bodies from a side and the IDA plans for the IDP from the other side.

the IDP or to ensure compatibility with the thought of the developers as in the processing of the contract with them. This as well as the incident impact of the involvement of the developer with economic investment background, which converges with that of the IDA as previously mentioned. This engraved on the IDP in the tendency to give priority to the interest of the developer even by passing the laws by the IDA for the benefit of the developer. It was also for the convergence of interests between them which returns back to the IDA by accelerating the implementation of the project even if it was on the expense of efficiency to meet the political interests of the government. Thus to summarize this, it is found that the IDA was not committed in the legislation and regulation of the IDP to what the official framework decided for it, which if followed by the IDA was supposed to avoid the IDP a number of problems that we stated earlier. The reason is due to the centrality in the institutional framework, poor coordination among its bodies as well as the desire of the Government to speed up the implementation of projects to exploit that in propaganda for political gains.

With regard to setting up the regulations and standards of urban planning, the official framework singled out the General Organization for Physical Planning (GOPP) for this responsibility so that its production is to be reviewed by the IDA (as a competent industrial zones management authority) and that accreditation is to be from the SCPUD. The IDP actual framework disagreed with that, as we previously mentioned, where no regulations and standards were set for the IPs planning and the IDA replaced them by taking a set of partial general regulations for the IPs from the Unified Building Law, prepared by the GOPP⁴⁹. However, the IDA as well as taking this general group which does not include all areas of planning, it modified them (this group of regulations) for the benefit of the industrial developer. It was also mentioned that the IDA advised the developers how to overcome some of the regulations; the cause behind this was already mentioned regarding the desire of the IDA in speeding up implementation of the IDP program.

Regarding zoning regulations within the IPs; setting them in the official framework is the specialisation of the NUCA, the owner of the new cities land (where the IPs located). This is what the industrial developer was committed to through his/her consultants in putting regulations that comply with the general regulations set by the city council where the IP located.

⁴⁹ We have discussed in a previous paragraph the problems of adoption of the general regulations in case of the IDP.

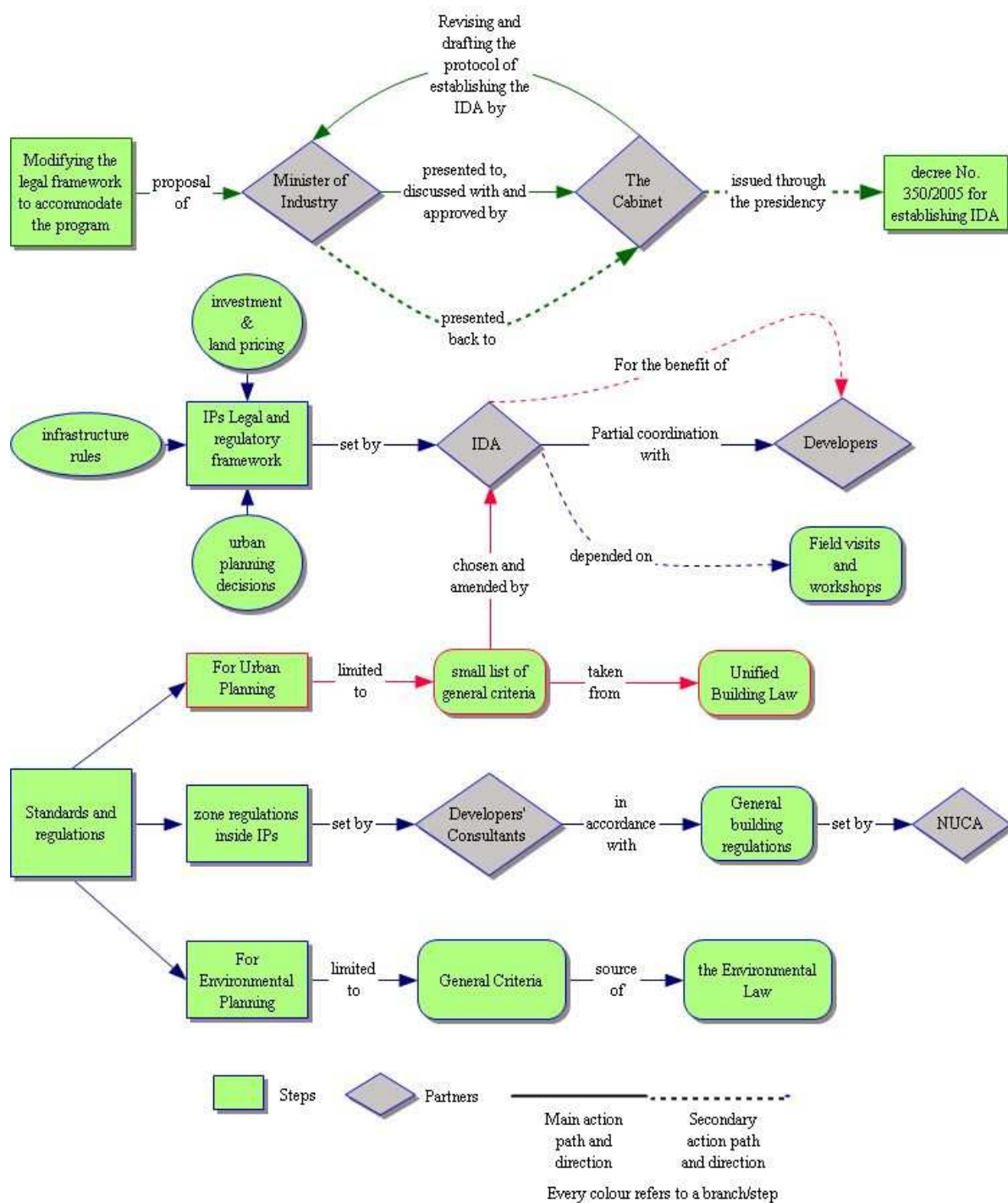


Figure 6-7: Simplified flowchart of the IPs regulation and legislation phase

With regard to environmental regulations, there is no difference than the case of the urban planning regulations. The official framework put them under the jurisdiction of the EEAA. However, the IDA has, in the IDP actual framework, thrown the responsibility for any possible environmental damage on the developer alone and refers him/her to the general standards and regulations in the environmental law. The IDA also does not refer to the EEAA for preparing an environmental code for the program that considers the specificity of the case of the IPs as well as of the environmental status for the sites containing the IPs. This leads to an expected decline of the environmental situation for these sites and the IPs either internally or externally.

6.4.1.6. Coordination, Networking and Participation

It is important here to note that the elements of comparison between the State's official framework and the IDP actual one, competent with coordination and communication between the various parties, were addressed individually during the discussion of the previous stages. Depending on this, the foregoing is to be summarized with reconstruction in a collective form through which we can give an overview and justification for the differences and similarities between the two frameworks. Thus and by examination of the previous findings concerning coordination and communication with the various parties of the previous phases of the IDP, these findings could be put into a flowchart as shown in Figure (6-8). By comparing them (the conclusions and the figure) with their likes in the official framework of the State⁵⁰ the following could be concluded:

At the outset, it could be said that the compatibility between the two frameworks; the official framework and the IDP actual one, rarely takes place while disagreement between them is substantial and has multiple images. While the official framework committed the IDA to coordinate with some parties, the IDA did not commit, which is dominant to a great extent. The contrary is also true; the IDA coordinated and communicated with parties that were not mentioned in the official framework, which are the few cases of coordination.

- I. Starting from the steps where the IDA did not comply with the law regarding coordination with different authorities; these steps can be determined in the following points:
 - The official framework committed the IDA to coordinate with different State authorities related to the implementation of policies of industrial land development, which the IDA did not do, where no coordination was mentioned regarding studying

⁵⁰ See Chapter (5), Figure (5-6).

the program, the possibilities of its implementation and its various requirements specially the utilities. On the contrary, the IDA followed a participatory approach with representatives of the private sector from developers and financial institutions to develop an operational framework for the IDP program.

- With respect to matters related to investment, land pricing and marketing of the program, the official framework committed the IDA to coordinate with the competent State bodies such as the GAFI or the FSEEDIZ as well as pricing committees, so that the adoption of resolutions is from the Cabinet. This did not happen and the IDA accounted for that alone.
 - Regarding choosing locations for the IPs; the official framework committed the IDA to coordinate with the NCSLP to ensure the best selection, as well as to ensure coordination with the concerned State bodies, where this is the basic role of the NCSLP. In contrary, the IDA has not adhered to this commitment and accounted for choosing the locations and coordinated only with owner of the land, the NUCA, to determine the land within the selected sites.
 - Concerning choosing the industrial activities of the IPs, the official framework committed the IDA to coordinate with all relevant parties in general and with the EEAA in particular. However, the IDA gave the responsibility to the industrial developer to choose according to his/her economic and marketing studies.
 - Regarding putting the regulations and standards of urban planning, the official framework committed the IDA to coordinate with the GOPP for the preparation of the regulations and then reviewing them so that they are adopted by the SCPUD. The IDA replaced this by taking a set of partial general regulations of the IZs from the Unified Building law as well as modifying them for the benefit of the industrial developer.
 - With respect to environmental regulations, the official framework committed the IDA to coordinate with the EEAA to practice its jurisdictions in the preparation of these regulations. Nevertheless, the IDA merely threw the responsibility of any possible environmental damage on the developer and referred him/her back to the general regulations and standards of the environment law.
- II. As for the coordination of the IDA (and before its establishment, the MTI) with parties not mentioned in the official framework; the MTI followed a dialogue and communication with businessmen, financial institutions and developers, and involved

them in some steps starting from the formulation of the idea and the transfer of expertise, to prepare an operational framework for the IDP program. After its establishment, the IDA involved the developers in the qualifying step of the developers companies and in drafting the contract.

III. As for the agreement between the two frameworks, the official framework and the IDP actual one, which is rare as previously noted, it has happened only in one case. Specifically this was in the approval procedures for urban plans where the official framework made it the responsibility of the IDA individually without requiring a partner to it or point an authority to coordinate with, what was carried out by the IDA.

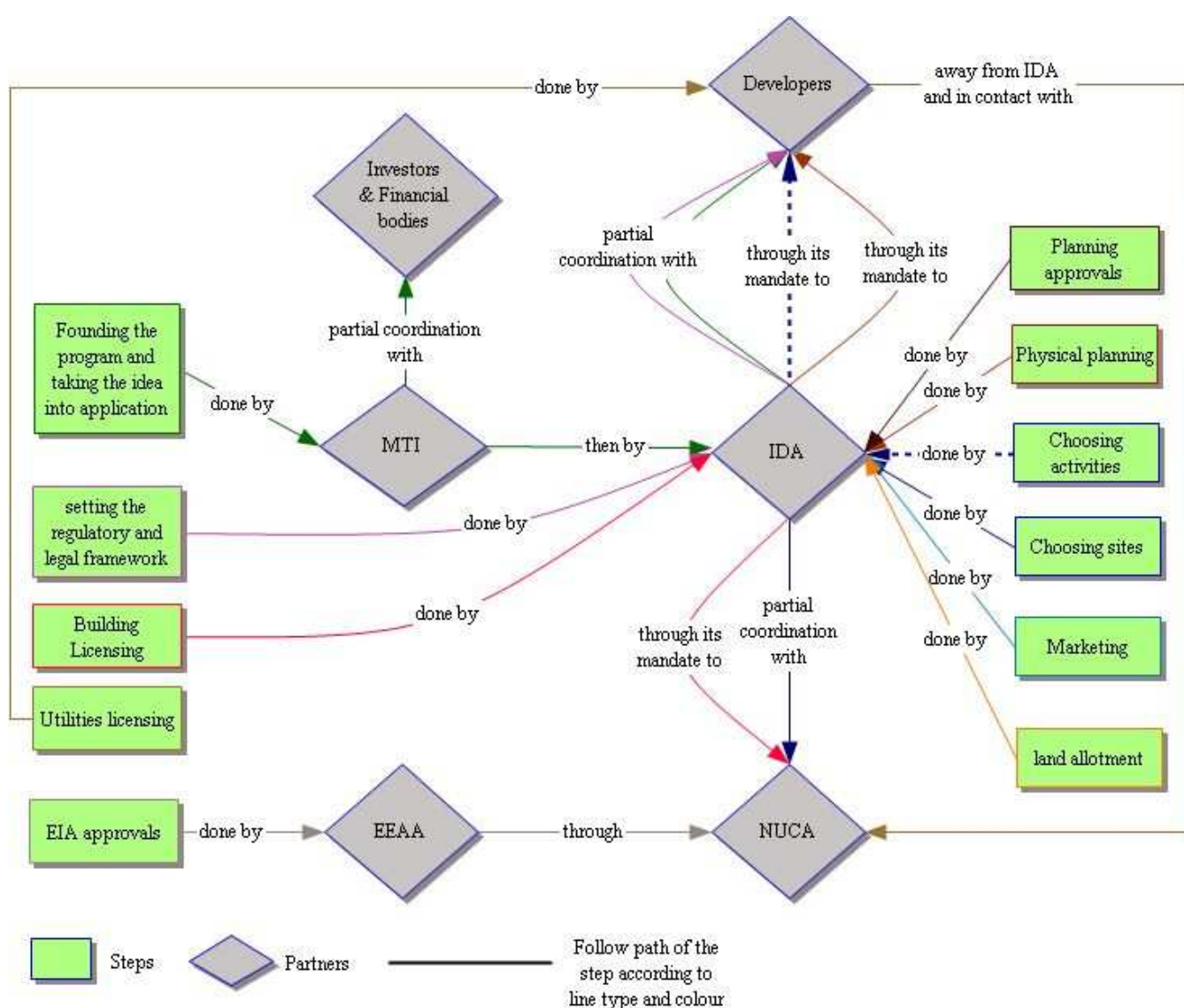


Figure 6-8: Simplified flowchart of the IPs coordination, networking and participation phase

If we analyzed the previous three sections, it could be said that the IDA is fully accounted for the preparation, regulation and legislation of the program in a clear violation of the law. This conclusion is clearly strengthened by the large number and multiple images, shown previously, of lacking commitment of the IDA to the official framework regarding the imposed parties that the IDA should have coordinated with. Even the only step that the IDA conducted in accordance with the official framework was an exclusive work of the IDA.

As for the parties the MTI and later the IDA communicated with, after its establishment, they were due to a must or we can say a need to transfer the experience and understand how to deal with a new idea that has not been applied in Egypt before. The organizers wanted to learn how to prepare for this idea and take it towards implementation. More importantly, it is not unlikely that behind this state of networking is the pursuit of personal interests, see (Mohammed et al., 2011, Ismail, 2011)⁵¹. Thus the researcher argues that this was not at all participation in its known scientific sense. As if it is the case, the commitment to the law and involvement of the parties mentioned in the law was better to be done than the introduction of a party – even if scientifically and functionally concerned – that is not legally interested in the program.

Overall and finally it can be said that the framework of the IDP suffers from centrality in decision-making which emerged clearly in the IDA often monopolizing the majority of steps with absence of coordination between the IDA and the concerned parties related to the program. In some bodies it even reached to being against the program because of the loss of the financial benefits they used to gain from their jurisdiction over the IZs before transferring it to the IDA. The ruling purpose, in most of the program steps, was limited to achieving political gains for the government⁵²; which seeks speeding up the implementation of projects to exploit this for propaganda and even if it was at the expense of efficiency. This comes through avoiding any step that could hinder or slow down the implementation such as; discussing coordination issues with the utilities authorities and reconciling their plans with the program plans and phases, or steps concerning the environment and studying the mechanisms of such steps or obliging developers by them.

⁵¹ The two heads of the MTI (Rasheed M Rasheed) and the IDA (Amr Assal) are sentenced in corruption cases for abuse of official position to profit and facilitate the access of businessmen to merits that are not their right. Rasheed has been sentenced for 15 years and, now is escaping and wanted by the Interpol. Assal has been sentenced with 10 years (Mohammed et al., 2011, Ismail, 2011)

⁵² We discussed this point before and provided proofs for it in different positions in this chapter, see for example Sections (6.3.3.1, 6.3.3.4 and 6.3.4.1).

6.4.2. Conclusion

This chapter so far has constructed the actual framework of the process through which the IPs have been planned in Egypt. By doing so, it has mainly answered the first research question. This section, through the analyses of the case studies and the formulation of the process, concludes the governing factors and forces that influenced the construction of this process, see Figure (6-9). These factors, in this way, represent preconceptions on the factors governing the planning process of the entire industrial zones in Egypt that the next chapter will address to answer the second research question.

- *Having the political will:*

The political will had a big role in the foundation of the program and that was through the generation and adoption of the idea of the IDP program then amending the legal institutional framework to accommodate the program. However, the general purpose ruling this will is doubted as it was in most of the program steps limited to achieving political gains by accelerating the implementation of projects to exploit this in propaganda even if it was at the expense of efficiency. This happened by avoiding any step that could hinder or slow down the implementation such as issues of coordination with the parties related to the program specially utilities authorities in reconciling their plans with the plans and phases of the IDP program. Furthermore, this occurred in cases affecting the environment and studying the mechanisms of the steps followed in these cases or obliging the developers by these mechanisms.

- *Networking and generating the idea:*

The investment background and good relations network available to the management had a significant impact in generating the program idea and in achieving communication between the main two parties of the program which are; the administration and the developer.

- *Institutional fragmentation and lack of participation:*

There is a common culture for the authorities in Egypt, which considers the strength of each authority is to be measured by its possession of the land that it can control. This makes the authority seeking to include land to its possession and monopolize the decision thereon. The IDA acting exclusively in deciding and implementing the majority of the steps to the contrary to what is decided in the official framework is as an example for that culture. The agreement between the official framework of the IDP and the actual framework regarding coordination and communication between the parties relevant to the program was rare, while the difference

between them was essential and had multi-images. The prevailing image was the lack of commitment of the IDA to what is decided by the official framework in a desire to monopolize the decision. Also, the agreement between them, knowing its rarity, was, as well, just an application of monopolizing the decision by the IDA. The breach of the official framework through avoiding the participation of the State agencies in the preparation of the program had a negative impact on ensuring the viability and implementation of the program and especially the utilities. This led to many problems and errors (not to reconcile plans sectorally caused the deficit in providing utilities - the implications of the low selling price of land - the selection of sites – etc). This could theoretically be avoided if the IDA committed in legislation and regulation of the program to what the official framework decided on the involvement of the relevant parties which were supposed, if they were brought, to spare the program a several number of these problems. On the contrary, the administration mostly was interested during some of the steps in involving the developers either to gain experience of dealing or to ensure compatibility with their thoughts at the expense of practically ensuring the availability of requirements and needs of the program. The investment economic background of the developer, which converges with its counterparts in the administration of the MTI and the IDA, had a significant impact on the leaning of the program towards the interest of the developer even if this was through violation of the law. This was due to the convergence of interests between them in the light of doubts about the corruption of officials as well as the interests accruing to government as a result of accelerating the implementation of projects to achieve political interests. It should be noted here that the official framework needs development to accommodate those who the IDA coordinated or communicated with such as the industrial developers, while not mentioned in the official framework. In addition, the official framework needs to accommodate those not involved in the IDP such as civil society organizations, and expected users and local community of the projects. The official framework also requires re-considering and studying for the purpose of awarding the IDA powers and appropriate mechanisms to manage the coordination with various sides and in particular the utilities authorities as the IDA in its current legal institutional position is tied up and isolated without power on these authorities.

**Simplified Flowchart of
The Actual Framework Features
and Governing Factors**

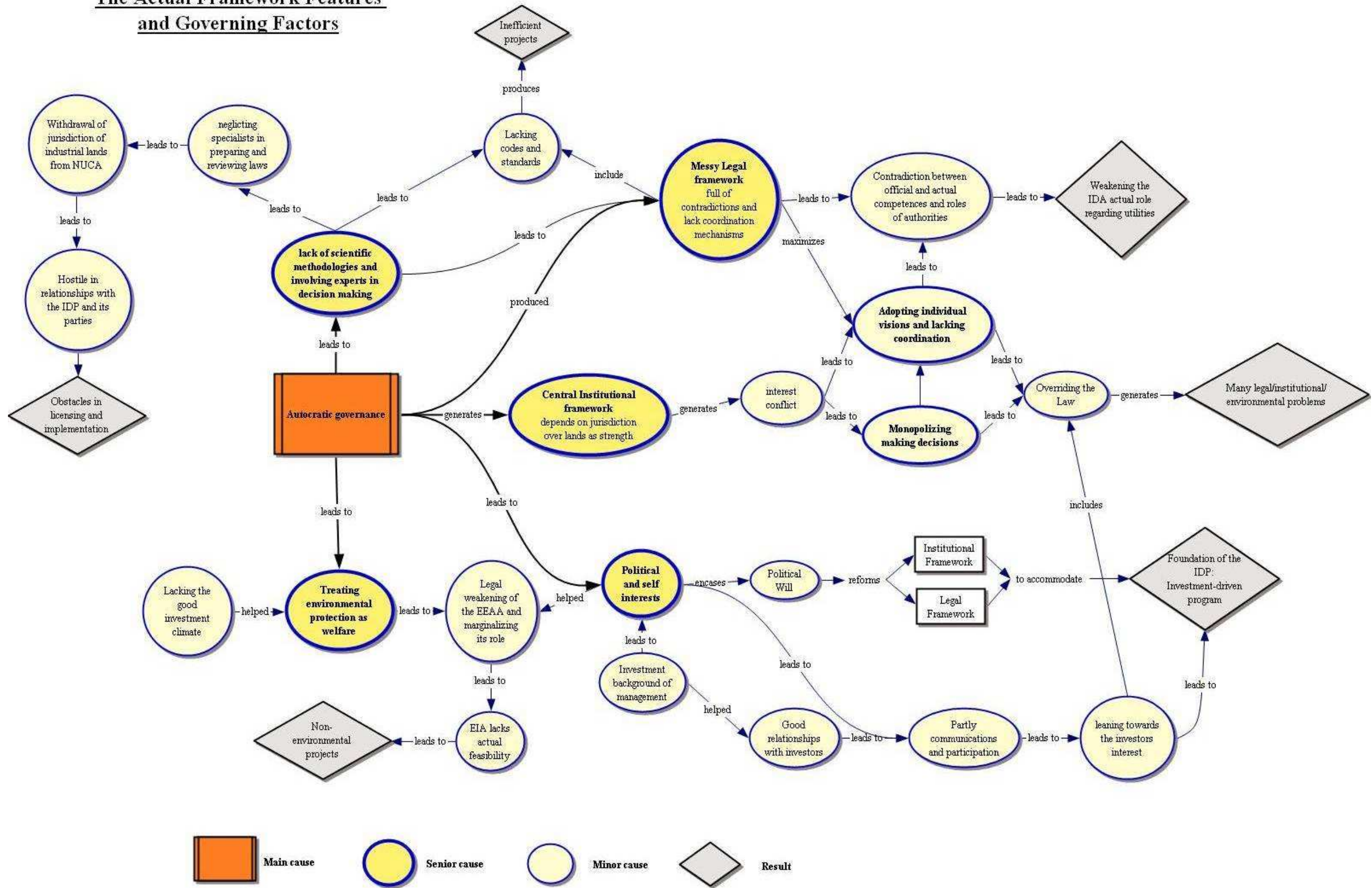


Figure 6-9: Simplified flowchart of the actual framework features and governing factors

- Centrality:

The IDP actual framework suffers, as in the institutional framework of the State, from centrality in decision-making. This was proven by the practical application of the One-stop window, one of the IDA's mechanisms to eliminate bureaucracy, in the lack of decision-making power to representatives of bodies within this window and that it is just a procedure with useless effect. It does not achieve except a little of the goal behind its establishment and the government uses it to achieve publicity not more. However, what deepens the centrality ruling the framework is that many of the minor problems in medium and minimum levels of work require intervention at the ministerial level to resolve them.

- Protecting the environment is well-being:

There is a common understanding of the involved parties in industrial zones founding process that protecting the environment in the Egyptian case is welfare and difficult to address in light of the problems facing the country in general and the investors in particular suffering from many problems; the foremost of which is the lack of good investment atmosphere. This may be a reason behind that the State's official framework not involving the EEAA in the foundation of the IDP program and therefore it was not surprising that the IDP actual framework also did not involve it in the preparation. Therefore, this legal weakening affected in marginalizing the role of the EEAA and thus the integration of environmental dimensions in the thought and implementation of the program. It was clear that the strength of the legal and institutional position of the IDA and the developer on one side is much larger than the strength of the EEAA which has been marginalized along with its tool of intervention which is the EIA. The marginalization took place by the effect of various means including the disappearance of the fines from the law, but it continued despite their addition to the amended law and this is because of the lack of seriousness of the government in the activation of these violations especially on big/important investors like the IPs. The studies became just a procedure without actual feasibility or guarantee that the planning of the IPs is compatible with the environmental considerations. This marginalization is not only a product of the general culture that deals with the environmental file as well-being, but also the government aiming, through it, at reducing obstacles in front of developers to speed up the pace of project implementation.

- *Useless timing and nature of the environmental approval:*

The timing and how to present the urban plans to the EEAA for approval within the EIA studies need to be reviewed. The EEAA approval is only for one-time that is not renewed in cases of urban plans modification. It also depends on a master plan showing the distribution of industrial activities types without actual allocation of factories. This leads to expanding the range in front of the developer, according to marketing and actual selling of land plots, to select industrial activities that could be environmentally incompatible with each other internally or externally. Therefore the picture becomes different from that approved by the EEAA.

- *Monopoly of legislation:*

Overall we can say that the general thought of the government and especially the industrial bodies in its dealings with respect to legislation and regulation for the program in most cases depends on the individual vision and lack of coordination with other sectors and agencies of the State. This does not necessarily mean that the move had been always wrong where moving individually and not on the level of the whole system sometimes takes right actions while makes mistakes many times. This affected in causing a gap between; the distribution of competences and roles in the official framework, and their actual reality on the ground. The mandate for industrial land is for the IDA, while the ownership, providing utilities and appropriate work teams and therefore actual control on the ground is for the NUCA. This led to weakness and sometimes the disappearance of the role of the IDA decided by the official framework, while, carried out actually by the NUCA but in a manner marked by being against it sometimes and lacking transparency and bureaucracy at other times as a result of the withdrawal of their jurisdiction and thus the financial benefits they used to receive. This leads to another gap between planning and implementation which may be due to a lack of understanding of the legislators to the reality or due to an error in the distribution of competences as a result of lack of coordination between all parties in the formulation or revision of the legislation before it is approved. Therefore, it is worth reconsidering the State's official framework regarding industrial zones to develop mechanisms and regulations that ensure a thorough examination of all dimensions, involving all parties relevant with a legislation and their approval on it before the preparation of its integrated and final draft.

- *The IDP and neglecting science:*

There is a gap in the IDP program between preparation and planning on one hand, and following the systematic methodologies of planning and respecting specialists on the other side. It is found that the administration of the IDP program in a number of steps monopolized planning away from the competent State authorities, which is considered a violation of the official framework. Furthermore, the planning experts and teams were absent from participating, as in choosing the IPs locations. The choice adopted the IDA's perspective alone, which leaned towards the investment thought for the developer's sake pushed by political desires to improve the image of the government. Nor is there a special code for the urban planning of the IPs and the dependence is only on a set of regulations that the IDA partially quoted from the Unified Building Code, and adjusted some of them for the benefit of the developer. Nor is there a special environmental code for planning the IPs and that reliance is on the regulations of the environmental law which was drafted prior to the IDP initiation which carries an implicit of being irrelevant and oblivious to the specificity of the case of the IPs. The program also witnessed the IDA's waiver of some of the responsibilities entrusted to it in the official framework for the sake of the industrial developers as choosing the activity of the IPs without a planning study, clear vision or specific controls to ensure the compatibility of the activity with its surroundings. In addition, the IDA gave the developer the mandate of the preparation of urban planning of IPs without identifying restrictions to the nature and efficiency level of consultancy offices to ensure proper planning.

- *Lack of transparency:*

Transparency was absent in the dealings between the authorities and each other or between the authorities and the developer. This appeared clearly in the lack of transparency of administrative bodies to provide information on the projects presenting EIA to the EEAA or in the lack of transparency of the cities councils in dealing with developers regarding the licensing.

- *Overriding the law:*

We should also point out that there are reasons that prompted the IDA to override the law and prompted those who are above it administratively in the institutional framework to overrun its work. These reasons were indicated in detail in several locations before in this chapter. But, we can summarize that what happened was a response for the whole institutional system which we dealt here with a part of it that could be a model for the rest. This part included the

IDA with the rest of the parties dealing in the IZs production, which miss the coordination between these bodies resembling isolated islands in each monopolizing decision and ruling the property or land under their hand. This part does not respect the science or the law except only in what serves the governing authority or those in charge who seek to accelerate the implementation of projects regardless of their efficiency to improve the image of their institutions and the government in front of the public opinion to achieve political or personal gains. This part represents the institutional system ruled with high centrality by a regime/authority which monopolized the rule for three decades until the people revolted on the twenty-fifth of January 2011 and remained in revolution over eighteen days to drop it down on the eleventh of February 2011.

To conclude, this chapter constructed the actual framework of the process through which the Egyptian IPs are planned. It also through the comparison between the actual and official framework has come up with preconceptions on the features and governing factors of the actual process and why it has took its current shape. The actual process has proven so far that it faces many defects that could be summarized in: a) central and fragmented institutional framework, b) monopolizing decision making and legislation, c) lacking effective networking and participation, d) marginalizing science, e) dealing with the environmental protection with indifference, and f) overriding the law and lacking transparency. The process that contains such features and governed by such factors that we summarized above is of course not applying principles of governance for sustainable development and industrial ecology, and therefore, unable to produce sustainable IZs.

Finally, by constructing the actual planning process and practically concluding its lack of sustainability principles, this chapter has completed answering the first research question. It also presents preconceptions on features and factors shaping the current planning process of the Egyptian IPs. It therefore helps answering the second research question. These preconceptions that came up out of the analysis of the IPs, constructed in Figure (6-9) will work as a base that the next chapter will build upon to theorize for the governing factors shaping the process through which the entire Egyptian industrial zones are planned. Doing so answers the second research question.

7. CHAPTER SEVEN: GOVERNING FACTORS OF THE PLANNING PROCESS OF THE INDUSTRIAL ZONES IN EGYPT

7.1. Introduction

Constructing the actual framework of the planning process of the Industrial Developer Program (IDP) has been concluded in Chapter (6). This was through analyzing the process through which three case studies of the IDP, three industrial parks (IPs), were planned. The analysis discussed different phases of the planning process including setting up policies, pre-planning, planning, approvals and licenses, and regulation and legislation. The analysis also addressed detailed steps of these phases, partners and their views, their roles and size of each role, and finally the relationships between those partners including coordination, networking and participation. To investigate the differences between what officially should be done and what actually has been done, as well as identifying the problems of the application, the planning process of the IDP has been compared to the official framework of the State (concluded in Chapter (5)). The analysis of the case studies along with the comparison between the actual and the official process has come up with preconceptions about the factors that have influenced the actual planning process of the IPs. To confirm these findings on the one hand and to generalise them on the other to cover industrial zones (IZs) in Egypt in general is the focus of this chapter. To do so, these findings need to be re-discussed but through a more comprehensive perspective that include different themes of the legislative, legal, and institutional framework ruling the planning process of the IZs in Egypt. To construct/organize the themes of this chapter, this chapter builds upon the preconceptions previously concluded (see Figure (6-9) that show these preconceptions and links among them). This chapter contributes to knowledge by exploring/confirming the problems of the actual framework (initially discussed in Chapter (6)) and, most importantly, justifies the factors governing the actual process in its current form in thought and application. It also justifies how these factors have shaped the Egyptian context and specifically the planning process to disabling the application of industrial ecology (IE) concepts. This chapter, by doing so, answers the second research question about the factors that influence/shape the current prevailing process through which industrial zones are planned in Egypt.

To achieve this goal, this chapter, in addition to the introduction and conclusion, is divided into six sections. Each section discusses one of the major factors shaping the process through which the IZs were planned. It discusses how each factor is linked to, influenced by and

affects other factors. It also discusses the implications of each factor on generating minor factors and justifies how they affect the application of IE. In the conclusion, this chapter synthesises, in an integrated construct, the factors and their implications to justify how and why the environmental role and its tools were weakened thus disabling the application of the IE concepts.

7.2. Authoritarian regime and centrality

Egypt has been controlled for many years by an authoritarian regime¹ (EIU, 2010). Perhaps this regime, Mubarak's regime, comes on top of the most important factors that have had a significant impact on influencing other factors, and shaping and formulating the State framework in Egypt. It has led to the centralization of power. This regime has reflected negatively on all aspects of life in Egypt (Elbeshry, 2011a). In light of that, this section examines the most important manifestations of such an impact, how they occur and their causes. It discusses how decision-making levels were weakened, as well as the organized chaos and its impact on weakening the State action system.

7.2.1. Weakening the decision making levels

For several decades, Egypt has been deprived of an official institutional system that has been replaced by individuals who have controlled the state. Everything used to start and end at the boss's will, whoever the boss is or whatever level he/she controls. This is not because Egypt lacks institutions and leaders or is unable to have a staff with the ability to work, but because of the influence of the authoritarian regime and the ascendancy of the President. The President's name is higher than the State's. He is the one to order and forbid. He applies the law and exempts from it. He is the one who opens and closes files. In several files, it was not allowed to issue a decision or start any action except in the name, permission and directives of the President in national and even international issues (Ayoub, 2011). The nature of this authoritarian regime has substantially weakened the levels of decision-making and made them almost helpless in the face of many routine matters. The public in Egypt are aware about this and realize that such routine matters are only resolved with the intervention of the President personally, whatever the administrative level is. Complicating matters, then issuing a Presidential decision to resolve them, is something the ruling power is used to do to win the confidence of people towards the head of State (Ac-66, In-47). There are many examples in this regard but it is better to show an example from within the IZs system as for the case of

¹ Discussed and defined in Section (1.2.1).

Anchass IZ. In-47², University Professor and one of Anchass investors, explained this case by saying:

Because of the conditions of Anchass IZ already operating without an issued establishment decree and therefore has an illegal situation, Anchass industrial investors in solidarity made a complaint to the President personally. It cost them 80 thousand pounds [which is a large amount for small investors like them to bear]. The Governor of Sharqeya was then forced to invite the investors to give them the licenses they wanted. (In-47)

As noted from this statement, the remarkable forced change in the attitude of the administration towards investors gives a clear indication about the nature of governance in Egypt. This strongly- influenced administration levels in the State institutional framework made them unable to take decisions despite the authority that administrators have. That is because administrators and leaders have been selected according to their loyalty to the hierarchy. Thus, they work to satisfy their superiors in a series of levels that ends at the top with the head of State. Ac-55³ explained in detail how this imbalance took place when he said:

Decision-making is by the President of the Republic. He chooses the officials beneath him. The standard for choice is loyalty. That is according to what many ministers said as being appointed by the President. Therefore, they work for his satisfaction. The Republic President by virtue of the nature of things cannot master every detail of everything in the country. There should be delegation of authority. When a minister comes to power, s/he wants to stay in her/his position. S/He does not establish a second row beneath her/him that is capable of carrying out the work. Thus, the result is that the minister is the decision maker and those beneath him only try to satisfy her/him. For example, if I send a first undersecretary to attend the governing council of any authority, s/he has to refer to the minister. Thus, s/he is not delegated in decision-making ... Beside this, originally, not all issues are displayed to the governing council because the authority to select cases to be displayed is under the jurisdiction of the minister or the head of the body. Therefore, many decisions are not displayed on the board of directors. Here the balance of power appears. If it happens that the head of the IDA is a member of its board of directors as well as the GOPP⁴, and, at the same time, the head of the GOPP is a member of the board of the IDA, [the implicit governing role of their relationship is that] you permit my work and I permit yours. There are no specific criteria to assess performance. Consequently, performance evaluation and follow-up do not exist in Egypt. (Ac-55)

² An indication for an interview/ee, the code may contain some of the following abbreviations that mean: En = Environmental, **In** = Industrial, Ac = Academic, De = Industrial Developer or Development Officer in local administration units, Ju = Judge, G = Governmental position (it will appear if applicable), NGO = A member of environmental NGOs boards of directors, **Numbers** = Serial Number of the interview/ee

³ Is an Assistant Professor and Head of Environmental Planning Department in Faculty of Urban and Regional Planning, Cairo University. He has wide scientific and practical expertise, and good contact with planning decision-making circuits by virtue of being an urban planner, an expert and a consultant to many governmental agencies and governorates.

⁴ General Organization for Physical Planning.

From the statement, we can also read that there are other factors⁵, generated due to autocracy, that have helped weaken the ability of various administrative levels to make sound decisions on a scientific basis. These factors include, lack of coordination that has been replaced by conflict and balance of forces where each party tries to achieve benefit. This has also been fuelled by the loss of the basis and criteria for evaluating performance. This was due to selecting officials mainly, as explained before, based on loyalty and not efficiency.

7.2.2. Order of chaos and weakening the work System of the State

The authoritarian regime, for a period of almost thirty years, did not stop at weakening decision-making levels. It exceeded that to largely weakening the entire State system. This is confirmed by several experts at different locations and with different specialties. Ac-G-11, with his practical and scientific experience, and his contact with decision-making circles⁶, said in this regard:

The institutional setup is weak ... we are not planning for anything. That is the reason for being a developing country; not that we do not have resources. It is because we are not organized in the way allowing us to take full advantage of our resources. There are many opportunities, but mistakes are continuously made. For example: Ramses garage [car parking place] which they decided to build. While building it and after they spent millions of Egyptian pounds on it, when the floors had risen and the bridge appeared [from the higher floors of the garage], someone ... told them: this garage will cause a disaster as we won't be able to ensure the *safety* of anything [moving] on 6th of October Bridge. So, they demolished it.... Why is this happening? Because of the butchery we are living in. Who will pay for this? If you have a good institutional setup with well studied frameworks this would never happen. However, all of the system is weak.

He then added that some initiatives may succeed as their leaders are enthusiastic and want to do things properly, but usually they fail due to our defective system (Ac-G-11). Ac-G-03⁷, Consultant of the Head of the Industrial Deveopemnt Authority (IDA), also confirmed the weakness of the system, and that cases of success in Egypt are only individual initiatives, stating:

You can dream but our system and work atmosphere are not proper at all ... Most importantly, you will be surprised that all good things in Egypt are individual initiatives. [He gave an example and then wondered]: Where is the State? What did they say there? [He means those individuals responsible of the case of the example] They said: "The Sea is in front of us, the lake is behind us, and we do not have any relation with the State. All we care about is to be able to export and

⁵ These factors are discussed in details later.

⁶ As an academic and urban planner as well as a consultant of the Head of the GOPP and the Head of the General Secretariat for new cities in the GOPP.

⁷ Is an Urban Planner, an Academic and a Consultant of many of the State bodies, on top of which is the IDA. Thus, he combines practical and scientific experience, and proximity to decision-making circles, especially the industrial ones in Egypt.

we do not want the State to know anything about us nor help us in anything: *May Allah protect us from their evils*". If there is something good, you must be sure it is an individual initiative. (Ac-G-03)

The former two statements shed light on the importance of two linked issues that deeply influence the nature of governance. The first statement highlights the issue of security and the central role played by those in charge of shaping the State. Those in charge of security interfere in all walks of life in Egypt, working on securing the regime and its interests not the State. Then from the last statement comes the importance of the refusal of successful individual entrepreneurs to request assistance from the Government. They accept not to expand their business to avoid fame and be recognized by the Government, to avoid its 'evils'. There are several cases in this regard. The owner of a group of El-Sharif companies is an example. He said at the end of an episode on a television broadcast that he has regretted the expansion of his trade and industries from the manufacture of plastic to manufacturing computers. He explained that this has angered many State officials after his refusal to obey them. He added saying:

"I wish I have learnt from the story of Moses and Alkhedr. I should have spoiled my ship for fear of the king who takes every ship by force. I was showing my trade and announcing here and there. I tricked myself and thought I was able to face any storm, which was not the case. The Government broke my back in just one hour." (El-Sherief, 2011)

Several people, including Mohammed Barghuthi, find that the weakness of the system was not only a result of the autocratic regime of Mubarak that lasted for about 30 years. It is a deliberate act, accompanied by the weakening of the system of values and replacing it with corrupted values in each workplace. This regime worked diligently to exclude competent professionals from senior management positions. It promoted inappropriate persons, security agents and those who are weak both professionally and ethically. During the Mubarak years, the work system turned into a sick environment dominated by the ethics of opportunism, adulation, corruption, and nepotism. Those attempting to resist this atmosphere were subject to problems reaching up to fabricating charges, trials, imprisonment, and defamation (El-Barghothy, 2011). Security officers carried this out as mentioned earlier. A number of intellectuals/authors, like Bozo (2011) and Eisa (2011), along with Ac-55 agreed with this proposition. Ac-55 stressed on that the regime was deliberately causing chaos to achieve its own interests. He said:

[Correcting the researcher for his description of the State system as being disturbed], this is not disturbance. It is an Order of Chaos. It is chaos, and because many people are taking advantage of this, they legislate it this way. If you want to

say “disturbance” then it is an intended organized disturbance, disturbance that is meant to be in this way. (Ac-55)

From the above it could be concluded that the nature of the autocratic regime, experienced by Egypt for many years, has anchored on its security arm working on securing and ensuring its interests and the interests of its followers. This system of governance has depended on legislating for and establishing an organized chaos that has affected all walks of life, to be able to continue achieving its objectives. This chaos has weakened the entire State work system. It has replaced the system of values of work, construction and moral values with less desirable values. This has led to weakening the decision-making levels. The decision, for its makers, was associated with the satisfaction of their superiors. Thus, it lacks efficiency. The planning process for the IZs, as part of the total, has been affected by the chaos and loss of values. The process of decision making has become random and unsustainable, as concluded by the previous two chapters.

It is worth noting that the factors governing the process of planning IZs, which have made them unsustainable, are several and interrelated. Each of these factors affects the other and is influenced by it. It is difficult to determine a starting point of this influence or its strength, or separate these factors from each other⁸. Nevertheless, the apparent control of this authoritarian regime, supported by the absence of the societal will, is what shows the tyranny of this system as a key factor in the formulation of other factors which the following sections discuss. It can be considered that the premise of this regime’s absence was likely to help treat these factors. This is negated by the regime existence as an obstacle for it to happen. For such reason, this chapter took the nature of that regime as a starting point, followed by detailed factors affecting and affected by it. These factors ruled the real shape of the framework for planning IZs. The next sections work on their discussion and interpretation.

⁸ The researcher believes that this is a logical reason for the suffering he experienced during restructuring this chapter. The researcher tried as much as possible to put the factors and classify them reasonably. He denies that the mentioned restructuring in this chapter cannot be placed in another logic way. It is up to the nature of the research, its questions, and the previous interim results reached by the researcher in previous chapters. The researcher also avoided repetition in addressing any of the details of a factor during the discussion of the other factors. However, that does not deny that the researcher had in some locations, to even the correct interpretation and explanation and to complete the picture of each factor with its causes and its implications to the reader, the researcher was forced when necessary to mention one of the factors during the discussion of another one. This is due to the extreme entanglement between them, whether as a cause or an effect. It is also important to mention that deciding on the nature and order of the themes discussed in this chapter is initially built on the preconceptions, concluded in the previous chapter (see Figure (6-9)), and the relations and links to each other therein.

7.3. Chaos of the regulatory framework (legislative and legal)

The State suffers from legislative chaos founded in the era of the deposed regime. This regime remained for years setting legislations and laws to achieve its own benefits as well as its followers regardless of any further matter. Those carrying out legislations had never thought effectively of treating this mess and modifying the legal legislative system (Nagati, 2011). That system suffers from many problems that have affected heavily the production process in general and the industry in particular. A corrupt legislative authority, unreflective of the Egyptian people's conscience and will, has controlled putting up the regulatory framework, and thus it has become characterized by imbalance and deficiency. It is not based on professional and scientific knowledge and suffers from contradictory responsibilities among partners of the development process. It also lacks an Egyptian index standards in a legal context that is best characterized by conflicted laws due to them being plenty, old and undeveloped (Ac-55). This framework is also characterized by disproportion between punishment and contravention especially in the environmental field (Ju-48). This has helped restrain the hands of the judiciary in dealing with environmental offences. It has had a profound impact on deepening the culture of disrespect for the environment in the development process in general and in the industrial process in particular.

This section justifies the most important factors creating this mess, causing a legislative defect, leading to the weakening of legal deterrence towards environmental issues. Thus, it has led to weakening the role of environmental agencies and their legal instruments of environmental protection, the environmental impact assessment (EIA) in particular, their only tool to ensure respect for the environment and its consideration into the planning process of IZs. Then, the chapter ends with a clarification of how the absence of justice has negatively affected trust between partners of this process. This has caused obstruction to the application of SD and IE concepts and mechanisms.

7.3.1. legislative imbalance and weakening the legal deterrence

7.3.1.1. Unlawful corrupt legislature and monopoly of the legislations production: background⁹

The legislative authority is supposed to be a sincere expression of the community conscience, where the judiciary role is to protect what the community expresses by disgracing those who violate rules and protecting those whose rights have been violated. Here, the importance of legislation comes because if it becomes corrupt, as in Egypt, everything follows in the system

⁹ For more details see Appendix (XII).

crashes (Ju-48). Voluminous studies, articles and investigations, both locally and globally, that talk about elections fraud in Egypt, put us in front of the fact that the legislative authority in Egypt is unreflective of the conscience of the Egyptian community (Gharieb, 2011, Abdesalam, 2010, El-Ebrashi, 2010, Khamas-Hawas, 2011, Abo-Bakr, 2011b, EIU, 2010). This corrupt legislative authority is accounted for the development of legislations away from people's will and the professional and scientific knowledge¹⁰ (LCHR, 2009, Hammad, 2011). It has even excluded the official technical authorities and the governmental bodies proposing the legislation or those which the legislation lies in their competence (Ac-55, En-G-16). This legislative authority has founded disorder and chaos in the legislative framework (Ac-55, Ju-48). Accordingly, the defective legislative framework has negatively affected the judicial authority and almost eliminated its existence (Ac-55, Ju-14, Ju-67). Ju-48, emphasized on the corruption of the legislative authority and its results which is the biggest problem experienced by the judiciary in Egypt. He added:

The basic point that has uncovered the flaws of the entire process is that the Egyptian legislative authority is unreflective and is an unreal expression of the Egyptian society ... Therefore what is the result? The result is a legal legislative defect weakening the judicial authority and disabling the law because 'each pot exudes its including' [Arabic proverb]. (Ju-48)

Focusing on the environmental issue under study in this research, Ju-48, with confirmation from En-G-16, Ju-14, and Ju-67, highlighted the disorder in the Environment Law No. 9 of 2009, reasoning the imbalance and lack of relevance to the nature of Egyptian society, especially with regard to the existence of conflicting and imbalanced penalties. This is due to the issuance of the law for presidential desires, "for showing off, as a claim that we have ... a strong law of environment." (Ju-48). These desires are according to Egypt's commitment to international agreements which were not approved by the people (Ju-48). It is important here to shed light on the importance that for the regulatory and legal setup to be favourable, effective and realistic, as indicated in Chapter (3), it has to be not only context-specific, but also case-specific (Roberts, 2004). The environmental law, to be consistent with international agreements, came out of the Egyptian context in a way that caused disabling to its sanctions as discussed in the next section.

To conclude, the monopoly of legislation by the corrupt legislative authority to serve their interests and the interests of the corrupt ruling class, has caused a legislative imbalance. This imbalance is represented in the chaos of a large number of legislations with conflicting multiple and imbalanced penalties particularly in the environmental law. Thus, this had its

¹⁰ This issue and its implications are discussed in detail in Section (7.3.3).

impacts on weakening the legal deterrence in general, and regarding environmental issues under consideration in particular. This, therefore, has weakened the role of environmental agencies and their legal tools for environmental protection, especially, EIA, their only tool to ensure respect for the environment and its consideration by the planning process of the IZs. The next section covers this in details.

7.3.1.2. Weakening legal deterrence and its effect on weakening environmental protection tools

As understood from the previous section, the nature of defect in legislation is diverse and multifaceted. The laws include multi-crimes for the same act, and penalties vary according to different laws (Ju-67). Ju-48 adds that conflicting provisions and imbalanced penalties are common defects due to the speed of legislations issuing for the benefits of the ruling class. In a projection on the Environment Law No. 9 of 2009, as indicated earlier, it came out as a response to the international treaties signed by the former president without the consent of the people or even the parliament (despite its corruption). Although this law gives powers that were not available in the former laws to the EEAA, legal experts and judges do not recognize that, considering it inapplicable. They argued that the nature of sanctions, their imbalance with the offenses and their exaggerated stringent as well as not being detailed to take into account the types and degrees of different offenses, led, at the end, to the members of the prosecution to waive the violations, to the extent permitted by the law, under the pretext of lack of importance (Ju-48, Ju-14, Ju-67). In the cases converted to trials, judges use their authorities, given to them by law, to disable these sanctions either through the provisions of the patent for any reason, or by giving a consistent rule with the sanctions but with a stay of execution (Ju-48). To go on to justify how the concerned authorities deal with environmental cases under the amended law of environment, discussing both parties of such cases: editor of the records, which is the legal administration in the EEAA represented by En-G-16 as the manager, on one side, and the judiciary on the other, is important. Starting with the originators of the case, En-G-16 strongly faulted the law especially regarding the penalties prescribed for those running their business without an EIA and then submitting an application to get the EEAA approval. He said:

The Law No. 9 for the year 2009 has no value ... After they issues the law I told them to consider that the punishment must be suitable in relation to the offense. You cannot execute me for scratching you.... The judge must differentiate between them. Therefore, penalties must vary ... It is stupidity from those putting the law to exaggerate the punishment and put it within a large range between 50,000 to one million pounds. Meanwhile, it did not identify which projects are falling under the criminality text in different situations. (En-G-16)

Based on practical legal experience of 21 years in the EEAA, En-G-16 objects on the strict unbalanced punishment compared to the type and classification of the offense. He also faulted expanding the punishment range without specifying categories suitable for the violation nature according to the EIA classification and the size of the project. In light of these defects, along with the nature of the violations, for small violations, either in size or in the environmental impact, that were transferred to him from the DEI¹¹, he could not edit records as the minimum penalty amount is so much exaggerated. In this context, he said:

I have not edited any records yet and I refuse to do so. I myself refuse them. Do you know what they [the inspection department] are sending to me? They send cases of a roastery – a plastic crusher – I will show you examples of what they sent, for you to laugh. They send cases that I am sorry to say: the cases bother you psychologically.... The environmental inspection is asking me to apply compensations on these cases! What do they want me to do?! That's why I apply fines on the mobile work stations of 10.000 EGP and the restaurant 5.000 EGP ... I mean that, psychologically, I cannot be harsh with them. (En-G-16)

As noted from the text that even with the pressure exerted from the DEI, En-G-16 reported such cases with much less compensations than that stated by the law. With mercy and justice, he tended to cancel, disable or reduce the penalty. If this is the action of a person who reports cases from the environmental body, how does he see the judiciary dealing? En-G-16 believes¹² that the judge would seek to acquit offenders for the same reasons leading him to deal with mercy with such cases, adding:

It is impossible for the judge to equal between a roastery or a bakery and a plant of fertilizers or cement.... Unfortunately, it is left to the judge who gives acquit. The judge is a human being like you and me. Let us say there is a case presented to the judge of a small restaurant that did not present a model (A) [of the EIA]. The study is just a couple of papers study. However, the penalty for that is between 50,000 to one million pounds. I ask you, if you are the judge sitting on the platform to sentence 'uncle Attia' [he means the owner of the restaurant with a very small environmental impact] what will you do? ... How much is his capital? It is all about nothing. Will he pay 50.000 pounds for this 'nothing'?! The judge must acquit him of course then he will not be a violator... Even the Inspection [what is meant here is the judicial inspection over the judges] will support the judge... The judge does this via searching for gaps in the case, for wrong procedures, for anything. (En-G-16)

Therefore, as far as En-G-16 expected, the judge will spare no effort in light of what is legally available to him to acquit the violators of this unfair item. He will even find support from the administration of judicial inspection for his action. This is an attitude worthy to study and

¹¹ Department of Environmental Inspection, the EEAA.

¹² According to his experience with the judiciary in similar affairs.

clarify, to make sure that judges deal with it in this way as well as to justify the reasons that compel them to do so.

- Interpretation of judges' dealing with environmental cases and its impact on disabling sanctions:

This brings us to the other side of the environmental cases which is the judges' side. Judges believe that the punishment in general must agree with the offense in balance without negligence or exaggeration for achieving public and private deterrence (Ju-14, Ju-48, Ju-67). Ju-48 finds that the penalties stipulated in the most common environmental crimes are not consistent with the appropriate standards of legal deterrence with its two types public and private. The public deterrence is that the law prevents the rest of the people from thinking to commit a similar act. The private deterrence is to prevent the same person from re-committing the same act again. If the sentence is less than the real and due punishment in accordance with the person's culture, the public and private deterrence will not be consistent. If the punishment exceeds the limit, it will be faced by a type of indifference (Ju-48). In support, Dr. Hamdy Hashem, environmental studies and environmental urban expert, mentions that environmental laws in Third World countries, including Egypt, are stalled between the legislation and the application. He attributes the reason for this to that those laws did not realize that the estimation of punishment and reward should be in the context of having the environmental problem related to a moral nature. It is related to the citizen's culture and a sense of responsibility towards the environment. Thus these laws are out of the activation circle of the values system toward the preservation of the environment from pollution and its conservation for future generations (Hashem, 2010).

Environmental violations and its severe penalties/sanctions:

Within the context of the previous introduction; the question that arises here is how the judiciary deals with both types whether environmental violations or environmental crimes¹³. Starting with environmental violations and their severe penalties, Ju-48 believes that any judge under his judicial conscience is forced to disable them, saying:

Sanctions in the environmental law in general are not consistent with the actual reality of the offense ... The nature of these sanctions is not consistent with the Egyptian environmental culture.... They are very strict over what can be endured by an individual. For example, what does it mean for a simple person who is used to bathing his buffalo, that costs 8000 EGP, in a waterway for irrigation to be imprisoned for a whole year and pay a fine of 10,000 pounds?! ... The penalty

¹³ These are the environmental violations of high impact on the environment as called in the environmental crimes law.

does not fit the culture of the people nor their abilities ... If you fine him with 20 pounds he will never repeat it again. All what you have to do is to initiate an apparatus that can honestly collect only the 20 pounds. The clearest example for that is if someone eats pulps or smokes a cigarette in the subway station, he/she pays 10 EGP as a fine. It is, therefore, impossible to find anyone doing so there. On the other hand, if the punishment was 10,000 pounds no one will care about it and the execution of the sentence will be very hard. I mean the door will be opened to corrupt police secretaries to take any bribe from the violator and let him/her go ... The judge is faced by a legal text that he can not apply. He is forced by his living judicial conscience not to apply it ... Therefore, when the judge feels that the punishment is exaggerated, he applies the minimum level. If the minimum level of the penalty is exaggerated he stops applying it if he had mer. (Ju-48)

According to Ju-48; this kind of tough sanctions towards environmental violations does not get along with the Egyptian environmental culture in general. It also lacks balance between the offense and its size, and the financial capabilities of the offenders. It is, therefore, difficult for judges to be separated from this context while adjudicating cases. Judge Dr. Osama Abdul-Aziz, in his article, put a frame that confirms and explains this, saying:

Justice requires from the judge not to be a deaf tool for the administration of justice. He should apply the legal text after interpreting it and understanding its causes. He must not perform this role away from the social context in which he lives. Above this he watches the transformations and changes in the society around him. He has to balance between the different interpretations that fit with the changes occurring around him (Abdelaziz, 2010).

The maximum level of sanctions do not fit the environmental crimes¹⁴ and their damages:

On the opposite side of what is presented earlier about adopting a hard-line policy against the environmental violations in an inconsistent way with the culture and the capacity of offenders, the maximum penalties with respect to environmental crimes are lesser than the offense committed or the cost of its treatment. Some of these crimes cannot be compensated with money. In this context, Ju-48 said:

With regard to major crimes and felonies, such as dumping harmful and toxic substances in the Egyptian coasts, these are not caught. If they are caught they are edited in any way, unless it reaches the public prosecutor. When reaching the prosecution, reconciliation is done before reaching the court. I have many examples. I have an example which is not nice (shocking) of a ship accident, called Nabbota, in the year 89. It has dropped a quantity of oil in front of Raas Ntrany at Sharm El-Sheikh. The Public Prosecutor ordered to catch and bring the shipmaster. He also prevented the shipmaster from leaving the country and the legal actions were taken. Then the shipmaster was released and the ship was allowed to leave after a letter of guarantee with one million and a half dollars. These are the maximum limits of the fine. To perform a purifying and clearing

¹⁴ In other word, they are legally called felonies that have severe impacts on the environment.

process of the oil, it will cost us a lot, let alone the aquatic life that we lost. Thus the fine is much less than the true value¹⁵. (Ju-48)

Therefore, the law stresses with those unable to pay the fine although they were not harmful to the environment, while it tolerates with those who can bear and deserve the harsh punishment despite the serious injury inflicted to the environment. The effects of this, as we have mentioned previously, led to disruption of the law with most of the cases. For the cases often associated with groups weakly affecting the environment, this occurs through provisions of patent or to sentence the offender with a suspended sentence. For the severe impact environmental crimes, in case they are caught and if a compromise was not reached before the public prosecutor and the judiciary, the maximum penalties prescribed by the law does not compensate for the offense. Ju-48 summarized this in precise words, where he said about the law:

It tightens on those who are unable to execute the sentence and tolerates those who deserve and are capable to execute the severe punishment. Here the injustice occurs and, therefore, the right and beauty values fall in front of the citizen's eyes. This is because linking the values of right and beauty is the value of justice. If the value of justice falls down, the right and beauty values fall as well. The right value is the virtues in general and the beauty value is discipline of life. That is because the balancing force is the value of justice. The penalty therefore, must be consistent with the deed. If it is more or less things become imbalanced. (Ju-48)

Therefore, and with the lack of the value of justice in the community (individuals and officials), the legal deterrence is weakened. Imbalance occurs and the community deals, in particular, with the environmental regard with indifference. This explains dealing carelessly with the EIA's, especially regarding major projects as previously explained in the former two chapters. This has effectively helped eliminate the only tool by which environmental agencies can intervene to ensure putting the planning process of the IZs on the path of respecting the environment.

7.3.2. Absence of the prompt justice and hindering the application of industrial ecology

Mubarak and his successive governments' rhetoric about exerting more efforts and accelerating ruling in cases for everyone without long waiting or prolonged suffering for litigants (Damatsoft, 2011), did not bring anything new for almost 30 years which is the duration of Mubarak's rule. Rather, Mubarak called for the achievement of something he and his regime were the first to stand up against . This is the content of what a number of senior

¹⁵ This issue could be typical of some other environmental laws in other countries even the developed one and not particular only for Egypt. Although saying that, it is important to be mentioned in contrast to the case of small violations to clearly illustrates the huge gap between them in the Egyptian law.

judges in Egypt believe in (Abo-Bakr, 2011a, Al-Asswany, 2011). This section briefly addresses the factors causing the absence of prompt justice, notably the lack of judiciary independence and the administrative corruption. It also summarizes the impact of these two factors on the planning process and, in particular, the environmental regard. Then, it outlines the impact of the absence of justice on the lack of confidence, and its influence on disabling the application of SD and IE mechanisms. See Appendix (XIII) for more details and evidences.

7.3.2.1. Executive authority with administrative corruption hinder the independence of the judiciary

As understood from the previous sections, when the law has become a tool for the expression of the ruler's will rather than the people's will, the imbalance has leaked out to everything. Under the central autocracy, the executive authority has dominated over the legislative and judiciary authorities (Al-Refaai, 2011, Ju-48, Abo-Bakr, 2011a). The executive authority has intervened in judiciary affairs with several means including the pressure on the judges through judicial inspection (following the Minister of Justice), the distribution of certain cases in the courts on certain judges, the assignment of judges to work in governmental bodies, and the executive authority controlling the bulk of the salaries of judges (Hassan, 2011, Ju-48). This has led to weakening the judiciary's ability to protect rights, where the financial and political influence has intervened in the implementation of the law and provisions (Arafa, 2009)¹⁶. This has led to shacking the prestige of the law. The people feel that it is a sword hanging over their heads not protecting them. Thus, they have antagonized the law and circumvented it. So, corruption spread (Hassan, 2011). The environmental issue is not an exception, where, despite the abundance of environmental laws, the corruption has disrupted them in several ways (Arafa, 2009). First, this is through disabling the implementation of the provisions on influential people, and applying them on the weak. It is not only regarding non-implementation of sentences, but also it has reached up to the violation of judicial decisions of the top administrative judiciary in Egypt, the Supreme Administrative Court, by governmental authorities! (Essisy, 2011, Ju-48). Second, by the judges themselves, where they block the application of the law, knowing that irregularities are edited against the weak people not because they are violators as much as they refused to respond to the records editors requesting bribes to not to edit these records (Ju-48, Ju-14). In this regard, Judge Ju-48 strongly said: "this is the real situation: the administrative corruption

¹⁶ Dr. Salah Arafa: one of the most important Egyptian environment flags who gained prominence in the international arena

is the tragedy of the Egyptian environment”. Third, it is through the exploitation of the administrative corruption to legalize the situation of pollution sources. A large proportion of pollution sources has been working apparently in a legal way by running permits, illegally obtained from the competent administrative authorities. Thus, this way has blocked the judiciary interference to correct the illegal situation of such pollution sources, even if individually, as prosecutors will be blamed by the judicial inspection (following the executive authority). Furthermore, there is another important reason that practically prevents prosecutors from doing so. A prosecutor is a part of the Egyptian people who, in general, do consider the environmental issue a priority¹⁷ (Ju-48).

7.3.2.2. Absence of trust and hindering the application of industrial symbiosis

Environmentally, and within the frame of the above, it could be said that the problem does not stop at the limit of environmental destruction, as a result of the encroachment of the executive authority over other authorities, specifically the judiciary, the spread of administrative corruption and the lack of implementation of verdicts. Most importantly, all of these factors have caused the Egyptian society to lose the feeling of justice because of the absence of prompt justice. That was through slow litigation and its weakness in the restitution of rights to their respective owners¹⁸ (Sedky, 2010). People under such context found themselves forced to waive their rights, or part of them, to avoid engagement in these stressful procedures of slow litigation, which are time and money consuming (Qusya.com, 2010). En-65 tended to confirm this culture and illustrates it in details, saying:

Ideally, among the things encouraging people to do business together, in addition to trust, is that if this trust has been shaken, they still have another line of defence which is contracts and the judiciary. For us, this second line of defence does not exist at all. If we have a contract, between me and you, we sign the contract to register our confidence. But the truth is that if you would violate the contract I cannot think about going to the judiciary. It doesn't worth with the size of our contracts. (En-65)

With loosing the last defence wall for the citizen which is the judiciary, lacking prompt justice has created a general exaggerated atmosphere of mistrust, affecting the reciprocal relationships between partners of the development process where confidence of citizens in the ruling authority first, and, secondly, in each other has been lacking. As a result, to avoid problems, the cooperative relations disappeared between dealers in money in general, and between the parties within the system of IZs in particular (En-65). Lacking these relations

¹⁷ This is discussed in details in Section (7.5.1).

¹⁸ According to the researcher at the American University, Safaa Youssof Sedky, in her own doctoral dissertation in the Sadat Academy for Administrative Sciences that 81% of the Egyptians affirm the slow pace of litigation and that they are marred by routine killing hope in the arrival of the proceedings to an end.

contradicts one of the most important principles of IE required to achieve industrial symbiosis (IS) (Boons et al., 2011). Therefore, attempts to apply mechanisms of IS have disappeared, because of the lack of the necessary context for cooperation in Egypt (En-65).

7.3.3. Setting legislations ignores professional and scientific thinking

We talked in the previous sections about the legislative defect and its imbalance in sanctions. Sanctions have become multiple, conflicting and incompatible with the violations in general and regarding the environmental issue in particular. This has weakened the legal deterrence regarding the environmental violations, and left its negative impact on the role of environmental agencies and their tools for environmental protection. This imbalance is a natural result of the monopoly of an illegitimate legislative authority of the legislation setting. They are driven by corruption and the intent to preserve their benefits and the interests of those appointing them – and in total - ignore the professional and scientific knowledge in legislation. In details, the legislative chaos has increased and the clear roles and responsibilities of the partners have disappeared in the planning process. The legislative framework has lacked scientific methodologies, codes, rates, and standards for planning. Thus planning has adopted individual diligence for work teams. The mechanisms for monitoring and professionally accounting planners have disappeared. This has led to choosing teams and consultants on the basis of loyalty and obedience, not on expertise and efficiency. Thus planning has gotten worse and the procedural shape has dominated the planning process rather than efficiency. Outcomes from the planning process have become chaotic or without a real impact on the ground. By ignoring science, it is logical that the law does not serve the environment practically, and does not accommodate modern thoughts in its protection, such as IE. This is an important factor that impedes individual initiatives that attempt to apply this thought in Egypt. This section deals with these factors in detail and their effects on the planning process in general and environmentally in particular. It is worth mentioning here that the implications of these factors have been discussed previously, both officially, in Chapter (5), and actually in analyzing the case studies of the IPs in the previous chapter. We are here not just emphasizing and generalizing them to cover the Egyptian IZs but, more importantly, answering how and why they have happened, which is the main purpose of the entire chapter.

7.3.3.1. Lacking clear and balanced responsibilities and roles

A number of experts, like: (En-65), (Ac-08), (Ac-15), and (Ac-01), saw that the legislative framework lacks determining clear responsibilities and roles that are not conflicting for each

of the partners whether within the government, experts or investors and so on. Ac-55 confirmed this -adding that this legislative imbalance led to transferring the problem to the institutional framework for those making the decision. With the absence of a clear framework of responsibilities, conflicts appear between different bodies. This is especially with the absence of a coordination mechanism among them in an effective way. The product at the end comes as a result of a personal vision or desires resulting from pressure from outside the institutional framework (Ac-55). Ac-55 gave an example of this, saying:

For example, there is no legislative framework in Egypt for locating or selecting industrial development sites. It is left to the decision-maker: When taking a decision for establishing an IZ, who takes the decision? There is the MIT through the IDA. Also, there is the GOPP through urban plans. What is the mechanism of coordination between the two: There is none. They both have the same role but as if they lie in different valleys, no coordination at all ... How come? (Ac-55)

Then he explained how this works and its effects. Each of these bodies has an establishment law/decreed determining its role in the planning process. However, these roles overlap and conflict with each other. In the previous example and in accordance with the Unified Building Law, the GOPP chooses the IZ location within its plans according to the schematic level. On the other hand and according to the establishing decree of the IDA, the choice of sites for industrial development is the IDA's responsibility. Thus the IDA chooses other sites in an action not involving the GOPP, leading to conflict and wrestle. In other cases, the IDA specifies the function of IZs located by the GOPP and here the product is chaotic: the one to choose the location did not choose the function and the one selecting the function did not pick the site. Therefore this occurs as a result of the lack of clear and detailed responsibilities in the legislative framework for each partner. Also, it is due to the lack of coordination¹⁹ between these bodies which helps collapse the situation (Ac-55). On another complementary side and from environmental perspective, En-65 believes that there is a large gap between the legislative framework and the role assigned to the EEAA, and the nature of the supposed proper role of the authority according to the professional and scientific knowledge. The authority job must be political more than technical. This is to put the productive sectors especially the industry on the correct environmental path and ensuring its works to be environmentally successful (En-65). He completed comparing this role to the role of the bassist (rhythm adjuster) in the band, saying:

You know, a musician cannot work without a drummer. The drummer is the bassist ... The EEAA job is strategic. It achieves its goals when reaching main streaming. While the IDA is working for industry, the environmental work is to

¹⁹ The coordination issue is discussed in Section (7.7).

be done. When the agriculture performs its work, the environmental work is to be done as well. You are not supposed to take everything on your lap and say I will do the environment work. No one is working this way. The correct thing in a band is that you drum for the others to play flute (play music) to reach a music symphony (harmony). If we are all playing flute there will be no harmony at all. If people did not listen to what they want to listen they will not continue playing on the rhythm. (En-65)

The EEAA, therefore, as understood from the previous statement, is responsible for forcing the IDA to integrate environment into their work. It has succeeded to a large extent in achieving this in one single case monitored in the previous chapter. This is when it exerted pressure on the IPs of the industrial developer for making the EIAs at the level of the entire IZs, not only at the level of each factory. Therefore, the EEAA in this case dealt politically not just according to its official role to enforce the competent authorities to respond positively to its environmental views. Yet, En-65 sees that the EEAA's way in this case should be generalized for all of its role and tasks, but the nature of the legislation weakening the role of the EEAA obstacles achieving that. The law lacks committing various bodies with coordination and cooperation with the EEAA regarding the full steps of the planning process. On the other hand, it commits the EEAA to coordinate with all other bodies. Similarly, Prof. Dr. Salah Arafa, the international expert on sustainable development and environment, sees that the balance of power is not in favour of the EEAA at all compared to the MTI for example. This is in light of the culture of ego and lack of coordination which is not provided by the law. Moreover, the governmental agencies override the law committing many offenses that the EEAA cannot stop or address. In this context, he adds in his article:

It would not be fair to accuse the MSEA of failing because it is so much overloaded in light of its limited potential and influence ... All ministries are supposed to work on the protection of environment. They should be accounted for any failure to the environment particularly with regard to factories and the Nile River. (Arafa, 2009).

So, the environmental agencies are weak compared to other authorities and ministries such as the MTI. There are many who have the same belief and recognition of the reality of that weakness, within the EEAA itself. En-G-32, director of one of the most interacting administrations with IZs in the EEAA, addressed the approvals for the creation of IZs and their role in them, saying:

You must know the system in Egypt: Who gives the approvals? Higher levels, like the GOPP and MTI, do. Then it is all raised to the Cabinet after its approval by these ministries. What is our role? **If** they consult us, we tell them about the environmental dimensions we need. The decision is then issued from the Cabinet. As the decision is issued, you cannot do anything although it is possible that it has included incorrect things. (En-G-32)

So the ministries and agencies of industry and urban planning, according to the logic of a senior official from the EEAA, are considerable entities that decide where and how to select sites for the IZs. On the other hand, the role of the EEAA is no more than providing technical advice on the environmental dimensions if requested. That is what happens even in case of errors. Therefore, the rule set by NGO-30²⁰ is correct. She (NGO-30) said "the nature of laws in Egypt and the nature of the MSEA as a state ministry, do not give it any powers or sovereignty over other ministries or bodies. Therefore, to guarantee moving towards environmental protection and applying sustainable development, resolving this kind of imbalanced power politics is significant (ESCWA, 2003).

On another complementary hand to the nature of the role and weakness of the environmental agencies not recognized in the law, Dr. Hala Barakat, Advisor of the CDCNH²¹, explained that, the policy of the MSEA and the EEAA, its executive apparatus, is not based on facing and preventing violations before they occur. Rather, it is based on accounting after the crime is committed. The environmental apparatus allows the crime to take place. Then it applies the punishment and fines. Therefore, it is performing the policy of collecting money and not the policy of protecting the natural resources of the country (Barakat, 2011). The MSEA does nothing to treat any of the several environmental problems facing the Egyptian community, although the methods of treatment are through using the axioms of science applied in many countries in the world. Egypt so far does not have any governmental plan²² for the recycling of solid wastes. These are considered worldwide as a wealth possible to recycle and get from them tremendous benefits rather than considering them as harmful material to the environment (Barakat, 2011). Therefore, the actual role of the EEAA comes after the execution during monitoring the effects of development on the environment. Its role is not in limiting these impacts during preparation and planning. This adds an important dimension to the weakness of the environmental agencies in protecting the environment.

To conclude, with regard to the nature of the role of the EEAA, the EEAA provides specialized technical support and advice when needed or develops policies and general environmental programs that are legally non-binding to other sectors. In order to achieve the political part of the EEAA role, it is required to give some powers that qualify it for that,

²⁰ Environmental Studies Institute Deputy and a member of board of directors of a number of environmental NGOs

²¹ The Centre of Documentation of Cultural and Natural Heritage.

²² There are individual cases in this regard, including the case of El-Safa Company for Environmental Investment. It succeeded in implementing a project to produce electricity from waste recycling after suffering of the government bureaucracy. However, there are no governmental plans in this field (Alborsa, 2011).

what is not included in the law. The EEAA is legally committed to coordinate with other bodies while the contrary is not true. It is also found that the focus of the EEAA role practically is to monitor the impacts of production and punish the offenders not to think and plan to limit the effects during the preparation of projects. This, as a whole, is referring to the obvious weakness of the strength and powers of the EEAA making it difficult to achieve the supposed role in a correct way. This is negatively reflected on the planning process in general, causing lack of sustainability.

7.3.3.2. Lacking methodologies and standards, and hindering the application of SD

This section deals with the imbalance in the legislative framework of planning. It discusses the lack of updated and detailed methodologies allowing the respect of the planning considerations in a comprehensive integrated perspective. This framework also lacks environmental standards and rates. Thus, it becomes defective, leading to an inevitable result: being harmful to the environment and disabling practical accommodation of SD and methods of its application.

- Legislative framework of planning lacks methodologies and regulations on scientific basis:

From the planning view, it can be said that the Unified Building Law is inaccurate and incomplete. It does not address the details and mechanisms of the current and future situations according to systematic studies²³. The law deals generally with the supposed to follow procedures for the preparation of planning. It also deals with the planning nature as a product without discussing methodologies, regulations, and details of rates and overall requirements that should be followed for the preparation of planning. Thus it leaves the details to work teams and different bodies, which set standards and regulations for each project separately (Ac-55, Ac-G-03, En-65, Ac-66). In this context, Ac-55 stated:

The law does not mention anything about methodologies. Alternatively, it concentrates on the shape of the product. It, for example, asks for a map of the IZs without mentioning how to do it or stating on which rates. Therefore, it is left for each expert on his own vision. Despite its disadvantages, the old Urban Planning Law was specific to some extent but it was replaced by the Unified Building Law which is something gelatinous. (Ac-55)

²³ Similarly, Ac-G-03 talked about the shortage of laws in Egypt in general as well as not accommodating the future status, saying: In the past when I used to be like you making post graduate studies, a German doctor in our University asked me a question. At that time the issue of the new cities was new. They used to give an exemption for 10 years for investors. He asked if the investor changed the activity after 10 years, what are we going to do with the investor? Will the investor take another 10 years of exemption? The doctor was looking forward as an investor, after 10 years and changing the activity. He said it was not stated in the law... We were not able to answer his question! (Ac-G-03).

Ac-G-03, as a consultant of the IDA Head, added that the Unified Building Law mentions some of the required regulations but does not include all the appropriate needed ones for all types of planning projects, especially the industrial ones. He also confirmed the indifference in how they prepare industrial projects regulations in the IDA, saying: “In a hurry, they ask me: please Dr. [Ac-G-03] can you just tell us what does the planning law mention regarding this issue? and that is it” (Ac-G-03). This is in addition to the existing mistakes in the law that can hinder the commitment to the few mentioned regulations. In this regard, Ac-G-03, as the one who edited the draft of the IZs planning section in the Unified Building Law, explained this saying:

Even the one who completed editing after me is funny! Although I put the regulations for the IZs in general, he made them specific just for the IZs within the urban cordons of cities and villages, and this is wrong ... His mind led him to that we are only working within these cordons thus, the IZs are to be only within them. What a way of thinking! There are IZs in the provinces outside these cordons, what about them? It is supposed that they will not follow this law in this case! (Ac-G-03)

Therefore, it is understood from the foregoing that with the absence of detailed legislative framework of planning, authorities of work teams increase in the preparation of regulations for planning projects. It is clear as shown above and according to what is confirmed by Ac-55 that these teams, at their different efficiency levels and governmental nature, deal in a non-professional way. Satisfaction of those who appointed them, whoever they are: the project team leader or the body having jurisdiction on the project, predominates over the process. Those appointing the planning teams are also responsive to the pressure exerted on them whether higher governmental pressure, from their leaders, or the investors (Ac-55, Ac-66, Ac-G-03). Ac-55 gave an example of the strategic failure as a result of the UBL lacking the methodologies and clear standards obliging work parties. He said about the project of the preparation of strategic plans for villages in Egypt:

On what basis did they [the GOPP] plan the first tier of 500 villages? On the basis of cordon 86. After they finished the planning, they found it inappropriate and threw all the plans/schemes in the bin. Then they changed the thought deciding on making new cordon. The GOPP made it for the second tier. [He then told the story of the second tier finishing with the failure of it and its reasons] ... This means that the GOPP has worked according to a first and second wrong Terms of Reference (TORs). What did it reach at the end: nothing, and so on. Thus you have been spending money for 10 years without any real return. (Ac-55)

The regulatory framework for planning, therefore, is neither thorough nor detailed professionally to prevent such chaos that we referred to in the previous example. The framework states the product nature and its leading procedures in just a form without

mentioning clear and detailed planning methodologies. It does not address the mechanisms and details of appropriate planning rates for different projects. Therefore, it leaves the opportunity for diligence and discretion to work teams. This, with other factors like weak education system in general and planning education specifically²⁴, significantly puts the operation at risk of error. That is especially in light of pressures exerted on work teams and the desires of some of them to please officials. In addition, there is a lack of attention to the systematic study and a way of dealing carelessly and unprofessionally with projects by work teams.

- The law does not practically serve the environment nor accommodating modern thought for its protection:

To complete what is mentioned above, and considering that protecting the environment or not is a product of the planning process, the planning process in light of this dysfunctional legislative framework will only produce unsustainable products (Shalaby, 2003b). Ac-55 demonstrated on this, considering that lacking the appropriate environmental rates and regulations in the legislative framework was the reason for shackling the hands of the judiciary regarding protecting the environment. This is like the failure to stop one of the most famous environmental cases, Agrium plant, that has concerned the Egyptian public opinion. This led to its implementation despite the severe damage to the environment. He explained this issue saying:

If the legislative framework is malformed then the judiciary is shackled. The legislative framework does not state the amount and rates of pollution. The legislative framework mentions procedural steps they [in Agrium plant and the Government] already have followed. That means they presented an EIA where the MSEA should accept or reject this study. If it was accepted, as happened, the judiciary is committed to the decision in accordance with the law and its text. (Ac-55)

Therefore, limiting the legislative framework to the procedures without discussing details of the conditions and environmental standards scientifically, contributes to the damage to the environment. On another complementary side, and from a quick analytical view of the schemes of some IZs models in Egypt, owned by international companies, a decline in the standards of respecting the environment²⁵ has been strongly observed. This was clear when comparing the product from the environmental perspective to what is theoretically expected

²⁴ Is discussed in Section (7.4.2).

²⁵ As simple examples of the decline of these standards: the lack of a drainage system for industrial activities separated from the domestic sewage system. The low percentage of green areas below 3 percent of the surface, see Section (1.2.2) for similar cases.

to be provided by such companies regarding respecting the environmental standards as well as international standards or modern ideas in this regard, such as the IE. En-65 and Ac-55, shared the same justification of this: in the absence of a scientifically correct detailed legislative framework that is mandatory to these companies (Ac-55, En-65). Ac-55 added:

There are regulations which they follow, but what is the degree of accuracy of these regulations? ... For example; water pollution: if there is an IZ treating water. If the POD and COD²⁶ concentrations are 10 over 10, it will be allowed. What does 10 over 10 mean? It means that if there were a factory producing daily a million cubic meters with a concentration of 10/10, it is allowed. It means producing 10 tons of pollutants every day. This is a terrible (capacity) load but they only took the concentration in consideration... Thus, this work does not follow the scientific method as it does not follow the (capacity) load concept²⁷ Therefore, as the specification put in the legislative framework does not state that, the company coming will follow your specification. Where, the company is not to be more “Royal” than the “King”. (Ac-55)

Therefore, wrong scientific dealing with the nature of regulations and standards and staying away from new ones being circulated globally gets the specifications out of their correct environmental frame. En-65 added another dimension, stating that it is not limited to environmental standards and their scientific accuracy only, but also the nature of the planning regulations; which are placed without studying their environmental impacts, bears part of the problem. He gave an example of a company which was facing a problem in getting rid of the wastewater used in its industrial operations. This led the company to use this water in the cultivation of tree forests in lands it has. However, he explained that this situation was difficult for them to circulate because of the lack of suitable land according to the planning regulations applied for dividing the IZs land plots. In such regulations the industrial plots sizes and the percentage of building on them did not take into account such matters and other environmental issues (En-65). Ac-G-03, agreeing with this argument, gave an example of the officials’ way of thinking in the IDA in depending on terms of the law in refusing to consider the application of the thought of separate industrial wastewater networks, saying:

There are no separate industrial wastewater networks at all in Egypt, in neither private nor governmental IZs. Upon mentioning this, they [in the IDA] tell you each plant treats itself, as what comes out from plants must be identical to the specifications. What if it was not identical to the specifications? They say it is their problem with the MSEA not the problem of the IDA²⁸. (Ac-G-03)

²⁶ Wastewater quality indicators.

²⁷ The concept of qualitative (capacity) load was added in the modified Environment Act of 2009 as one of the studies made by the entrepreneurs within the EIAs to obtain the environmental approval. However, they were not activated, as explained in the previous chapter, see also Appendix (IX). In addition monitoring the contaminants of the factories are based on tables of pollutants. These tables adopt the thought referred to by Ac-55 and not the thought based on the qualitative (capacity) load.

²⁸ En-G-52 shared Ac-G-03 his opinion and also the absence of separate drainage systems in industrial zones.

Thus, it could be understood that the legislative capacity for the practical mechanisms of environmental protection and modern environmental thought, is very weak. It is non-binding to the partners of the IZs planning process to respect the environment and its protection mechanisms. It, in this context, helps the industrial sector officials limiting their attention only on economic and industrial issues, and delaying the environmental problems to post-implementation. Then, their occurrence is to be in the jurisdiction of the environmental agencies. In light of this, it is difficult to achieve SD and apply IE. Ac-55 agreed with that the existing legislative framework is linked only to studying the local impact of development through the EIAs of the unit and not for the zone as a whole neither the strategic dimension of projects and programs. Thus, it eliminates the thought of optimal use and protection and becomes out of the equation of SD and its application mechanisms (Ac-55). This is not distinctive to the Egyptian legislative framework in that it is disabling SD and IE. Some other countries face the same situation like Australia that its legislative framework poses particular challenges for applying IE (Boons et al., 2011). Reforming the legislative framework for IZs developing process in line with the principles and ideas of SD and IE is crucial (Roberts, 2004).

To conclude, the process governed by a defective legislative framework results in planning that does not respect the environment. That is since the framework is limited to procedures. It is neither detailed nor containing rates and environmental standards that are scientifically correct and updated. Therefore, this framework is flawed restricting the judiciary from dealing in a proper way that could protect the environment. Also, it is not appropriate for the application of environmental thoughts and SD with its modern mechanisms such as IE. It helps deepen the economic perception of the industrial sector officials at the expense of caring about environmental protection. Reforming the legislative framework to apply SD and IE principles is, therefore, significant.

7.3.3.3. Lacking performance assessment to strengthen the loyalty-driven assignment

It is discussed in the previous section that the lack of a planning code in the legislative framework based on a professional and scientific knowledge including methodologies and regulations. Also, the work teams depend on individual diligence based on thought and efficiency of each team. This leads to chaos in the planning process and lowers the product level schematically and environmentally. What worsens the problem and works on increasing it more is the lack of a mechanism or provisions in the legislative framework for accounting the planners and assessing their performance. This is what was confirmed by a number of

experts, like (Ac-G-03), (Ac-G-11), (Ac-66), (Ac-15), (Ac-01), and (Ac-55). The latter detailed the nature of the problem, saying:

With the absence of the legislative framework, if a planner did any work whether good or bad, can anyone account or assess him/her? How to account them without a code? ... Even the list of practice standards found in the Engineers Syndicate is talking about procedures not a scientific method of evaluation. Therefore, it is away from the professional and scientific knowledge.... I mean, for example, civil engineering has a weak code like so: the engineer and the contractor are responsible for the building for ten years, if it collapses or something happens to it they are to be imprisoned. OK, this is a building, what about those responsible for a city with a hundred thousand buildings? If they are mistaken, what is their penalty? Nothing! ... It does not have rooting for the process itself; it did not give a scientific definition for the planner and his exact work nature. So, you can find unqualified graduates working as planners ... So, the legislative framework is failing. (Ac-55)

From this statement along with what preceded, it could be realized that the planning process in all its dimensions, including the planner definition and, the way to account and assess his/her performance, suffers from a legislative defect emptying it from its scientific content. This helps increase its mistakes and problems. Moreover, the absence of a scientific accounting system helps choose work teams and consultants on the basis of loyalty and obedience not on expertise and efficiency. Mamdouh Ismaeil (2008) agrees in general on the prevalence of this matter. He asserts that most of the administrative system consultants and experts lack professionalism. Most of them are people of trust and loyalty. They are usually appointed through courtesy and mediation. Such type of jobs turned out to be just a source of money, unfortunately under the knowledge and acceptance of the Government. He adds that this hits the principle of equal opportunities and prevents communication among generations. It infects the administrative system with inertia (Ismaeil, 2008). Reflecting on the planning process in general and the IZs in particular, this can be confirmed from several sources, like (Ac-55), (Ac-G-03), and (Ac-G-11). Ac-G-11 confirmed this phenomenon and considers it a result of the absence of professional and scientific approach for planning. He then gave an example regarding the selection of industrial development experts in the new cities planning work teams, saying:

Nothing is given to the concerned specialists ... For example, you request an industrial development expert, they bring Dr. "....."²⁹, who is a doctor of industrial planning and specialized in industrial setup; industries and so on. They do not bring someone from the IDA. Do you understand what I mean? They bring this man as they know him well; they try to make things easy for

²⁹ The expert name has been withheld in order to protect his interests and not to affect him and his reputation.

themselves. Well, industrial planning is important but this is not the appropriate required specialization. (Ac-G-11)

So, confidence is respected at the expense of efficiency and expertise in the selection of specialized experts to the project of planning new cities in the GOPP. It is also confirmed by Ac-G-03 from his personal experience. This experience is from inside the body responsible for IZs by virtue of him being a consultant of the IDA Head³⁰. He said:

The dominating pattern became the “Yes Man”. For example, the IDA head cancelled a contract of an Engineer... An Engineer with great experience and a high capacity for follow-up ... I was surprised, the Head did so because the engineer tells him what he should do. However, others who always say “Amen” are fine to him. The engineer came telling me can you believe? ... I told him it looks that I will be next. The IDA Head tried dismissing me several times, however, his Assistants advised him not to do so. They said the doctor saves us in specific needs. That is because the technical stuff, chosen by the Head and well known to him, know nothing about technical matters ... Meanwhile, he wants to dismiss me as I am not pleasing him. I do not dissemble him. Hypocrisy is the way to reach higher ranks in Egypt nowadays. (Ac-G-03)

Therefore, the dominating pattern within the IDA does not differ from the general framework of the State apparatus. The pattern of assignment starts with the appointment of the IDA Head of non-specialists in the industrial field. Thus, he has appointed those below him in the career ladder, on the basis of confidence, not on experience and efficiency. Moreover, everyone opposing the IDA Head in opinion has been dispensed. He has only retained the hypocrites as stated by Ac-G-03.

It could be concluded from the foregoing that the absence of a scientific and legal system for accounting experts and work teams, leads not only to lack of seriousness and professionalism causing weakness of the product, but also helps choose work teams and consultants on the basis of loyalty and obedience, not expertise and professionalism. Therefore, things get even worse with the exclusion of professionalism of the work teams. That is after unloading the governing legislative framework from the professional content. Consequently, the gap between the planning process and what it produces, and sustainability, increases.

7.4. Marginalizing science

Governments before the Twenty Fifth of January Revolution followed wrong and indiscriminate policies (Qusya.com, 2010) in making administrative decisions in isolation from the professional and scientific knowledge (Almasalla, 2009). Several problems that are not familiar to the Egyptian society emerged and the inability of governments to deal with

³⁰ The IDA head, referred to in these paragraphs, is currently serving his prison term after his punishment on charges of corruption (Mohammed et al., 2011, Ismail, 2011).

these problems appeared as well. Such problems are: solid waste, fertilizers, loaf of bread, land speculation (Qusya.com, 2010)' high rates of road accidents (Almasalla, 2009) and others. On the economic side, the rich class increased at the expense of increasing the number of the poor (Qusya.com, 2010). On the community level, the chaos hit the community as one of its features, which the Government bears responsibility for it as a result of its wrong policies. The urban situation worsened to the point that Egypt occupied the first rank globally in terms of poor urban planning (El-Sherief, 2011). In an interpretation of this, experts and specialists (Almasalla, 2009, Appadi, 2010, Ismaeil, 2008) have loaded the successive governments, especially the last one, the responsibility for that. This is due to the absence of governmental planning based on professional and scientific knowledge, as well as absence of the systematic method in the management of crises and urgent problems (Appadi, 2010). This in its entirety is a result of the minimization of the levels of respecting science to the maximum grades in light of these governments. That was reflected in the weakness of the budget allocated to scientific research (Qusya.com, 2010). It was accompanied by lowering the level of education and thus the level of graduates, and they became ineligible to enter the work market (Qusya.com, 2010). In addition to the low level of graduates, the systematic method for the planning for human resources was absent (Ismaeil, 2008) which increased the severeness of the problem due to the separation between the education system and the work system. This led to problems of weak trained workers referred to by many specialists from the industrial sector (Ac-G-03, Ac-55, De-28, De-43, De-64).

In light of this general introduction on the Egyptian community, which explains the effect of the absence of science and the systematic method in planning on life in Egypt before the revolution and up till now, this section explains the nature of the problem in the actual framework of the planning process of IZs. It also explains the effect of the lack of respect for science and poor education on the chaos of planning. These as a whole are important complex factors, which have lead up to one another, leading ultimately to non-sustainability of the process responsible for the planning of IZs in Egypt.

7.4.1. Lack of respect for science:

Alsharkawy (2009) speaks generally about the missing respect for science in Egypt. He invokes the argument of a contemporary writer defining the problem of scientific research and the crisis origin. The writer says: "Our countries will not develop unless the minds of scientists become more expensive than the feet of football players." Our country does not pay the least interest to scientific research and does not consider it as a priority. The previous

regime ignored science and allotted less than 0.23% of the GDP to the scientific research (Muhammad, 2010). Also, the regime outcome of bureaucracy stood as an obstacle in the way of any real contribution to the march of scientific progress (Alsharkawy, 2009). Ac-55 agrees with this, referring to the Egyptian regime which used to spread lies and false arguments to justify the bad situation of the country. He said:

India, for example, adopted the new thought. However here in Egypt, in each visit for the President, he says from where I shall bring you money. The population growth takes away everything. How can he say so?! We are no more than 80 million while India is one billion and one tenth ... Japan's population is 140 million and its potentials are not equal to 10 percent of ours. Oppositely, there are areas of earthquakes, tornados and lots of other problems. However, they know how to use their existing powers and plan their use in a sound systematic manner. (Ac-55)

Ac-66, Ac-G-11, and Ac-G-03 agreed with Ac-55's argument. Ac-G-03 added that lacking interest in science, represented in the views of qualified specialized consultants or technical studies, has reached the planning decision-making circuit at all its levels. This has produced a culture of disregard for the views of consultants and academics, considering them living in an ideal world, and that their views are theoretical and separated from reality. He said:

I am giving you an idea about the situation. These words are from officials. They say: the University Professors' talk has no relation with reality.... Do not consider the University Professors' talk as we are not taking a lecture. We are not living in Utopia! (Ac-G-03)

It should be noted that the majority of consultants and academics working in the field of planning are also professionals. They have experienced applied work in planning; either through their private offices or through studies and research units in their Universities. Therefore, they should never be considered separated from practical and professional work as it is wrongly thought in governmental bodies as mentioned by Ac-G-03. Thus, Ac-G-03 and Ac-55 confirmed that officials only look for the consultant who accepts their opinions, as discussed in Section (7.3.3.3), and adapt them in a scientific way or transform their views into the required technical product. Here comes the function and importance of the consultant for officials. They do not participate in decision-making but they formulate techniques that serve this decision. Then Ac-G-03 explained this saying:

I myself have many arguments with the Head of the IDA. At the end he tells me thank you, we do not need your help, and we know what we are doing.... The consultant in Egypt is just like a burials wagon. They ask him to go to Aswan and he does. He goes and the dead is to be buried and thus he did his work. It is not his concern whether the dead person goes to Heaven or to Hell. They need the consultant in technical issues, but the decision-making is theirs. The consultant only has to bury. What does a consultant really mean? It means taking my opinion

not as they are doing. He does not like me, why? This is because in every meeting I say the right thing to do. But the rest of the Egyptians obey him to achieve their own interests. (Ac-G-03)

In addition to the governmental bodies way in looking to and dealing with consultants and their scientific views, they do not care as well about technical studies or expressing a technical opinion on the specialized studies presented to them (Ac-G-11, Ac-G-03, Ac-66). This can also be understood from a statement of Ac-G-38, one of the GOPP president's consultants. He talked about the bodies being not interested in expressing their technical views in general and specifically regarding industrial projects manual. He said:

No, unfortunately. All bodies including the EEAA are blamed for being not interested in studying or reading to express specialized technical opinion from their point of view. We as the GOPP do not receive any comments from all authorities. (Ac-G-38)

Therefore, and in addition to ignoring science by the governmental bodies, it is further understood from the previous statements that the major category of consultants employed by these bodies are inclined negatively to ignoring professional knowledge. They have accepted to be a mere tool in the hands of decision-makers. They use them to justify their decisions which are not based on systematic study. Added to these consultants is a large numbers of researchers who have accepted for their researches to be just a way leading to promotion without having the real scientific payoff. This is what Alsharkawy (2009) sees, away from the political regime, that the scientific, intellectual and media elites have shares also in ignoring professional and scientific knowledge in our country (Alsharkawy, 2009). Ac-G-03 also monitored part of this, referring to planners who are forced by the general economic life of Egypt to deal passively and without professionalism with the work presented to them, targeting financial return. Ac-G-03 explained this saying:

An IZ project we were judging these days; a sketch of 87 km² in an A4 paper without any details. Can you imagine that there is not even a large panel? Please imagine that is the way it is presented to you.... Then, when I go to the consultant trying to explain it to him; he says I did not take my money! I just want my money and please stop bothering me! (Ac-G-03)

So, concern for science and diligent work has become a culture that does not exist. The concerns have focused more on the fees due to what the country faces in general from a bad economic situation. This situation has hit everyone and forced them to do so. Confirming this meaning, Ac-G-03 completed his former speech saying:

You have to bear in mind that science, industry and planning do not provide suitable jobs in this country. You are now interested about the issue because you are making postgraduate studies. As soon as you get the Doctorate degree you will look for what brings you money. You will not live as a Messenger for

industry. Let's be clear and honest. We have to excuse them as they are all doing the same thing.

From the above we can say that the nature of the former regime and the absence of political will towards progress and advancement, its ignorance of science and its expenditure, and economic deterioration of the country, are all factors that have left a significant impact on spreading a culture of general lack of interest in science, professional and scientific knowledge and those in charge of it. This culture has been reflected in disrespecting the views of consultants, and the lack of interest of officials and experts in performing and reviewing specialized technical studies. This has affected and has been affected at the same time by the education weakness in general and planning education as part of this total. The next section discusses the issue of planning education.

7.4.2. Planning education is scientifically incapable

The educational system in general has been affected the most by this culture of ignoring science. It has had a significant impact on lack of efficiency, scientific and professional capacity of graduates and their ability to give within the labour market specially the trained technical labour (Ac-G-11, De-28, De-43, De-64). Ac-G-03 also agreed with this opinion and said: "We are used to say that the Egyptian labour is cheap. It is no longer cheap. There is no labour at all, neither skilled nor technical. This is because the level of your education is falling." (Ac-G-03). What has happened to the education in general has hit the planning education in particular. Many argued that there is a great imbalance in the system of planning education, like Ac-66, Ac-01, and Ac-44 along with Ac-55 who said:

The planning education is imbalanced, in definitions, methodologies, research and identifying problems. Thus how will the resulting planner look like? (Ac-55)

Given the existing defect of the planning education system as understood from the previous statement, Ac-55's question seems logical about the form, and scientific and practical ability of the planner as product of this dysfunctional system. Having Egypt obtaining the first place globally in 2009 in terms of poor urban planning (El-Sherief, 2009) is an answer the question. The planner have taken part of the responsibility about this failure, along with other elements previously mentioned like a corrupt system missing political will for progress and advancement. Thus, scientific knowledge has been kept away from decision-making circles with a common culture of lacking respect for science. These factors have produced together chaos of planning at all levels of decision-making. The next section discusses the chaos of planning detailing reasons and factors leading to this chaos and the effects on the planning process of the IZs.

7.4.3. Chaotic planning: the governing factors

It is understood from the previous sections that the Egyptian urbanization suffers from chaos caused by the lack of respect for the professional and scientific knowledge. This culture resulted in, with other political and financial factors, the weakness of the educational system in general and the planning education system in particular, which has led to the weakness of the work system of planners. This system has missed the practical framework of concepts, rates, methodologies, and integrated visions, and hence become characterized by traditional thoughts. Within this context, political decision, influenced by security concerns and maintaining the regime, has controlled planning decision at its various levels. All of these variables have taken planning in Egypt away from sustainable development.

In light of this introduction, the following sections discuss the two main factors that have had the greatest influence on the chaos of planning: the political decision controlling the planning process and the scientific weakness of the planners' work system.

7.4.3.1. Planning decisions are politically driven

People in power have a strong influence on guiding the decisions within the planning process or on changing the planning during implementation (NGO-30). Many cities and major projects in Egypt were created by political decisions, without any study (De-G-57). Therefore, problems abounded due to such decisions. Perhaps the most prominent of which are the problems of the destruction of the natural environment. That is as what happened in Helwan from the concentration of polluting heavy industries according to the political decision (Ac-G-11). Ac-55 explained the error of the method followed in such a case, saying:

The political decision was: We want a labour conglomerate in Helwan so that if a counter-revolution evolved they can stand against it. Now they are repeating the same process ... Therefore, allocation of industry, both now or earlier is not based on scientific knowledge. (Ac-55)

Therefore, the political decision is in control in order to preserve the regime security and stability, even if by violating the systematic study. In addition to the political dimensions guiding the planning decision-making, according to Ac-G-03, corruption has had the biggest influence on guiding the decision-making. He also gave a number of examples, see appendix (XIV) for some of them. He meant by giving these examples to say that planning decisions are made in a compliment to those with political and financial powers. Despite the knowledge of the officials that these decisions are legally wrong, it does not stop them from passing them. He then said it clearly: "Everything can be illegally accessed just for being someone powerful" (Ac-G-03). Ac-55 agreed with that. He added that this is clear and continuing in

order to guide decision making towards what achieves personal gains for those in charge. He said in this regard:

There is no appropriate legislative framework that is attributable to the institutional framework which is no longer objective. The institutional framework has become personal or subjective based on what satisfies this Minister or that. Otherwise, when there is a struggle between various forces and parties that is governed by a set of interests, along with rampant corruption, the decision is then based on satisfying this investor or that or that. Thus it is cancelling the existing scientific framework. (Ac-55)

Therefore, struggle between powers, controlled by interests and corruption, makes the decision subjective to please influential people in the absence of legislation and legal deterrence. Therefore, it is assumed that who puts laws, adjusts the irregularities and moves the lawsuits against the violators, which is the executive authority, is the first to violate the law pursuant to the interests of influential people. Thus, absence of legal deterrence helps the personification of the legal and political decision and its direction to serve the interests of influential people along with neglecting scientific logic and studies ensuring efficient planning leading to chaos of the planning process and messy product.

7.4.3.2. Non-scientific planners work system

Away from the factors considering decision-makers as the cause of chaotic planning, there is a number of other factors within the work system of the planners themselves, and especially scientifically. In this context, the scientific framework for planning in Egypt could be analyzed and the most important planning factors affecting its randomness could be identified. These factors start, at first, with the absence of a comprehensive framework of concepts, planning methodologies and integrated visions, where, the dependence becomes on individual visions and interpretations. Ac-55 said in this regard: "There are no agreed methodologies. Everyone makes up their own ones. Even the policy, visions and strategic levels; they are all messed up" (Ac-55). Ac-G-03 confirmed this adding that there is not any integrated vision of the national planning, as well as for the different sectors citing the example of the industrial sector, where he said:

There is no complete vision. Nothing integrated is applied on planning. For example there is no industrial map for Egypt ... The problem started because the late (GIA) used to build plants and they became endemic due to the central system. When the municipalities started operating, every governor having a piece of land has taken the approval of the Prime Minister and adopted this land as an IZ without a plan of the State associating all of this together... Then, a problem emerged in funding the infrastructure of the governorates. They got to overdraft from the National Investment Bank (NIB). They wanted to extend to the region, no matter what happens, without a plan and without anything. Money has been

withdrawn but without any yield. Thus, they reformulated the authority and the IDA was established.... I will give you a very simple example in Beni Suef in Bayyad ElArab. There is an IZ about 800 acres and next to it is New Beni Suef. Both of them did not work... There are 2.5 km between them. Then at a distance of 5 km they established a heavy industries zone including cement factories. Therefore, there is not a general view at the governorate level... What about at Egypt's level! ... Allocating IZs in Egypt is without a general vision. There is no map. Thus it is not based on high level studies. They are all just whims. (Ac-G-03)

Ac-G-11, confirming and commenting on the absence of the overall planning vision, the planning and the sectoral coordination, said: "Do we have sectoral planning? Is there cross cutting issues? Does the IDA have Plans for IZs in Egypt, their expectations developments and ambitions? Does this happen in coordination with other agencies? There is nothing of this at all. (Ac-G-11)

Second: Indicators and planning rates used in the decision-making are non-scientific: The decision-makers depend - because of their eagerness to improve their appearance not to achieve real development - on using indicators that mostly measure quantity and not quality. This often leads to poor performance and the emergence of problems. Ac-55 gave an example on this from the reality of the indicators used in water supply, where he said:

Indicators used in planning are all nonsense... What does the Index equal? Total water production on the total population.... How can I increase the total production? The existing stations have been expanded! Thus the deprived areas are still deprived. When the stations were expanded, the water pressure increased. The pipes were not able to carry. So, they exploded because the pipes follow the governorates not the National Authority for water. The result is that you spent 12 billion to replenish groundwater by sweet water. What is the yield? It is the same. The water is available for 97% of the citizens while the actual recipients are 63% ... Thus, you chose a wrong indicator and you used it incorrectly as well. However, when assessing the performance, they say we raised the performance, we added a station!

Third: Traditional thought of planning experts: Experts refer this to the planning thoughts circulation system being not based on scientific research and modern ideas (Ac-G-03, Ac-55). Here, Ac-55 drove an example on a research he has supervised. This research has questioned about 40 Professors of planning, experts and government officials about the reflection of the dramatic development of information technology and communications on the methodologies of urban planning. Most of the answers were confined to the fact that the communications are steps within the process of preparing the physical planning for a project. He said literally about their answers:

Our relationship with communications is that when we finish the Master Plan, we give it to a communications expert to make us the telephones network " (Ac-55).

He denounced the experts' failure to appreciate the lifestyle change accompanying the change in the evolution of communication and its use in practice. For example, in e-commerce and its impact on the change of the productive base, this inevitably will change the urban planning thought. However, they did not recognize that. However, Ac-G-03 believes that many experts surrounding decision-making circuits are even not aware of the traditional thought in planning at the first place. He then cited an example of a governor along with his experts not understanding the planning thought of IZs and the priority of marketing in conjunction with planning, not after implementation as they do. He said:

Let's take an IZ with established infrastructure but without plants. They say we were not able to market it, the problem is in the marketing ... We as a governorate work on a local level! (Ac-G-03).

Ac-G-03 denounced first their delay in marketing and secondly their awareness that the governorate deals in marketing only at a local scale.

To conclude, the general framework of the planning process is infected with chaos missing the respect for the professional and scientific knowledge. This chaos is primarily due to the lack of the political will to bring about renaissance and development. The political decision, directed by security reasons and maintaining the regime, controlled the planning process. The political decision became characterized by subjectivity not objectivity and it became in service of politically and financially influential people. As for the scientific aspect of the system, its framework lacked the comprehensiveness of concepts, planning methodologies and integrated visions. Indicators and planning rates also lacked the right scientific basis. The traditional thinking dominated planning experts. This chaos led to the delinquency of the planning process away from sustainable development and the environment lacking proper planning which is the most important factor that maintains respecting the considerations of preserving the environment. The next section shows the effect of chaotic planning on the environment and the absence of sustainable development.

7.4.4. Chaotic planning and its impact on sustainability

There is no doubt that the human needs and activities have negative impacts that affect, to varying degrees, the elements of the biosphere system. This effect increases reaching up to environmental disruption, in the case of chaotic planning and not considering the comprehensive vision that takes into account the environmental dimensions. As indicated earlier, from the most prominent factors that led to chaotic planning and had the most negative impact on the environment is the absence of governmental planning based on systematic study (Hesham, 2010). It resulted in a large increase in the population pressure on

the urban area of the Republic, that is only around 6% of the total surface area of Egypt (Hashem, 2010). This has led to chaos in the urban growth and the spread of slums (Hesham, 2010) on the expense of the scarcity of agricultural land and, as well as overuse of the components of the natural environment, correlated with the disruption of ecological balance at the local and regional levels. It has also led to the failure to fulfil the utilities service and upgrading them especially in the countryside. Thus, the gap between rural and urban areas has increased (Hashem, 2010). Ac-G-11 - Consultant of the GOPP Head and the President of the General Secretariat of New Cities in the GOPP - added that the economic vision adopted by the State dealt with the environmental considerations as obstacles, and thus disabled them. He demonstrated that this was through the non-inclusion of strategic EIAs, despite their benefits and effects on the planning process, within the studies to be prepared for the new cities. He said in details:

The economic goal was preventing you from putting requirements that might seem as obstructing the development process ... There were nothing in the TOR [terms of reference] for Sadat and 10th of Ramadan cities, about the EIA. I was asking, at which level do you ask about the environmental impacts here? We must study the strategic impact assessment (SIA). They will identify the possible types of industries or give very large mitigation majors on the planning level. The drainage of different industries cannot go together. Thus you need more than one network. So, studying the details of industry affects the planning. However, we do not apply this here. Our main concern is to create IZ without environmental considerations, without knowledge ... The institutional setup needs adjustment as well ... In my doctorate, I have reached the fact that the strategic assessment is a tool that our system does not accommodate its application. Where, its application depends on sound planning that we do not have. (Ac-G-11)

Therefore, the economic vision ignoring the environmental considerations, in addition to the absence of proper planning based on a systemic study, are all factors adopted by and weakened the institutional framework making it disabling for the application of SIA. According to Ac-55, even the EIA studies for individual establishments are also without feasibility under the institutional framework marginalizing the systemic study, saying:

Allocation of industry, whether now or earlier, has not been based on a systemic study.... Then, the Ministry of Environment requests an EIA to decide. On what basis are they going to decide? Since they do not locate the place or the function, on what basis are they going to object? ... For example, Agrium plant in Damietta: The MSEA objected after what? After the MTI and the GOPP approvals on the location which is a change in land use as it is a political decision of the governorate somehow. The IDA approved aiming eventually to attract the largest possible amount of investments. The MSEA objected based on a considerable environmental dimension? Well, if they have coordinated together initially, nothing of this could have happened. (Ac-55)

Therefore, the failure to follow the systematic study to develop a comprehensive vision for the allocation of industry in participation and coordination with other stakeholders especially the MSEA has weakened the process. The MSEA's role was delayed until after proceeding of the project making it useless and hence, the project was implemented despite objections from the MSEA (Ac-55). In response to pressure exerted by the political leadership, the MSEA was eventually forced to agree after making non effective adjustments of the project³¹ (Ac-G-03, Ac-55). Ac-G-11 stressed on the absence of the systematic study especially in the relationship between the residential areas and the IZs, where, the political decision governs the choice of the locations of these uses without planning studies. This ultimately leads to natural disasters. Ac-G-11 derived the example of an IZ and its extensions in Sixth of October City, which turned into a contaminated island surrounded by residential areas from most quarters. Furthermore, industries of all types and environmental levels, from polluting to the light polluting in addition to pharmaceutical industries, have been distributed randomly in direct response to supply and demand of land that changes the prepared plans are supposed to consider the environmental considerations (Shalaby, 2003b, En-65, En-G-60). De-G-57 and En-G-52, environmental officials in six of October City, confirmed on that schemes were amended in a response to demand on land that is driven by the growing self interest and corruption. In details De-G-57 said:

However, I am afraid to say that at the end self interests prevail on all of this. Do you understand? It means; it is possible that the scheme has a specific zone for a specific activity; they change it without care.... For example, an area was planned as stores zone. Suddenly, the IDA decided to make it for manufacturing plants. This is because they do not have more land allocated for industry.... The IDA started implementing directly without bearing in mind what this land was planned for or its relationship with the surrounding. (De-G-57)

Responding to the demand on industrial land in the way shown above does not only lead to negative environmental relationships between activities, but also, depending on this way on the expense of systematic study in industrial allocation, leads to disruption to applying the environmental methods in planning. Ac-G-03 agreed with this argument considering it as a major cause for disabling the implementation of separate industrial drainage in IZs, adding:

Nothing integrated is presented in planning. For example in an IZ, as you supply pipes for water, drainage, electricity and pressure, you must check how the industrial drainage will be. You find that they tell you we do not know what will resettle as it is according to supply and demand... They are supposed to study marketing first and know exactly the types before planning. Unfortunately, nothing of this happens! (Ac-G-03)

³¹ The project location has been changed after severe public pressure exercised by the people of Damietta.

So, it could be understood so far that the planning decision makers in the IDA depend on the thought of supply and demand of land in industry allocation. It lacks the application of scientific thinking in constructing a comprehensive vision that considers different dimensions. It also lacks balancing between marketing and planning that could achieve flexible vision could to be implemented but respects the environment as far as possible. However, this does not take place because of the random modification of planning in accordance with supply and demand. This blocks the application of standards and methods of environmental protection especially regarding IE. En-65, sustainable development expert, sees a difficulty in the application of IE under the existing way of planning and the constant change in schemes. He said:

Upon trying to apply the thought of IE, for example, when implementing an IZ for foods industries and you find that the foods are not highly demanded. Thus, some chemical industries are to be involved as well. That is indiscipline! If you want to make correct planning and be committed to a goal such as the IE and things like that, you must be committed first to the plan. But which plan? You need first to conduct studies, marketing and so on, to decide which activity you are capable to attract. You must make a perfect study to ensure that... Your thought must be clear. Unfortunately, this is not found. (En-65)

He also added another example of the intellectual poverty surrounding the planning decision-makers, where he said:

Ain Sukhna does not have water... This is one of the problems which we have discussed, that establishing an IZ in Ain Sokhna is something very nice and the site is very good, near to the harbour and Cairo. The problem is the settlement of many industries with intensive water use while already there is no water. Paper Industry, Steel Industry and others have been located there. All of these were put in a place where the water is scarce. This is a kind of intellectual poverty. (En-65)

Thus, the lack of understanding of the planning decision-maker to the issue of water scarcity and then the resettlement of intensive water consuming industries, certainly mean a lot of problems, whether environmental or economic. The decision makers were to avoid such problems, if they have realized the nature of the problem in a scientific way.

On another complementary hand³², in light of lacking integrated comprehensive planning, Egypt has received many dirty industries with severe damage to the environment - such as the case of the Canadian Agrium factory referred to before, and many cement plants, etc. This has increased the destruction of the environment in addition to the economic loss as a result of the spread of diseases associated with industrial pollution and the deterioration of the

³² Given the difference in the vision towards development and environment in Egypt as a developing country than that in the developed countries, and with the growing role of the environmental NGOs in developed countries and the decline of their role in Egypt.

general health of the population. Also, with the absence of the political will to promote, develop and achieve sustainable development (Tolba, 2008) and the weakness of the country's economy (Hashem, 2010), the system of education has been weakened and environmental illiteracy has spread³³, not only at the public level but also at the level of work teams in the field of planning (Tolba, 2008). So, it was a natural result to marginalize the solutions respecting the environment as well as the mechanisms of its protection in the planning process (Hassan, 2011). Ac-G-11 gave an example; if we consider the analysis of the environmental problem we find that; experts do not study it in the proper way with perception and awareness of all the dimensions of the problem. He added:

Upon discussing the problem of the cement factories in Helwan; all experts have been talking about zone 1 surrounding the plants and the disaster there. The problem is that people who are more vulnerable are not those around the factory but those farther; those receiving the lighter atoms which they inhale. Therefore, your analysis and awareness of the problem and its dimensions are not correct. You are dealing only with the apparent problem, the largest dust particles fall there and cause visual pollution. However, those are difficult to inhale. The health problem could be greater at the zones 2 and 3. Moreover, dealing with each case needs different ways in dealing and this does not happen. (Ac-G-11)

Therefore, as a result of the analysis of the problem in this way, dealing is only with the apparent pollution. Meanwhile, the effects of the lighter weight pollutants are the most dangerous to health. This is other than the study of only the prevailing direction of the polluting winds to avoid its negative impacts on the surrounding. The issue is that the prevailing direction could be up to 40% of the year, what about the rest of the year? The change of wind directions during the year is not considered at all. This leads to many negative environmental impacts on the affected areas (Shalaby, 2003b).

To concluded, the nature of the former regime and the absence of a political will to achieve progress along with the economic downturn and thus ignoring science and its expenditure, have led to weakening the education system and spreading a culture of disrespect of science and of those caring about it. This has been associated with controlling the planning process by the political decision that is oriented by security purposes to maintain the regime. Because of all of this, the planning education has weakened. Thus, the framework of the planning process has become infected by chaos missing the respect of the professional and scientific knowledge. Moreover, under the pressure of economic life, the planning teams and experts dealt passively and without professionalism with the work presented to them and with the technical justification for the wishes of the decision-makers. Scientifically, the framework of

³³ This issue is discussed in the next section.

the planning process lacks encompassing the planning concepts and methodologies, integrated planning visions, and planning standards and indicators based on sound scientific base. In light of this, a comprehensive vision for industry allocation has been lacked that has helped - with political pressures driven by corruption - in delaying the environmental agencies' role to a stage where it is difficult to take or enforce the right decision. They could not prevent the implementation of contaminating projects and the environment has been negatively affected. In addition, lacking proper and integrated planning resulted in a weak institutional framework and so, it has become unable to accommodate the application of the SIAs. In addition, traditional planning thought has dominated the planning experts and even so, the adopted planning has been changed in response to industrial demand that dominated the competent IZs administrative bodies. This has produced serious negative ecological relationships between land uses as well as blocking the application of methods and mechanisms for environmental protection, such as; separate industrial drainage or central treatments stations. Furthermore, the lack of environmental awareness has dominated the planning specialists leading to a failure to study the environmental problem according to the systematic study and to properly realize all the dimensions of the problem. This has resulted in the absence of solutions that respect the environment and thus environmental disruption increases. The planning process is, therefore, away from sustainable development.

7.5. Corrupting the society and marginalizing its will and role

Mubarak's military regime dealt with the Egyptian civil society with a lot of ignorance by several legal, legislative, and institutional means, including preventing funding (Mansour, 2006). It did not stop at this, it reached up to falsifying the people's will, choice and participation in the political life. Perhaps the election fraud at all its levels in a crude way using several means including bullying, buying votes, preventing the emergence of parties and authoritarianism on the society by the emergency law which lasted throughout the Mubarak ruling period, attest as the best proof on this issue (Gharieb, 2011, Abdesalam, 2010, El-Ebrashi, 2010). Falsifying the people's will had a severe effect on a moral degradation in the citizens awareness by giving them the example in the legitimacy of forgery, deception and bullying. It also created a general feeling of hopelessness of change and reform. This led to colouring the majority of the society by negativity, indifference and staying away from political participation, since they are unable to influence with their vote in the legislative council. In addition, the election fraud largely spoils the governmental bodies supervising, organizing, and implementing the elections as they become contaminated by

flawed practices. Those belonging to these bodies get used to these practices and lost confidence in their leaders who ordered to, hinted for, or covered up fraud. With repetition, these practices turned into a lasting governmental and popular behaviour accepting lying, fraud, bribery, bullying and other scourges of unfair and unclean elections (Almahdy, 2011). Hence, this regime has spread by its practices corruption in all the files of the Egyptian people, causing an imbalance civil society (Moussa, 2011). The Egyptian environment had not been an exception or spared from corruption especially by those with power and influence (Hafez, 2011). Abuses of the authority and lack of respect of law in general and the environmental law in particular, along with the country's low economic status, may have messed up the Egyptian society contrary to its civilized, cultural, and religious nature respecting the environment and its protection. This inherited a general culture of lack of concern for the environment and sometimes hostility by those in positions of responsibility.

However, variant Egyptian groups remained coherent fighting images of marginalization, forgery, and corruption despite the harassment and persecution. They have been working for to break this authoritarianism. The last of their trials and the strongest was the protest on the 25th of January. The accumulation of internal anger helped to develop the protest to be wrapped and embraced by millions of the Egyptian people. This led to the popular overwhelming revolution that toppled the regime in order to begin a new era in Egypt of the people dominance, activating the people's participation and their decisions to be governing (Al-Turkey, 2011, Kamel, 2011, Lau, 2011).

From the above, a range of factors that helped spoil the society: its view and way of dealing with the environment emerges. In addition, the factors that marginalize the societal will in general and affect the planning process of IZs in particular as a part of the whole also emerges. This section explains these factors in detail concentrating, at first, on the societal perception of the environmental protection and the factors shaped this perception. It then discusses the role of environmental NGOs in the planning process. This role was characterized by individual successes away from the State system. Then it examines the factors that led to marginalizing the role of public participation, in particular the environmental NGOs. This starts from environmental bodies themselves ignoring these NGOs, while they are supposed to be the most caring within the State system to support the environmental NGOs. They deliberately failed to involve the environmental NGOs and benefit from their roles while referring the NGOs work to themselves. In addition, they did not give the needed financial support. This section also deals with the nature of the

institutional legislative framework with all what it has from corruption, bureaucracy, lack of transparency and slow justice, which have worked not only on marginalizing popular participation but also even on disabling the individual initiatives/attempts to reform made by the civil society.

7.5.1. Societal perception of the environment

This section discusses the issue of dealing with indifference and sometimes hostility with the environment and considering its protection a kind of luxury, and explains the factors leading to this. As noted earlier, the authoritarian regime along with the economic decline it caused that hit most of the Egyptians³⁴, messed up the look of the Egyptian society to the environment to be treated with indifference. The issue of bridging the financial vulnerability was put in the forefront of the Egyptian society interest. All other walks of life have been ignored especially those that cost financially as it is mistakenly understood about the protection of the environment. This perception - along with the previously mentioned factors - left a significant impact on disrupting the legal deterrence of the environmental legislations³⁵. This undermined the role of environmental agencies and made them unable to protect the environment in general and to intervene in the process of planning IZs in particular to ensure environmental sustainability. In addition to marginalizing the civil society, that culture has helped deepen this marginalization towards the NGOs interested in environmental affairs, whether from the society or from the institutional framework of the State and also from the environmental agencies themselves.

7.5.1.1. *Between antagonism and indifference*

By knowing that the environmental problem is of a moral nature stemming from the awareness and understanding of the responsibility towards the environment and its biosphere (Hashem, 2010), Nelly Youssef, the editor and specialist in the Egyptian environmental matter at Goethe-Institute Cairo, considered that the culture of environmental protection requires reforming the relationship between the citizen and the environment. This is to convert it from an adversarial relationship or indifference to the relationship of concern and respect. She demonstrated on that by her interpretation of the emergence of new terms used by the Egyptian youth such as the word "environment" which if used in the description of someone or somewhere, it means a very low level and being characterized by inferiority and

³⁴ The terms of the authoritarian rule and the laws bypass have been discussed in earlier sections of this chapter. So, this section will focus only on the impact of the deteriorating economic situation and its impact on placing the environment in a late stage of the priorities of the Egyptian society.

³⁵ This has been addressed in Section (7.3.1.2).

deterioration. This indicates that young people look to the environment around them and treat it as being steep/descended and polluted because these young people grew up in a society lacking the culture of environmental protection and attention (Youssof, 2011). Ju-48 agreed with this stressing in his reply on the eligibility of the public prosecutor in addressing environmental violations, without waiting for being presented by the editors of environmental records. He confirmed that the public prosecutor is part of the Egyptian people, culturally bound, by the nature of the general Egyptian case, economically and socially and he puts the environmental issue at low levels of his priorities. He explained this by saying:

It is his right of course, however where is the culture allowing him to do so? Of course there is not... If the prosecutor, in his constituency, finds an incident he will address it. The incident has to be in his own culture, not his technical one. He must know that it is shameful and this is not available for the environmental violations. If I see someone beating a person in the street I will arrest him. Also, if I saw someone stealing in my constituency I will arrest him. From my point of view or in my general culture this is shameful.... These are the crimes in the culture of the Egyptian people. Environmental crime is not considered in its natural sense in the culture of the people. The people do not give it any attention unless it has a large impact such as harmful or toxic wastes or oil leakage from a ship.... The most practical is that he will be accused by being a crazy person. Otherwise he will be accused by having a personal interest in doing so. (Ju-48)

Therefore, the general culture of the Egyptian society towards the environment has laid it outside the circle of attention. This is the case even for the judges who are assigned to apply the law. In fact, it's up to the point of describing those interested in environment protection and those against breaching it, even if it is the core of their competences, by seeking an illegal interest or being insane. In a complementary side of the previous scene and in a way confirming the same culture and the same way of dealing with the environment issue and its respect from another category entrusted with the protection of the law, Ac-G-11 condemned the culture of the Egyptian citizen towards the environment. He also condemned the ignorance of traffic officers dealing with the control of traffic violations and their lack of awareness of the cases of environmental pollution on their plentiful and their negative environmental impacts on the health of citizens. He hit an example of an incident that has occurred with him. He was described after this by insanity. He said:

When will we understand? When will we understand that that guy with his car emitting pollution is killing us? You find the traffic officers asking about the seat belt. In Moqatam there was a traffic commission. A microbus in front of me was emitting smoke and lots of gases. The police officers stopped it for a while then they let it go. In my turn they did not stop me. However I stopped. One of the officers asked me what the matter? I asked him how he let the microbus go. He said he did nothing wrong as his license is valid. I wondered if they did not see the smoke coming out of the microbus. I told him he is killing us. If I were

reckless, thoughtless, and not wearing my seat belt, I will kill myself on my own. But the man in the microbus is killing us all. I told the officer you are standing in the streets smelling the exhaust, your lung is ossifying and you are dying in your place. You are not taking care now but in 10, 15 or 20 years you will take care. Another officer standing with him said: Is this guy crazy or what? He meant me of course.

The public negative culture towards the environment along with the law men as part of the whole, which is understood from the preceding, does not stop at this point. But the intellectual frame of the officials in general and the administrators of the process of IZs production in particular, lacks the proper awareness towards environmental issues, interest in them and their protection (Ac-G-03). Even within the EEAA as the State entity entrusted with understanding and caring about the environment and its protection, its leaders, members and experts lack the proper environmental awareness (Ac-G-11). Ac-G-11 monitored one of these cases. He confirmed its recurrence, where he said:

I was talking to the Head of the Protection of Nature administration in the EEAA. I was telling him about a project with the USAID where we were performing Programmatic Assessment. He started making fun of me. He said to the American Project Manager: "you are bringing some youth to make fun of us. They are a bunch of young people who know nothing. Programmatic! You do not know. It is called Environmental Impact Assessment." They were all laughing. I told him my PhD is in this subject. This Programmatic Assessment is applied in the USA since the sixties. He has never heard about it despite he is a senior official in the EEAA and responsible of nature protection. Then what could we expect from the others?! (Ac-G-11)

The case is the same within the framework of experts and academics involved in planning as it is within the EEAA. Without denying the existence of professionals who are conscious of the nature of the environment and its protection having the novelty of science in this area, but what is common among planners is other than that. They also put the concern for the environment and its protection at the end of their lists of priorities, where they do not think about it before achieving the issues before it. Cases in this regard are so many, but it should be noted that the researcher was not able to monitor them all. However an example of them could be mentioned as a model. One of the most important of them is for the understanding of a well-known senior academic³⁶ in the field of planning for industry with extensive experience and contact with planning and industrial decision-making circuits and thus influencing them. This expert said about the protection of the environment:

"I cannot deceive you. The entire system is wrong. It is too early to speak about the environment. The system needs to be adjusted first. Then I can start thinking

³⁶ The researcher preferred not to mention the expert's name, not to offend him by the publication of this speech.

about the environment. But today you are thinking about the environment while the system is already corrupted?!" (Ac-G-03).

Here, the expert meant it is required to reform the system before considering the protection of the environment. It is a common understanding that the protection of the environment requires additional cumbersome costs that could not be borne by the system. However, this understanding is wrong and contrary to the ideas and mechanisms of sustainable development including the IE. These rely on achieving economic savings in conjunction with stopping depletion of resources and environmental protection (Shalaby, 2003b).

It could be concluded that the existence of an overview of the Egyptian society ignores the environment and its protection. This view is caused by several factors ranging between the corruption and the authority abuses in general and towards the environmental laws particularly. This has spoiled the nature of the community in contradiction to its cultural and civilization covenantal towards the environment. The deteriorating economic situation of the country and its reflection on the economic need of the community members have also helped in limiting their attention on improving their living conditions and ignoring what is below; the other inferior things. This takes place especially in the case of a prevailing concept that environmental protection is a disabling and financially exhausting matter. This is to suggest a major reason behind the endemic culture of lack of concern for the environment. The next section discusses and interprets the effect of the State's economic and developmental situation on the deployment of such a culture.

7.5.1.2. *Why does this perception exist?*

Egypt has lived before the revolution - which did not bear its fruits yet - a period of intellectual concern for the future under pitch-black conditions with no hope of changing them. The economic situation and living conditions of the country have reached the rock bottom. There were high rates of poverty and unemployment as well as rampant corruption, social injustice, erosion of the social structures and deterioration of living standards of the lowest income strata of the society (Ezz-Edeen, 2011). In such a situation and by knowing the low environmental awareness, which we discussed in the earlier sections, the interest of the Egyptian society was limited in searching for a source of living (Al-Wali, 2009). In order to achieve it, anything delaying achieving this target was ignored. Voluntary work has been ignored in general and in particular volunteering for protection of the environment. In such economic conditions experienced by Egypt; rich classes have become devoted to manage their money while the poor resorted to work as long as possible to improve the living conditions (Eibeed, 2009). What is valid for the society was also valid for the State

institutions. It has detected in the previous chapter how the marginalization of the environmental dimension and the role of environmental bodies, was made to avoid any disruption of the speed with which the IDA wanted to implement industrial projects for media show.

Starting with the State and its problems, Dr. Farouk Al-Baz, Director of the Center for Remote Sensing at Boston University, through his wide scientific and practical experience³⁷, proposed a national project named “Desert Development Corridor”. This proposal would offer several opportunities in around 2,000 km strip of the Western Desert for the development of industry, new communities, tourism, agriculture, and trade. He gave a clear statement about the current situation of development of Egypt and explained why the project has not been implemented, saying:

“For whatever reasons, the Government of Egypt was unable or unwilling to pursue the project, when I first proposed it 20 years ago. Because the country is presently facing insurmountable problems, the proposal is resubmitted for consideration by the private sector – local, Arab and international investors” (Al-Baz, 2010).

From Dr. El-Baz’s statement using the word "unwilling" in the interpretation of the cause which has prevented the Egyptian government from implementing the project over twenty years, it is plausibly understood that the former regime was rejecting the project without logical reasons. Also, this nature and way of careless dealing with the serious projects is what has led the country, as described by El-Baz, to the suffering of insoluble problems. This is the reality of the situation experienced by Egypt in the status quo. If this is the general situation of the country, by focusing on the industry being the most development sectors polluting the environment, it did not differ much from the previous. It is part of that whole. Ac-55 emphasized this seeing that what is in Egypt is not to be considered as industrial development since the concept was lacking. He said:

We are here talking about IZs not industrial development. The development issue is falling in Egypt. Thus the result is: You are not talking about sustainable development or local development. You are not discussing anything of that. You are just establishing IZs." (Ac-55).

Ac-G-03 explained this, saying that what is occurring in Egypt is real estate investment not industrial development. He explained this in detail, saying:

The industrial investor is the serious one making real development. He/she imports machines, brings machines, raw materials, and sophisticated means of

³⁷ Dr. Farouk Al-Baz is director of the Center for Remote Sensing at Boston University. A geologist, veteran of the Apollo Program, and Science Advisor to the late President Anwar Sadat of Egypt, he is a member of the National Academy of Engineering.

transport. He employs workers. But what are they doing now? They seize lands and keep them until their price increases. Then they sell them. What is the evidence on that? ... What is the need for having housing inside the IZ? [Referring to the IPs of the industrial developers] They want to diversify their real estate. They want to have industrial land along with residential units and so and so ... This is real estate. It is a very complicated issue with so many details. Finally, the conclusion is that on the ground there is nothing called industrial development. (Ac-G-03)

Therefore, the missing seriousness of the investors and the absence of a binding system for them to achieve real development, lead to the conversion of the establishment of IZs to real estate investment. The State loses the development expected from this sector. It does not stop at this point, but several IZs that huge budgets were spent in providing their utilities and that consumed a considerable sum of the State budget, they do not work (En-65). Many of these areas, which are spread in Egypt, for example, contain a drainage system connected to a sewage treatment station where the station building is established but without mechanical works. It is not free of corruption, which took advantage of the State budget in order to profit from it without achieving development (Ac-G-03). In addition to the above, the operating areas suffer from many problems - some of which are discussed in the previous chapters - have made their system dysfunctional unable to give. In light of these problems the level of concern for the environment has inclined. Its protection was considered as a drag or disruption that should be bypassed for the sake of a more important issue. In this context, En-G-52 denounced the investors' opposition to the long time of decision making by the EEAA regarding the EIAs despite that it should not exceed thirty days in accordance with the law. She added saying:

The time required for the EEAA to reply used to be within 60 days. In the new law they are 30 days now and the investor still thinks it is time wasting.... A study of this type could take a whole year in the developed world. So, we need to respect the environment. However, they do not understand and they do not care about this. (En-G-52)

Therefore, if it were not for what has settled in the mind of investors from indifference and lack of concern for the environment and its protection, they would not have considered the thirty days for an important study such as the EIA, a disruption to the procedures and time. Also, if this can be justified as a matter of the investors being often keen to achieve financial gains more than anything else; it is unacceptable that the lack of attention to the environment and considering its protection a block for the development comes from responsible leaders within the institutional framework for the production of the IZs. En-G-60, board member of

FSEEDIZ³⁸, a fund which was established recently to repair things in the IZs that have been funded but did not work yet, denounced this. He talked about an experience out of many he experienced by virtue of his contact with the planning decision-making circuits within the planning framework. He said:

When they started working in Upper Egypt. I told them at the board of the FSIDES to take care as they started working, there will be cement industries, and there are requests from abroad and so and so... If you please we want to put something like the strategic EIA for the industry in Upper Egypt. We need it for the environmental pollution especially as we do not have drainage outlets. Every factory will finally throw wastes in the Nile river. They told me please do not put obstacles in the way! I mean, they wanted to tell me to keep away. This is the mentality taking decisions. This is a disaster. (En-G-60)

The mentality leads to the disaster stated by En-G-60 is that failure to address environmental issues in order to avoid disabling the development process. This is the prevailing mentality for specialists in the industrial sector governs the IZs planning process and even for the experts concerned with guiding them in the urban planning. On a confirmation on the experts' side, a well-known expert, who is close to the planning industrial decision-making circles³⁹, his view on the environment and its protection matches the previous case. He said "You are a specialist in the environment. Which environment do you want me to consider while I am unable to produce, provide salaries for the workers or to export?" Though the logic behind this concept could be understood from an economic point of view in a previous time, it is not accepted now with new ideas and concepts of SD and IE achieving economic savings while protecting the environment (Shalaby, 2003b), see Chapter (3). Such environmental concepts are still away from the real practice of planning for the Egyptian IZs.

It could be concluded that the failure to protect the environment in Egypt is a result of many factors. From one side, there are the deterioration of the general situation of the country specifically economically, and the accumulation of knowledge in the community; individuals and institutions; expressed in that the protection of the environment needs budgets for their implementation. On the other, there is a lack of environmental awareness among officials and experts in the State institutions regarding sustainable development and its modern mechanisms and what they offer from solutions to achieve economic savings along with protecting the environment. All of these factors produced a culture in the society in general and for the dealers within the planning process framework for IZs in particular, that environmental protection is a heavy burden ignored by everyone. In the best cases, it is

³⁸ The Fund for Supporting the Establishment, Extending public utilities and Development of IZs (FSEEDIZ), See Appendix (VI) for full details.

³⁹ The name and capacity (ability) are withheld to avoid harm to the expert.

placed last on the list of priorities. This culture has led to the disregard of environmental considerations in the development projects, causing serious damage to the natural environment.

7.5.2. Environmental NGOs: individual initiatives and ignorance by the State

This section reviews the role played by environmental NGOs in Egypt, the limits and dimensions of this role and the various factors that influenced its composition. In light of the culture of lack of concern for the environmental protection and with the political marginalization of the will and role of the civil society, this culture has helped in deepening this marginalization towards the environmental NGOs, whether from the community or from the institutional framework of the State. It is even from the environmental agencies themselves. Therefore, it is found that the role of the environmental NGOs was limited to increasing the environmental awareness of the community or in simple civil works which are in their entirety outside the scope of participation in decision-making or participating in the environmental assessment of projects. There are many factors that may have affected this role. They can be summarized in the ignorance by the authority to the civil society via multiple ways. The legislation imbalance, shackling the judiciary, corruption, bureaucracy of the institutional framework, stopping the governmental financial support and curtailing the civil one, were all the previous authority's means to extend its control over the civil society.

7.5.2.1. Individual initiatives away from decision making

Despite the factors mentioned previously that worked on marginalizing the role of the civil society and ignoring the environment and its protection, the voluntary work in the Egyptian society has grown recently. However, the individual nature predominated as well as the lack of proper organization and adequate study of the dimensions required by this work (Al-Wali, 2009). The vast majority of the environmental NGOs have targeted increasing citizen environmental awareness and preservation of the environment activities. A group of NGOs have led good initiatives in addressing a number of issues concerning the preservation of the environment (Kandil, 2005). NGO-30 agreed with this last argument. She illustrated a number of models, saying:

The NGOs concerned with the environment have a strong and effective role in preventing many of the projects adversely affecting the environment. There are many cases such as that of Adel Abu Zahra in Alexandria and preventing the drainage into the sea. Also, there is the subject of Agrium and changing the location of the factory after the intervention of the environmental civil authorities forcing the State to present the project again [after the approval of the EEAA on the project] on academic research institutions [mainly the Institute of

Environmental Studies where she works]. Then the Institute rejected it. So, the project was moved to another location. (NGO-30)

As understood from the previous statement, the situation of preventing the drainage is for an already running project. In addition, the local community did not know about the Agrium plant until the time of the announcement of its implementation after the completion of the planning stage and appropriations. This is what sought the State, after community objections, to the re-evaluation of the EIAs again. Therefore, these projects and others addressed by NGOs through their leadership of the community to press for non-implementation of these projects, are all attempts that took place at the time of launching the projects or, at best, at the time of their implementation announcement. Thus, NGOs do not have the opportunity to participate neither in the planning process in general nor in the stages of the environmental assessment process as it is supposed (Badr and Alsunbati, 2008). NGO-34, the chairman of an NGO operating in the environmental issue, also confirmed, through his experience and inadvertent contact with the EEAA and local administrations, on that the principle of participation of civil society is treated with ignorance by the Government. According to him, the reality of what's happening is that the community is surprised by the projects implemented in front of them. Therefore, it was not accessible for the vast majority of NGOs except to directing their activities to raise awareness of the environment or in the landscaping and similar field work which does not fall within the decision-making process. While other NGOs, like ours, were specialized, in addition to the previous works, in resolving the relationship between the factories owners and the EEAA regarding the adjustment of the positions of the producing factories according to the environmental laws (NGO-34).

We conclude from the foregoing that the role of environmental NGOs is predominantly of individual nature. It is limited to environmental education and environmental civil work. Also, this role is completely outside the framework of the planning process in general or the environmental assessment process more specifically⁴⁰. The Government tended to ignore the civil society and environmental NGOs in decision-making. There are several factors that produced and facilitated this to happen. They could be addressed in the next part.

7.5.2.2. Ignoring the environmental NGOs' role: the governing factors

Behind this ignorance towards the civil society in general and environmental protection NGOs in particular, were a set of factors. These factors with their different genres originate

⁴⁰ As well as what has been discussed from evidences, it is worth noting that the researcher has compiled a list of names and contact details of registered environmental associations in Egypt. He reviewed the work available on the Internet. He performed field visits to another group of them. Through this, he recognized the work of these associations, so, he could conclude what has been reached in this paragraph.

from the State: restriction using the legislative legal framework, limiting private funding, preventing governmental funding and finally bureaucracy and corruption.

First: ignorance and restriction using the legislative/legal framework of the State:

Many people in Egypt, including Ac-55, see that the civil society is "a fanfare without real production" because it is forbidden to exercise its job and role. Despite their attempts, but the result on the ground almost does not exist (Ac-55). On the hand closer to the environment, NGO-34, Head of one of the Environmental NGOs, confirmed on the government neglect of their involvement in the hearings to express their opinion on projects, drafting laws or things like that. In his response to a question about if the Ministry of Environment has called for environmental NGOs to listen to their opinions with regard to the amendment of the environment law for the year 2009. He generally denied this and said: "Unfortunately not... The Ministry in general does not send to anyone... This is despite I'm there all the time in the Ministry and we are one of the most contacted NGOs to them (NGO-34). Ac-55 added on the outcome of the view reached by NGO-34 that the government is taking the means and dodges to achieve hearing and community participation as a procedure not as a real function. This is based to dump the legislation from a binding detailed framework (Ac-55). Then he added:

The problem is that the legislative framework did not state how to make these hearing sessions. You state that the civil society is able to do so and so, but actually you are strangling and chaining it. Thus it will not be able to act

In an interpretation of the restraint exercised against civil society, Ac-55 saw that the two sides, through which the civil society can express their opinion and participate actively in the resolution, are the legislative and the judicial authorities, while they are popularly disabled. The legislative authority is corrupted and does not reflect the community. Its loyalty is to those who gave them power. Therefore, it will express them and not the community. The judicial power is restricted by the executive authority as well as the imbalance of the legislations failing its strength⁴¹ (Ac-55). Projecting more on the legislation governing the work of the NGOs and confirming what Ac-55 said, Dr. Essam Obeid sees that with regard to the NGOs specifically, they are subject to numerous legislations, whether such legislation include or concern the NGOs or what is related to the work of the NGOs themselves. This leads to stylistic and functional fragmentation in many cases. That is in addition to the large number of amendments and changes in such legislations (Eibeed, 2009) governed by corrupt legislative power. In front of disabling the judiciary and the legislature, the only solution to the civil society available is civil disobedience. Here, the heavy security stick of the authority

⁴¹ These factors are discussed in Section (7.3).

interferes and scatters by force. With such obstacles, the civil society has missed its role in the formulation of the desired situation and in the participation in decision-making. For this, the civil society as a whole preferred to withdraw from the equation. This is confirmed by the low overall voter turnout in the elections that used not to exceed 3 to 4%. This is in addition to the lack of its role in popular monitoring and follow-up of reform, because in order to play this role it must be provided with information allowing them to do so while that is not available. There is no law for the circulation of information and transparency is not available⁴². Actually what is applied is the confidentiality of information under the laws criminalizing materials disclosure. (Ac-55)

Second: Limiting funding under the prevention of governmental financial support

On another complementary hand, preventing funding is of the means of restriction, practiced against the civil society. Perhaps it is one of the most important problems facing the social service and hampering the work of NGOs and institutions working in this field. Based on that funding depends on the NGOs own resources or governmental support (Eibeed, 2009); the government has ignored all the NGOs, including the environmental ones and left them begging from abroad (Arafa, 2009). NGO-34 was suffering like many of the environmental NGOs from lack of funding from the governmental entities and from the environmental bodies. He considered this as the most important constraint preventing them from performing their role as it is supposed to be (NGO-34). He condemned and showed surprise from the EEAA action where instead of supporting them financially, it benefits financially from their work, saying:

When making a conference or anything ... We ask for fund from the Ministry of Environment to make the conference. Instead of that they rent us the hall holding the conference! (NGO-34)

In addition to the benefit of the government from the NGOs work instead of supporting them, the legislation to ensure the regime's control over the civil society is almost preventing the donation for the NGOs. The rich who want to donate are trapped by censorship tools and laws that criminalize donations to the NGOs without prior official permission (Al-Wali, 2009).

Third: Bureaucracy, corruption and hindering the efforts of civil society:

In addition to the above factors influencing the marginalization of the civil society will and role; factors like nepotism, corruption and bureaucracy are factors that helped weaken and marginalize the role of the NGOs in general and the environmental ones in particular (NGO-30). There are many cases in this regard and are circulated in the newspapers in Egypt, even

⁴² The lack of transparency is discussed in Section (7.6).

before the revolution. We can start with an example combining between the marginalization of the role of the community and involving environmental destruction where the corruption of the Ministry of the Environment itself contributed in it, where it is supposed to be the keenest body on protecting the environment. Several newspapers reported in the year 2010 (Yassin, 2010a, Lahona, 2010, SaveEgypt, 2010b) that the head of the EEAA, Dr. Mawaheb Abul Azm had consented on the establishment of a power station at the north of Giza city. This is despite her visa on the final report of the EIA study for the project which objected the project and described it as devastating. In spite of that and her full knowledge of its dangers, the head of the EEAA - close to the ousted president's wife - has demanded the minister to approve the establishment of the station. He in turn approved the project. It is worth mentioning here that the objection of the municipalities and the people of the region had been ignored completely by the government despite the Egyptian Electricity Holding Company's requests, the owner of the project, to conduct further consultation and hearing sessions to solicit the people's opinion. However, the unexpected environmental approval had settled it at the expense of the health of more than 70 thousand citizens (SaveEgypt, 2010b). In front of such a flagrant case of environmental and citizens' health destruction by the hands of those supposed to protect them, and even ignoring the request of the project owner for consultation with the public, the question that arises is; what was the action of the local community towards it? Ac-55 answered this question dropping on a similar case which is the case of Agrium plant and how the State dealt with the civil society. He said:

They imposed it regardless of the people. Why? Because the Canadian Ambassador said we have paid \$ 25 million bribes and the one who took the bribes have to deliver. So at the end he delivered. They hit the civil society into the wall [did not care about the civil society] and it was implemented. This is the shape of corruption. If you have a legislative framework followed by a clear institutional framework specifying the role of the civil society, nothing of this would have happened. (Ac-55)

Therefore, the State's ignorance of the civil society, and in cases of its objection forcing it on what people hate using various means, was prevalent in the former regime. It is explained in earlier sections of this chapter that in the cases where the civil society has prosecuted the polluting projects - as in the case of Agrium plant - and because of the legislative imbalance, the judiciary was handcuffed and could not redress it. Moreover, if the civil society demonstrated or protested in a stepping up, the turn of the security stick comes to intervene (Ac-55).

NGO-34, Head of one of the Environmental NGOs, had plenty of experience with the municipalities, the EEAA and other ministries in similar projects taken over by corruption and bureaucracy completely disrupting their efforts that continued for consecutive months in various attempts. In one of the attempts, after painstaking effort with the various departments, that lasted for months, and after obtaining all necessary visas, including the governor's visa personally to extend the NGO with a 1000 trees to beautify a neighbourhood, he was surprised during the delivery with seedlings that are not suitable for planting on public roads. NGO-34 denounced the corruption and bureaucracy in the State apparatus and said:

We put the 1.000 seedlings in the incubator. I appointed someone to be responsible for them. After that we found that the whole implant has spoiled. Some died and some became yellow. I said I will not do anymore work again... Unfortunately there are people pushing you forward and others pushing backward. There are people who encourage and others who cause terrible frustration (NGO-34).

Therefore, the State was not only restricted to ignoring the civil society, but even the individual attempts by some NGOs some of which have been disabled by bureaucracy and corruption, and those behind these attempts were frustrated.

It could be concluded that in light of a culture of indifference towards the environment along with political marginalization exercised by the authority against the civil society, the role of NGOs interested in environmental issues has been weakened and marginalized. So, an individual unorganized character dominated the role of NGOs and it was limited in increasing environmental awareness of the community or in the inexpensive civil works. This role appeared as well in civil society leadership in the face of some projects that harm the environment which surprise them by their implementation or by announcing their implementation without the civil society knowledge. The environmental NGOs have been excluded from the mechanisms of participation in decision-making or even the participation in the environmental assessment of projects. There were many factors that may have shaped this role where they all return to the ignorance / limitation by the previous authority to the civil society by multiple means. They can be summed up in the following: ignoring the environmental NGOs in the hearing sessions, the legislation disruption and not obliging the government on participation with others, shackling the judiciary, corruption, bureaucracy, lack of transparency in the institutional framework, and stopping governmental financial support and limiting the civil one. All of these factors were used by the previous authority to extend its control over the civil society and restrict it.

7.6. Corruption and Lack of transparency⁴³

Corruption became extremely rampant in the era of former president and he succeeded in his approach making it a prominent feature of his time. This regime encompassed the largest gang in the human history where there has never been stealing of land, people, money and wealth in such a miserable way before, not even in the eras of occupation (SaveEgypt, 2010a). It was not strange that people revolted against this regime and placed its symbols in prisons on trial on charges of corruption where some of them have been sentenced and some of them waiting in jail led by the ousted president (EPP, 2010b, EPP, 2010a). There were many manifestations and forms of corruption, but the most serious is the direction of decision-making to serve the political and utilitarian goals of those in charge of power and their followers (Ju-48). The rampant corruption is due to several factors, starting with poor transparency and lack of disclosure of information of the State and its work (EIU, 2010). Lacking transparency enabled government officials and senior staff to break the law and breach career obligations in order to achieve functional graft without having to disclose the information against them (Elmasry, 2010, Yassin, 2010b, Mansour, 2010). The corruption was also increased by lacking effective societal accountability (Ac-55, Ahram-Digital, 2011). Furthermore, low income level of State staff employees that do not guarantee a dignified life for them, has facilitated the success of the authority in achieving its goal to choose officials according to the loyalty not for the efficiency. Last but not least, from the most important factors that also helped in the spread of corruption and to take an organized approach is; the former regime did not activate the anti-corruption laws as well as the international conventions and treaties signed by Egypt for the same purpose (Ahram-Digital, 2011). Furthermore, the State was not only just withholding information, but it has also legalized its confidentiality to protect the totalitarian regime and its interests (Ac-55). This made the executive authority not subject to oversight or real and effective accountability (AnsarPortsaid, 2010).

In this context and as part of this whole, this section discusses corruption in the State apparatus and its impact on decision-guidance with respect to the environmental issue, and especially to disable the only tool to control the planning process for IZs environmentally which is the EIAs of the projects. Then it addresses the lack of transparency within the planning system as one of the most important factors that facilitated the spread of corruption.

⁴³ The rest of this chapter sections, as well as the previous chapter and also Appendix (XV), discuss the corruption and lack of transparency and their effects from the perspective of each section individually. Therefore, this section avoids repetition of discussion of these effects and focuses only on the impact of corruption and lack of transparency on the environment and tools to protect it.

7.6.1. Corruption disrupting the EIAs

The previous introduction indicates the large spread of corruption with multiple images in the State apparatus. In a projection on the environment regard; it is found that the Egyptian environment is not spared from corruption. In fact, the most prominent picture was in the corruption of influential people marginalizing the environmental bodies in their limited role stated by the laws. Several attempts of wasting and polluting the environment and bypassing the role of environmental agencies such as creating dozens of major projects without any EIAs or their contravention, all of this was triggered by superior orders of the previous regime that violated the environmental laws and the EEAA decisions (Hafez, 2011). It does not stop at violating the environmental agencies decisions but more importantly, as examples already indicated previously, the environmental agencies who worked to harm the environment. There are examples of major projects approved by the Ministry of Environment itself despite rejecting their EIAs (SaveEgypt, 2010b), see Section (7.5.2.2). That was in compliance with and loyalty of the leaders of the environmental agencies to the higher authority which appointed them without efficiency and left them in their posts despite exceeding the legal age (Adel, 2011) leaving a state of anger and discontent within these agencies (Ali, 2011). Perhaps the example of Agrium factory was the best evidence of the above where, after the rejection of the EEAA to the EIA, the refusal has been changed to an approval at the second time. Then it has been presented again, after popular pressure, to the Institute of Environmental Studies at the University of Ain Shams and it was rejected. However, the government has implemented it in another location. This is confirmed by En-G-32, NGO-30, and Ac-55. Moreover, Ac-55 returned the approval of the environmental bodies in the second time to the corruption, where he said: "This is what happened. The Ministry of Environment accepted the project after its refusal at first, but why? Because it was far from bribes. Then when they received their share, they agreed." (Ac-55).

From within the EEAA; En-G-16, the Director of Legal Department, spoke about not taking legal action from the Department of Environmental Inspection against the owners of big factories of influence, and stressing that such cases quickly gets the environmental approval unlike the normal ones. In the normal cases, the Inspection Department works hard to prove irregularities. En-G-16 said in this regard:

Such heavy factories owned by important people do not come to me at all for committing any violations. They apply on a Saturday and get an approval on a Thursday. In contrary, when a restaurant applies, the Inspection [Department] ask for completion and keep saying: the chimney is crooked or not complying with

the specifications, the form was not clear or you have sent it to the district instead of the Secretary General, etc. (En-G-16)

Such way of dealing confirms the spread of corruption in the management of environment and the lack of justice among the projects as we discussed earlier. This led Ju-48, through his judicial experience, to launch a generic expression describing the difficulty of applying the law on the people of influence and power in such an environment that is governed by corruption. He said:

Environmental crimes are not seized, if seized the punishment will not be signed, and if signed the punishment will not be implemented. There are defects in the environmental law and defects in the devices implementing and following up environmental affairs. (Ju-48)

Therefore, and based on the above and what is discussed in previous chapters; though the legal and institutional arrangements⁴⁴ that Egypt had made to protect the environment (declaration of environmental law, the announcement of many natural reserves and the formation of a ministry of environment and so on etc.) all of this could be considered procedures without real function not reflecting a reality to preserve the environment in Egypt (Barakat, 2011). The process of environmental assessment as the only tool for the environmental agencies to ensure that the planning process for IZs is on the way for environmental sustainability is of no value. This is because the process is controlled by corruption and cronyism, not only of the people in power, but even of the State apparatus itself and with the assistance and the implementation of the environmental bodies mandated by law to protect the environment. All of this puts us in front of the reality of unsustainable environmental decision confirming the un-sustainability of the process of IZs planning, which means lack of sustainability of the product.

7.6.2. Lacking transparency is to hinder the application of IE

Lack of transparency is one of the most important factors, as indicated previously, that have helped creating the appropriate atmosphere for the growth of corruption in the institutional framework of the State. The planning process of IZs is part of this framework. It is reasonable that the characteristics of the entire framework reflect to all its constituents and parts as long as the same context exists under the auspices of the totalitarian regime lacking systematic study in decision-making process making it chaotic, see Section (7-4). In light of this, lack of transparency did not only help protect the corruption, but also prevented planning for the future leading to the disappearance of good investment and development context. The planning process of IZs is one of these contexts, because of lacking transparency, it lost

⁴⁴ These arrangements are discussed in detail in Chapter (2), Sections (2.3.3.2 and 2.3.4).

contact with sustainability and its mechanisms, on top of which; the IE. This section discusses the impact of lacking transparency on disabling the application of SD and IE.

Dr. Ahmed Al-Ghandour, the Egyptian economic expert and Dean of the deans of the Faculty of Economics and Political Science, confirmed on the relationship between the totalitarian regime and lack of transparency, and its effect on impeding planning for the future, where he said:

"The system in which we live is a totalitarian regime. Power is concentrated in the hands of one person. He decides everything and anything. I do not know what will happen tomorrow?! It is a fuzzy situation. How can I scientifically predict something and plan for it?" (Adem, 2010)

Engineer Mohie Edeen Zaki, Chairman of the Board of Directors of the Iron Alloys Company, agreed on that lack of transparency surrounding decision taking, the sudden way it takes place with, and being not based on prior planning; encapsulates the development process with chaos. This leads to a state of confusion and anxiety hitting those affected and they lose confidence in the investment atmosphere, which disrupts the production process (Khidr, 2010). In this context, Ac-G-11 - Senior lecturer of environmental planning, consultant of the GOPP Head and the President of the General Secretariat of New Cities in the GOPP - explained the importance of transparency in participation and dialogue adopted by the strategic assessments studies in introducing decisions, the way of their production and participating in them, to the citizens. This is completely absent from the planning process in Egypt. He said:

Participation and dialogue are of the most important tools of Strategic Assessment through public participation and public hearing... The goal is to keep people knowing what will happen... The Strategic Assessment when quoting transparency means that you know why the decision is taken. It may be for a political, economic or urban goal. However, it is necessary that the goal is clear to all parties, for all parties to meet and look at their interests.... We have nothing of this. People moving to a place could be surprised after two months later by a factory built beside them suddenly. The whole process is failing. (Ac-G-11)

Therefore, and in light of chaotic decision-making because of the absence of transparency; interests conflict and efficiency disappears from the development process. Focusing on the environmental affair, En-65, sustainable development expert, argues that the most important factors behind the chaos of the planning system are the lack of transparency and sudden decision-taking which is not based on study, leading to the inability to extrapolate the future. These are the two things that do not agree with IE or enable it. He then added detailing the above by saying:

Anything in Egypt can be made by anyone and it is right [which means accepted as being correct]. Meanwhile, someone else can do it and it is wrong [rejected for being wrong].... We are living in fog. Can you tell me about a definite way of doing or not doing anything in Egypt?! The food industries were working. Why are they not working now? The cloudiness [lacking transparency and taking decisions suddenly] is the cause. Here in Egypt there is a kind of vibration. It is hard for you to expect or plan anything for the future.... Therefore, we have a problem in planning for something like IE in such a cloudy framework. You do not know how it looks like today or how it will look like tomorrow. This is a big problem.... If you did not enter the IE at the time of planning, will it succeed later? Its probabilities for success are very weak. Planning is the stage where right decisions should be taken. I must study what I will reach, and if I did not reach it I must know what I will do. Finally what will allow me to gather all the people who are feeding on each other, and cooperating with each other [he intended here the planning for industrial symbiosis]? I need to have a plan and transparency. If I do not have a plan I must forget about achieving anything sustainable or like IE. (En-65)

It is understood from En-65's statement that the cloudiness, he meant, surrounding the decision-making with the sudden application of these decisions, do not coincide with the careful systematic planning capable of predicting the future that creates the conditions and appropriate context for the application of IE. In an environment experiencing sudden uncharted change in the activity such as in the Egyptian context, it is very hard to invite a group of industries to be allocated in an IZ in a way qualifying them to take advantage of the wastes of each other, see Chapter (3).

To conclude, lack of transparency and abrupt that dominated the decision-making in the institutional framework of the State under the totalitarian regime in order to protect its corruption, has established for chaos in the planning system. It has prevented the systematic prediction and planning for the future. This context is not sustainable and is disabling for the application of IE.

7.7. Conflicts and lacking coordination

Under the autocratic governance, a culture of conflict between the State bodies and authorities penetrated to gain the satisfaction of the Head of the regime to ensure continuity in position and personal gains. Ac-55 emphasized and expressed this briefly and strongly: "The institutional framework has conflict of powers between different parties. This conflict was motivated by corruption." (Ac-55). With this conflict each body or sector has monopolized decision-making and planning for implementation. Cooperation and coordination between bodies and different sectors disappeared and thus the State work system was weakened. In light of this, this section reviews the nature of conflict between bodies involved in the

production of IZs and the impact of land possession as one of the most important factors leading to this conflict. Away from corruption⁴⁵, as the main factor behind this conflict, hampering the State attempts to improve the planning framework and the allocation of State land, there is also the impact of the legislative framework on weakening the system of coordination between different bodies, in particular within the environmental bodies (En-65). This section works on illustrating the impact of the institutional fragmentation mainly in powers and their distribution in the institutional framework what has deepened the conflict (Ac-G-03, De-G-57). It then discusses the absence of team spirit and cooperation because of the sovereignty of individual interest and the impact on disabling the application of mechanisms such as IE.

7.7.1. Jurisdiction over lands and interest conflict

The mandates on the State territory have varied with different visions of each side and the objectives of this mandate (Alalam-Alyoum, 2011). This diversity has witnessed different limits and scope of influence for each body and lack of a clear definition of the territory under their jurisdiction (El-Wasat, 2010). With the absence of definition and dealing with the mandate from an individual perspective not from the perspective of the public interest, the interests conflicted and struggle occurred (Ahram, 2010). It led to sharp disagreements between the heads of the mandate parties. This disagreement controlled the atmosphere of the meetings determining the competent authority to supervise the territory of the State in the proposed Uniform Code of the State land (Rabie and Raafat, 2010). Ac-G-03 – consultant of the IDA Head, with extensive experience and contact with planning decision-making circles⁴⁶ - argues that this conflict is a logical inherited consequence from the nature and the general system form of the State that is packed with corruption. This system has created a culture that parties' strength is measured by the amount of land they possess and can dispose of. This culture is what has made the actors acquire land without a clear goal or plan for its development. He then added on the mouthpiece of the IDA in its opposition to the cancellation of the military order that have allocated them a number of land pieces as IZs, saying:

“How can the military order be cancelled? No, we need them”. However, they do not have a plan already stating that they need these land plots or anything.... They took them, then what? Nothing happened. Only God knows how they will be developed. The land has only become under the jurisdiction of the IDA. This is considered as power in itself. Now, there is territory under the jurisdiction of the

⁴⁵ This is discussed in detail during the chapter and specifically in Section (7.6.1).

⁴⁶ By virtue of being a consultant to many organizations and ministries, especially the IDA.

armed forces, the police, the tourism development, the communities, the agricultural development and the industrial development authorities. Now all these sides are spreading the country apart ... The target is mandate. This is the important thing on which they are fighting?! (Ac-G-03)

Therefore it could be understood from Ac-G-03's statement that the IDA is like the other bodies in this respect. It works on the acquisition of land without being part of its plans. This confirms that the goal is not as a result of development objectives or public interest as much as it is a desire to extend influence driven by individual interests. Individual interest could be through the allocation of land to influential people in the country to speculate it what achieves benefits for both sides (Ac-55, Ac-G-03). Ac-G-11 - Consultant of the GOPP President and the Head of the Secretariat General for planning new cities in the GOPP – agreed on the existence of the conflict and its nature. He stressed on that the problem lays in that governmental bodies monopolised decision-making and management of the land they possess or projects on these lands. They do so without coordination with other stakeholders and authorities concerned with the proposed projects or the possibilities or capabilities available in the land and how to exploit them. He then added another dimension to the problem that is exacerbated due to the difference of jurisdictions types between the mandate of administration and the mandate of possession. This is becoming increasingly complex in light of the desire of each party to monopolize power. He called it the "clash of mandates" and he cited the following example:

There were areas in the Red Sea Governorate declared as natural reserves. Their mandate is as property of the Tourism Development Authority and being announced as a reserve they became administratively in the mandate of the EEAA. Now if someone wants to build a kiosk, where shall he/she go? When he/she goes to the Tourism officials, they accept it. Then when he/she goes to the EEAA they refuse. Another person wants to build a camp to build an ecolodge. The EEAA approves. As he/she starts building the Tourism officials tell him: "you did not take a license from us. We are the owners of the land. So, you are not allowed to build". This is what takes place in all the authorities. This is because there are no plans, no meetings or coordination. So we are working in lines that do not intersect. (Ac-G-11)

So instead of sectoral planning and coordination in joint projects, there is conflict between the parties for controlling the land. It even reached the extent of the hostility of each body to the works of others and disabling them.

It could be concluded here that; the multiplicity of mandate parties on the land without an appropriate framework, which separates the ranges of powers of each body, side by side with the corruption and individual interests have led to conflict of interests and emerging of a spirit of struggle. Therefore, cooperation disappeared and the bodies within the institutional

framework turned out into isolated islands without cooperation relationships, and if there were any, they are for dispute and disruption. The next section shows how the legislative framework strengthens this state of fragmentation and conflict.

7.7.2. Fragmentation as a problem strengthened by the legislative/institutional framework

There have been some attempts by the former regime to improve coordination mechanisms within the legislative institutional framework governing the planning of the State land uses. The aim was to resolve disputes that arise regarding the mandate of this land where the National Centre for Planning the State Land Use (NCPSLU) has been established⁴⁷. Moreover, another attempt was by issuing a unified law for the allocation of the State land placing the supervision of this matter to one of the authorities (Rabie and Raafat, 2010). However, these attempts until the Egyptian revolution in the 25th of January 2011 have failed. This was because; first the nature of the prevailing conflict within this framework is governed by individual interests not the public one, as discussed in the previous section. This involved the head of the NCPSLU - the new entity - in the conflict rather than investing the centre function in resolving the existing conflicts and disputes (Ahram, 2010). Second, the legislative framework because of its large number of legislations and conflicts of responsibilities and roles⁴⁸ has helped increase the conflict instead of coordination and cooperation between different bodies. This happened first, by failing to put the mechanisms committing the bodies to coordinate with each other. In addition, it did not place practical mechanisms that prevent growing role of one body over the others' roles as what happened in weakening the role of the environmental agencies. Secondly, it took place through dismantling and distributing the powers between the bodies in a way deepening the conflict. Ac-55 agreed with this understanding dropping on the situation of the IZs, both in existing cities or new cities, in their different subordination than that of the residential areas, where he said:

The legislative framework does not relate the residential area to the IZ ... The IZs follow the IDA, while the residential areas follow the NUCA⁴⁹ or the GOPP. They do not sit together to coordinate. From where can I get the affordability? The mortgage authority has no relationship with both of them. It exists in a separate island alone. They all live in separate islands without any coordination mechanism between them. (Ac-55)

⁴⁷ This centre; how it was established and its powers are discussed in details Appendix (VI), Section (VI.7).

⁴⁸ This was discussed within the chaos of legislation in Section (7.3.1).

⁴⁹ New Urban Communities Authorities

Therefore, despite the presence of both industrial and residential areas within the same city and within the same administrative borders, but the administrative mandate of the IZs is for the IDA, while the residential administrative jurisdiction is for the NUCA in the new cities or the GOPP within the existing cities. Thus, this represents fragmentation of powers leading to a conflict which grows in the state of struggle and lack of coordination mechanisms. Ac-G-03 stressed as well on the fragmentation of powers projecting also on the industry describing it as "you can say that the industry blood is sporadic" (Ac-G-03). The IDA does not have, within the scope of its powers, except the land, while the rest of the ingredients, and especially the utilities, scatter each in a different direction and authority (Ac-G-03). Therefore, Ac-G-03 argued that in the context of fragmentation of authority characterizing the institutional framework, the IDA would not be able to implement anything unless all its ingredients lay within the scope of its powers. He considered that the situation was better for the IZs before the establishment of the IDA withdrawing land development powers⁵⁰ from the new cities devices of the NUCA where he said: "the basic problem is that you are only able to do what is under your hands. It means the case was better when the IZs belonged to the NUCA, at least you guaranteed the utilities." (Ac-G-03). Moreover, regarding the new cities; (De-G-57) agreed with Ac-G-03, because the NUCA enjoyed the full power which qualified it to studying, planning, and implementing in accordance with the plans timelines. At the same time, she considered that the current situation of the city councils, administrating new cities, hold fragmented responsibilities that do not guarantee the implementation of plans, which negatively affects the development in new cities. She referred her opinion to that poor coordination between different bodies is a fact making it difficult to share or integrate, powers or roles. Accordingly, having full powers for an authority is better to ensure the implementation of planned development (De-G-57).

7.7.3. Impact of the absence of team spirit on the application of industrial ecology

As described in the previous sections, there are powers fragmentation and conflict culture dominating the relationships between different bodies instead of coordination and cooperation. This state of fragmentation provides a disabling context for SD and IE. According to Ac-G-03, the absence of team spirit driven by ego and desires of each party to refer success to itself, is an important factor helping in disabling IE. This is also confirmed by En-65, a sustainable development expert. He added that it is due to the complexity of operations like IE and being related to many parties. This requires awareness, a

⁵⁰ See Appendix (VI), Section (VI.2) for full details.

comprehensive understanding of the importance of coordination and cooperation between different parties which is not available in the Egyptian case because of the absence of team spirit. He said in this regard:

If you are talking about IE, then you are talking about several parties. The situation is complicated and difficult in Egypt. Why? We are the world champions in squash but we are very weak in football. You can achieve so much individually. However, it is very difficult to coordinate between many people here in Egypt, and to have all of them convinced that they will achieve one goal. (En-65)

To conclude, the nature of autocracy in Egypt before the revolution had created a culture of conflict between the authorities and various bodies driven by individual interests and corruption. Each agency has worked on the acquisition of land and monopolised decision making process regarding them in light of the absence of cooperation and coordination with the other agencies. The factors helping the lack of coordination have varied. They start with corruption that thwarted the few State attempts to resolve the dispute over the mandate of land. The legislative framework also had an impact on weakening the system of coordination between different bodies. It also helped in creating powers fragmentation within the institutional framework what deepened the conflict. In this situation of lack of public interest under the dominance of the spirit of conflict instead of team spirit and cooperation, the potential application of sustainable development and in particular the mechanisms to achieve IE diminish in the Egyptian society. That is because it depends in the first place on cooperation between various parties inside and in the vicinity of an IZ.

7.8. Conclusion

If Egypt has been formally active for years in protecting the environment by many means, discussed in details in Chapter (2), Sections (2.3.3.2 and 2.3.4), all of this has been no more than mere ink on paper not reflecting a reality to preserve the environment in Egypt. Actually, the IZs were established regardless the environmental considerations causing serious damage to the natural environment. By analyzing the process by which these IZs were planned it is found, as proved in this chapter and the previous two chapters, that the process has been chaotic and unsustainable. There have been several and interrelated factors governing this process in a complex and interactive circle. Though determining the first point to start with in this interactive circle of factors deciding on the most influencing factor was complicated, the apparent tyranny of the ‘authoritarian regime’ supported by weak societal will, is to be plausibly considered as a key factor in the formulation of the others.

This chapter justifies these factors and how they relate to and affect each other in details through the previous six sections. This section, therefore, concludes how and why the different factors have interacted with each in weakening and marginalising the environmental role and its tools. Therefore, it justifies how the context shaping the planning process of the Egyptian IZs is disabling for the implementation of IE.

I. Indifference with the environment: how and why

The autocratic regime as experienced by Egypt for long years has relied on its security arm that worked to insure the interests of the ruling class along with the interests of its followers. This regime has depended on legislating and establishing for organized chaos that affected all frames of the State and all walks of life in order to be able to continue achieving its objectives. This chaos has weakened the entire State work system. It has replaced the system of values of work, construction and moral values with other falling values such as seizing the opportunities, corruption, nepotism and flattery. This has led to weakening the decision-making levels, where the decision for its makers was associated with the satisfaction of their superiors. Thus, efficiency has been absent and hence Egypt has largely suffered from downturn in all fields of life where the economic downturn has become on top. Therefore, economic problems were put on the top in the culture and perception of all sects of the Egyptian society especially those in charge. In addition, corruption and abuses of the authority in general and towards the environmental laws particularly have spoiled the nature of the community. The Egyptian society, therefore, despite its ancient civilization and culture loving and protecting the environment, treated the environment with a state of indifference and considered its protection as heavy burden. The effect of such emerging state was maximised by the lack of environmental awareness among officials and experts regarding sustainable development and its modern mechanisms that offer solutions to achieve economic savings along with the environmental protection. This indifference state along with the implications of the authoritarian regime generated many other factors, as shown in the next points, that have weakened the environmental bodies' role and their tools. This therefore made these bodies unable to protect the environment in general or intervene to insure the sustainability of the planning process of the IZs in specific.

II. Marginalizing the environmental role

With the central autocracy governing system, the corrupt executive authority dominated over the legislative and judiciary authorities. From the legislative side, this domination produced chaotic and imbalanced legislative framework. It was a result of the monopoly of legislation

by corrupt legislators who directed the process to serve their own interests and the interests of those who appointed them in such positions. They took the process away from the universally recognized democratic mechanisms and systematic study. This process produced legislations that affected negatively the respect of the environment. Limiting the role of the environmental bodies, producing imbalanced sanctions for environmental violations and setting up unscientific regulatory framework to govern the planning process were all products of this process. These products worked as important factors that shaped the planning process of the Egyptian IZs away from sustainability as follows:

- Marginalizing the EEAA role:

The focus of the EEAA role was to monitor the impacts of production and punish the offenders. There was no real act in order to limit these effects initially from preparation and planning. In this concern, the law only mentioned that the EEAA provides specialised technical support and advice when needed. The EEAA can also develop policies and general environmental programs that are legally non-binding to other sectors. The law, regarding this, lacks committing various bodies with coordination and cooperation with the EEAA regarding the full steps of the planning process. On the other hand, it obligates the EEAA to coordinate with all other bodies. This, as a whole, refers to obvious weakness of the EEAA making it difficult for the EEAA to achieve the supposed role in a correct way. This has been negatively reflected on the planning process in general causing lack of sustainability.

- Unscientific regulatory framework governing the planning process:

The nature of the former regime lacking the political will to achieve progress, along with the economic downturn, have caused the ignorance of science and its expenditure. The education system therefore has been weakened and a culture of disrespect of science and those in charge of it has spread. In light of these factors, planning education has been weakened where the framework of the planning process has become infected by chaos missing the respect of the professional and scientific knowledge. Scientifically, the framework of the planning process has become chaotic lacking methodologies, integrated planning, and standards based on a knowledgeable base. Moreover, under the pressure of economic life, the planning teams have dealt passively and without professionalism with projects and with the technical justification for the non-scientific wishes of the decision-makers. In total, the planning framework is found to be away from principles of sustainable development and recent mechanisms for its application where comes on top of which is IE. It is found that traditional planning thoughts adopting separate land use planning have controlled the planning process in a way disabling

for IE for which mixed land use planning is crucial for its application. Furthermore, a thought very related to economic and industrial market demands, and driven also by corruption, has dominated the competent industrial authorities in allocating industrial activities in IZs. Accordingly, accredited schemes that adopt a separate land use planning have been dramatically changed in a chaotic way of industrial activities distribution not only disabling for the application of IE but also the basic environmental ideas like central treatment networks. Organizationally, the planning process lacked an appropriate system for accountability and evaluating the work teams. This helped not only in lacking seriousness and professionalism, but also in choosing work teams on the bases of loyalty and obedience. In this context, the environmental awareness disappeared from studying and analyzing environmental problems in a scientific manner. Thus, solutions that respect the environment disappeared and environmental disruption increased. Consequently, the gap between the planning process and its products and sustainability, increased.

- Weakening the environmental legal tool; the EIAs:

The sanctions system stipulated for the most common environmental crimes are not consistent with the culture and nature of the Egyptian society and, therefore, with the appropriate standards of public and private legal deterrence. Environmental laws, in this frame, did not realize that punishment and reward should be in the context of having the environmental problem related to a moral nature. It is to be related to the citizen's culture and their sense of responsibility towards the environment. For the most common environmental violations, the punishment exceeds the limit. As justice requires from judges not to be a deaf tool in the application of laws, judges spare no effort, in light of what is legally available, to acquit the violators of this unfair penalties. On an opposite side, as for the crimes with severe impacts on the environment, sentences in its maximum level are less than the offense committed or the cost of its treatment where some of these crimes cannot be compensated with money. Here, the injustice occurs and the right and beauty values fall in front of the citizen's eyes. Accordingly, the value of justice was lacked. Therefore, sanctions were faced by a type of indifference from the society what largely weakened the legal deterrence regarding the environmental violations and crimes. This, in total, explains dealing carelessly with the EIAs what have effectively weakened the only tool by which the environmental bodies can intervene to ensure putting the planning process of the IZs on the path towards respecting the environment. Furthermore, corruption and cronyism were preventing the block of some of the serious polluting projects. It was not only by the influential people, but by the

State apparatus itself and even with the assistance and the implementation of the environmental bodies mandated by law to protect the environment. All of this shows the reality of the environmental decision what confirms the un-sustainability of the planning process of the IZs as well as the products of such process.

- Limiting the environmental NGOs' role:

We conclude from the foregoing that in the light of a culture of indifference towards the environment and its protection generated in the community and its institutions, along with political marginalization exercised by the authority against the civil society, the role of NGOs interested in the environmental issue has been weakened and marginalized. So, an individual unorganized character dominated the role of NGOs and it was limited in increasing the environmental awareness of the community or in the inexpensive civil works. This role was also in civil society leadership in the face of some projects that harm the environment which they are surprised by their implementation or by announcing their implementation without the civil society knowledge. The environmental NGOs have been excluded from the mechanisms of participation in decision-making or even the participation in the environmental assessment of projects. There were many factors that have affected this role mainly where the State was involved by variant means to limit the role of the civil society. These means, if abstracted, are as follows: ignoring the environmental NGOs in the hearing sessions, the legislation disruption and not obliging the government for participation, shackling the judiciary, corruption, bureaucracy, lack of transparency in the institutional framework, and stopping governmental financial support and limiting the civil one. All of these factors were used by the governing authority to extend its control over the civil society and restrict it. Therefore, a context that lacks public participation is highly disabling for sustainable development and industrial ecology.

III. The current framework accommodates neither the environmental considerations nor the IE:

From the judiciary side, the executive authority intervened in judiciary affairs with several means: keeping the judicial inspection under the mandate of the executive authority to insure directing judges to what benefits the regime, choosing specific judges for certain cases, assignment of judges to work in governmental bodies, controlling the bulk of the judges' salaries, and finally intervening in the implementation of sentences. The people therefore felt that law is hanging over their heads not protecting them what led strongly to shaking the prestige of the law. Therefore, they antagonized the law and circumvented it what helped in

spreading corruption. This generality was applied in detail on the environmental regard, as despite the abundance of environmental laws, the corruption disrupted them in several ways such as:

- Applying sentences on weak people while strong and people in power were pardoned.
- Blocking the application of the law in many environmental cases by judges, knowing that the irregularities were edited against the weak people not because they were violators as much as they did not respond to the records editors requesting bribes not to edit these records.
- It was common to circumvent the judiciary interference against polluting sources by exploiting the administrative corruption to legalize these sources situations.

All of this has resulted in the absence of prompt justice what led to a mistrust of the citizens in the ruling authority first and secondly in each other. As a result, and to avoid problems lead to litigation, the cooperative relations disappeared between dealers financially in general and between partners of the IZs particularly. Therefore, the attempts to apply mechanisms of IE such as IS disappeared because of the lack of the necessary environment for cooperation.

From another complementary side, cooperation was excluded from the framework by the nature of the autocracy in Egypt. Before the revolution the previous regime had created a culture of conflict between authorities driven by individual interests and corruption. The legislative framework also had an impact on weakening coordination between different bodies and in particular between environmental agencies, as stated earlier. It has also fragmented the powers among these bodies in a way that deepened the conflict. In this situation of lack of public interest under the dominance of the spirit of conflict instead of the team work spirit and cooperation, the potential application of IE diminishes in the Egyptian society. That is because IE depends in the first place on full cooperation between various involved parties inside and in the vicinity of an IZ.

Furthermore, the legislative framework governing the planning process ignores the systematic thinking. It is limited to procedures with no details or environmental standards that are scientifically correct and updated. This framework, therefore, has restricted the judiciary from supporting the environment on one hand. On the other, it did not only help deepen the economic perception over the environmental one, but also hindered the application of environmental thoughts and modern mechanisms such as IE. The planning process governed by such a defective legislative framework resulted in unsustainable planning.

Additionally, to protect the totalitarian regime and its interests, lack of transparency with a sudden application/change of decisions became a key feature of the institutional framework of the State. This context is incompatible with the careful systematic planning capable of predicting for the future, which creates the appropriate context for the application of IE. In such a cloudy context, planning for IS, by allowing co-location relationships taking advantages of using wastes of each other is completely unlikely.

Finally, with the exclusion of efficiency and expertise of the work teams after unloading the governing framework from the professional and scientific content, the planning process lacked the proper planning where chaos has been in control. The framework therefore has become unable to accommodate SEA and SD that depend on the proper planning in its application. Moreover, the absence of an overall national/regional vision of the industrial localization has helped, with political pressures, in delaying the role of the environmental bodies to a stage where it is difficult to prevent the implementation of polluting projects.

After all, this chapter formulates, in six sections, the factors influencing the planning process of Egyptian industrial zones. This chapter gives explanation for why this process has taken its current shape. It justifies how the influencing factors interacted with each other in formulating un-sustainable process confirming on the findings of the previous two chapters. It concludes with justification of how and why the environmental role has been weakened and the context shaping the planning process is disabling for the implementation of SD and IE. This chapter by doing so answers the second research question and contributes to the knowledge by helping in filling the gap regarding understanding the factors shaping the process through which the Egyptian IZs are planned and barriers to the implementation of SD and IE in the Egyptian context. The next chapter, therefore, synthesizes together the answers for the research questions in an integrated form to facilitate reflecting on the international debate in light of the local understanding. It then gives recommendations that could help develop the current process and ends with potential paths of future research.

8. CHAPTER EIGHT: CONCLUSIONS, RECOMMENDATIONS AND FUTURE RESEARCH

8.1. Introduction

It is widely argued that existing industrial development in Egypt is not sustainable. It was also found that theorising on the current process of founding industrial zones (IZs) in Egypt, is lacking. Environmental conditions are expected to get worse, if new IZs are going to follow the footsteps of the existing ones. Yet, the government has recently announced taking steps in favour of sustainability. Understanding the current process and the factors influencing it is the first step to modify the path of industrial development in Egypt towards sustainability. This research therefore attempts to understand the process through which Egyptian IZs are planned, identifying therein, its governing factors. This research, hence, poses the following questions:

1. Does the Egyptian government have an operational framework that could lead to sustainable industrial zones?
 - a. What is the official framework of the process, under which industrial zones could be planned?
 - b. What is the actual process through which industrial zones are planned?
 - c. Consequently, to what extent is the current prevailing process sustainable and applying industrial ecology?
2. What are the factors that influence/shape the current prevailing process through which industrial zones are planned?

This chapter briefly synthesizes together the answers for these research questions extensively discussed in the previous three chapters. It provides a simplified construct of the current actual framework of the process through which Egyptian IZs are planned, and, more importantly, highlights its governing factors. In doing so, the chapter follows the outlines of the conceptual framework discussed in Chapter (3). In other words, the answers for the research questions are integrated herein into the same structure of the conceptual framework. Accordingly, the answers are presented under three sections: Overarching understandings, setting the context, and planning process for the Egyptian industrial parks. This allows presenting the answers in such a way that facilitates challenging the conceptual framework ideas/concepts against the theorization of the actual process of planning IZs in the Egyptian context. Reflecting on the international discourse in light of this local theorization, in addition

to shedding light on the current actual local process, stands as the contribution of this research to knowledge.

Furthermore, the potential comparison between the ideas presented by the conceptual framework and the investigated realities of the Egyptian process could enrich local scholarly as well as societal debates on how to develop the current process towards IE. As a first step on this breathtaking challenge, the chapter ends with recommendations that could potentially help develop the current process, and potential avenues for future research.

8.2. The Actual Framework of the Planning Process of the Egyptian industrial zones

The actual framework that this section synthesises is delineated in three parts. The first presents the overarching understandings that govern the formation of the context which gives shape to the planning process of the Egyptian IZs. The second discusses the context settings that make the process unsustainable, disabling, therefore, the implementation of IE. The third introduces the current actual process through which the Egyptian IZs are planned.

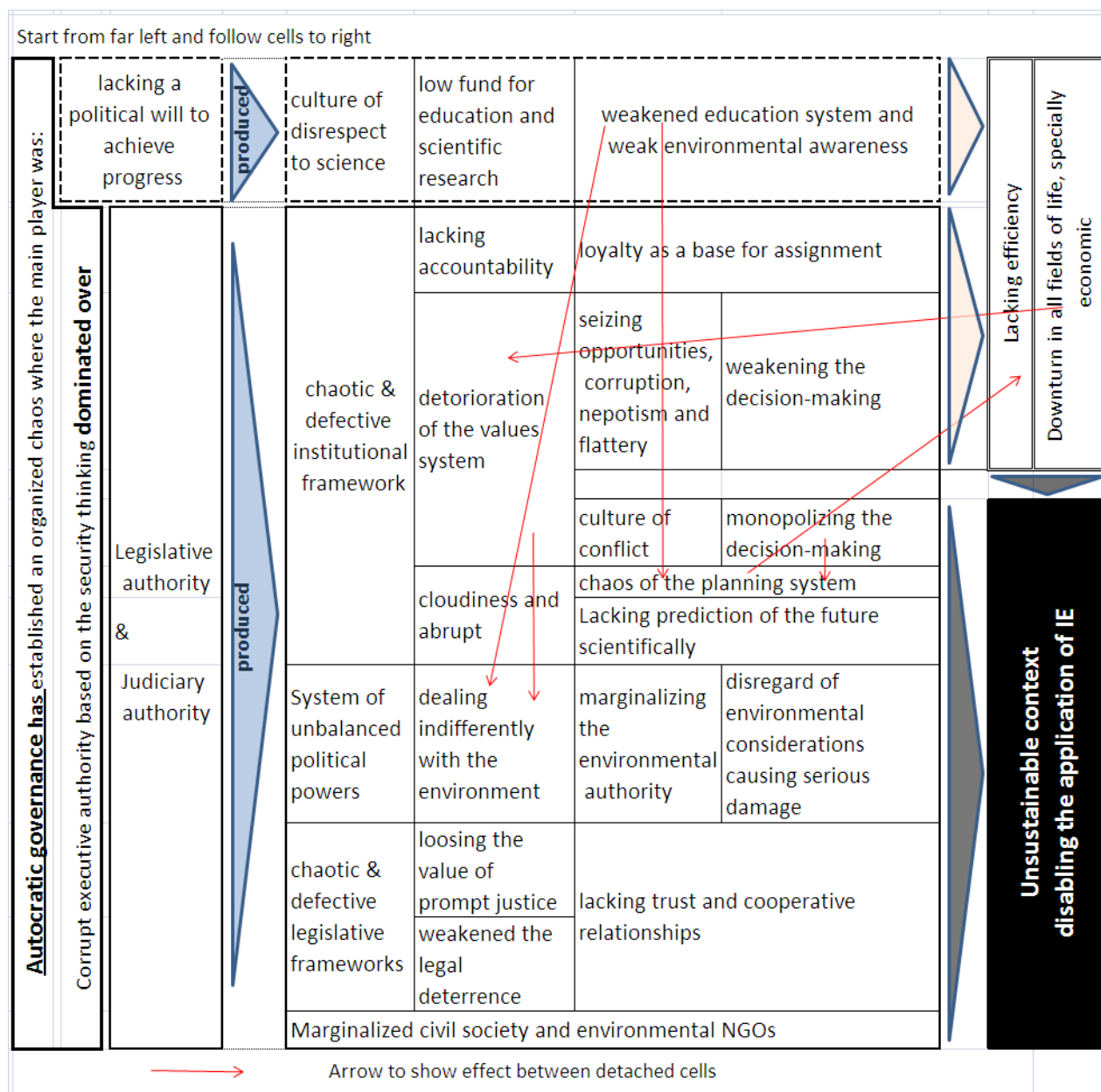
8.2.1. Overarching understandings

Figure (8-1) presents the understandings that govern the formation of the context and the process through which the Egyptian IZs are planned. It has been found in this research that the process is chaotic and unsustainable. In details, there have been several and interrelated factors/understandings that govern the formation of this process. Although it is difficult to determine a starting point for this interactive circle or the main influencing factor, the apparent control of the ‘authoritarian regime’, supported by the absence of a societal will (before the revolution), are to be put as key factors in the formulation of the others. Relationships among these factors, extensively discussed in Chapter (7), are briefly addressed in this section that shows factors which influence the planning process.

Egypt has been controlled for many years by an ***autocratic governing system***. This system has anchored on its security arm, insuring its interests and the interests of its followers. The system has established an ***organized chaos***, weakening, therefore, the coordination system and the entire work setup of the State. The main player therein has been a ***corrupt executive authority dominating over the legislative and judiciary authorities***. This domination has produced an unbalanced system of ***political powers*** and a group of ***chaotic/defective legislative and institutional frameworks***. In addition, it has also belittled ***the value of prompt justice***, and ***weakened the legal deterrence***. This construct of autocracy strongly influenced the formulation of other factors as follows:

- The education system has been weakened and *a culture of disrespect of science* has spread due to the nature of the former regime *lacking a political will* to achieve progress. This has been associated with control of the political decision, oriented by security reasons the aim of which is to maintain the regime, over the planning process making it chaotic and away from sustainability.

Figure 8-1: Overarching understandings governing the actual process of the IPs



- The values system of work, production and good morals has been replaced with other *falling values* such as seizing opportunities, corruption, nepotism and flattery. This has led to weakening the decision-making levels, where the decision for its makers was associated with the satisfaction of their superiors. Thus, *efficiency has become absent*

and hence Egypt has largely suffered from downturn in all fields of life where the economic downturn was on top.

- The totalitarian regime in order to protect its corruption has dealt with ***cloudiness (lack of transparency) and abrupt*** in decision-making in the institutional framework of the State. This caused a ***chaos in the planning system***. It has prevented scientific prediction of the future. This context is neither sustainable nor enabling for the application of IE.
- The nature of autocracy had created a ***culture of conflict*** between the authorities and governmental bodies involved in the planning process driven by individual interests. Accordingly, different bodies worked on monopolizing decision-making. Such context is not an enabling context for IE depending mainly on cooperation between involved stakeholders.
- Because of the chaos of the legislative framework, the Egyptian community has ***lacked trust*** between citizens and hence ***cooperative relations*** have been lost in the business field. IE therefore has lacked an important factor that could help in its application.
- Due to the ***absence of a scientific/legal system for accountability, loyalty and obedience*** has become the base on which consultants and work teams have been chosen. Absence of efficiency as a criterion has contributed to the presence of an unsustainable planning process.
- The Egyptian society has dealt ***indifferently with the environment*** and its protection. This was due to several factors. Corruption and neglect of environmental laws have spoiled the nature of the community in contradiction to its cultural and civilization heritage towards the environment. The deterioration of the general situation of the country, economic in specific, and its reflection on the basic needs of the people have limited their attention to improving their living conditions and ignoring anything else. This especially happened as a response to a prevailing concept that environmental protection is a disabling and financially exhausting matter. The effect of such a culture was maximized by the ***lack of environmental awareness*** among officials and experts regarding modern mechanisms of sustainable development (SD)/industrial ecology (IE) and solutions they can offer to achieve economic savings along with protection of the environment. This culture, along with the implications of the authoritarian regime, has weakened the environmental bodies' role and the tools they use. This therefore made these bodies unable to protect the environment in general and intervene to ensure the

sustainability of the planning process of the IZs in specific. Hence, this resulted in the disregard of environmental considerations in industrial development projects, causing serious damage to the natural environment.

- The subsequent governments of the former regime have tended to *ignore the civil society and environmental NGOs* in decision-making. Furthermore, *NGOs have been weakened and marginalized* by the former regime to keep control over people.

8.2.2. Setting the context

According to the understandings shown above, the Egyptian context could not be considered as an “enabling context” (Boons et al., 2011) for applying IE. In light of this, this section presents the settings of the Egyptian context influencing the planning process of IPs. It shows in detail how the context is not ready to actually incorporate and implement SD/IE. It shows how the societal will has been marginalized and kept weakened by the authoritarian regime. Then it highlights the weakened education system including the poor planning education. In addition, it shows defects of the institutional setup, the chaotic regulatory framework, lack of coordination and culture of conflict, and the deterioration of the economic situation and its effects on lacking sustainability.

8.2.2.1. *Marginalised societal Will*

The potential role of environmental NGOs is limited to the environmental education of the community and field projects. Environmental NGOs do not participate in decision-making or environmental assessment of projects. This has happened as the civil society’s role has been ignored and limited by the subsequent governments before the revolution of the 25th of January 2011 by multiple means including, see Figure (8-2):

- Elections fraud at all levels and in particular parliamentary elections.
- Suppressing the society attempt to protest and express opinions.
- Excluding NGOs from decision making and assessment mechanisms
- Legislation disruption that restricts the role of NGOs, and does not actually oblige the government to involve them in the decision-making process.
- Shackling the judiciary.
- Institutional defects like; corruption, bureaucracy, lack of transparency in the institutional framework.

Figure 8-2: Societal will settings

Marginalised societal will away from decision making	settings are:	Elections fraud & protesting suppression	Excluding NGOs from participation in decision-making & environmental assessment of projects	Legislation disruption restricting NGOs, does not oblige the government to involve them in the decision-making, and shackles the judiciary process.	Institutional defects like; corruption, bureaucracy, and lack of transparency
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8.2.2.2. Weak education system and research

The deterioration of the general situation of the country, economic in specific, has reflected negatively on lowering the budgets allocated to scientific research and education. This was a result of the absence of a political will to achieve real progress. Further, showing disrespect to science has been expressed by the government and media means as well as by the elites. Therefore, the education level has significantly deteriorated, and graduates have become ineligible to enter the work market. Planning education is a part of this system. It has become imbalanced lacking definitions, methodologies, standards, identifying problems, and research on sound scientific basis, and it has lacked creativity and innovation. As a result, in association with the control of the political decision, the framework of the planning process has become chaotic, and traditional thought has dominated the planning experts' way of thinking. Hence, the planning process has been kept away from sustainability. See Figure (8-3).

Figure 8-3: Education system and research settings

Weak education system	settings are:	Graduates became ineligible to enter the labour market	Weak planning education	Traditional thought has dominated planning experts' way of thinking	Chaotic & unsustainable planning process
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8.2.2.3. Shortcomings of institutional performance and capacity building

There are many forces which have negatively influenced the abilities of institutions and work teams therein to properly conduct their work. This has prevented Egypt from achieving measurable and sustainable results in its way to sustainable development. They could be summarized as follows, see Figure (8-4):

Figure 8-4: Institutional performance and capacity building settings

Shortcomings of institutional performance and capacity building	settings are:	Administration levels are unable to make sound decisions on scientific basis	Lacking effective institutional system that has been replaced by corrupted individuals. They choose work teams on loyalty.	lacking a proper accounting and performance assessment system. Experts deal passively and without a scientific critical thinking with the work presented to them.
		lacking proper programs for labour training		

- The nature of the former autocratic regime had strongly influenced the administration levels making them unable to make sound decisions built on scientific basis despite their legal position.
- Governmental bodies have been deprived of an effective institutional system that has been replaced by individuals who work for their interests.
- In light of lacking a legal system for accountability and evaluation, those individuals, the same way as they have been assigned, choose work teams and consultants on the basis of loyalty and obedience, not on scientific expertise and efficiency. Thus, they work to satisfy their superiors in a series of hierarchical levels on top of which is the Head of State.
- Lacking a proper actual accountability and performance assessment system causes lack of seriousness and professionalism. Accordingly, products of such context become weak.
- Supported by the regime, a culture of conflict among authorities and various bodies, driven by individual interests, has been created. In light of the absence of cooperation and coordination with others, governmental bodies have monopolized the decision making process driven by corruption that thwarted the few attempts to resolve the dispute between these bodies. With lacking attention to public interest under the dominance of a spirit of conflict instead of team spirit and cooperation, the potential application of IE mechanisms, mainly industrial symbiosis (IS), has diminished. That is because it depends in the first place on full cooperation between the various parties involved in founding IZs.
- Under the pressure of a harsh economy, planning teams and experts have dealt passively and without a scientific thinking with the work presented to them only to technically justify the non-scientific wishes of decision-makers.

- In addition to the low level of graduates, the State has lacked proper programs for labour training because of the absence of a human resources development plan, all of which have lead to ill-trained workers. Further, separation between the educational system outcome and the labour market demand has prevented making real benefit from training programs if there were any.

8.2.2.4. Science and new technologies

Egypt is far away from being a 'techno-scientific State' and accordingly from sustainability and IE application. Governments, specifically before the 25th of January 2011 Revolution, have followed wrong and chaotic policies in decision-making in isolation from the scientific approach. This is due to the absence of governmental planning which is based on scientific approach, as well as the absence of a proper management of crises and urgent problems. This in its entirety is a result of the disrespect of science by subsequent governments. Reflections of this culture on the planning process are as follows, see Figure (8-5):

- Significantly insufficient budget allocated to scientific research.
- Lack of interest in scientific views/opinions or technical studies of qualified specialized consultants exists at all levels of the planning decision-making process.
- Decision makers used to look for consultants who accept their opinions, rearticulate them in a scientific manner and process them into the required technical product. Here comes the function and importance of the consultant to officials. They do not participate in decision-making but they formulate techniques that serve this decision. From the consultants' side, under the economic deterioration faced by the country, a major category of those consultants, employed by governmental bodies, have been inclined to participate in ignoring science. They have accepted to be a mere tool in the hands of decision-makers. They used them to justify their decisions which are not based on scientific research.

Non-scientific approach has, as indicated earlier, formulated a chaotic unsustainable planning process. With respect to this process, some points could be briefly indicated as follows, see Figure (8-5):

- SD and environmental concepts have been kept away from studying planning and environmental problems. The planning process, therefore, lacked solutions that observe the environment leading to an increase in environmental disruption.
- Absence of a full vision of industrial settlements has delayed - with other factors such as political pressures and interests - the role of environmental agencies to a stage where it is

difficult to take an effective environmental decision. They could not prevent the implementation of contaminating projects and, hence, the environment has been negatively affected.

- A detrimental thought has dominated competent administrative bodies which is basically tying up the allocation of industrial projects to supply and demand. Applying this thought has dramatically changed the adopted planning. It has produced serious negative ecological relationships between land uses and has blocked attempts made to apply SD/IE concepts.

Figure 8-5: Science and new technologies settings

Culture of disrespect of science	settings are:	weak budget for scientific research.	lacking scientific views in decision-making process and interest to express technical opinion.	consultants of the officials justify their decisions which are not based on scientific research.
	chaotic unsustainable planning process:	planning has not been scientifically conducted and has lacked solutions which respect the environment.		
		absence of a full vision of industrial settlement delays the role of the EEAA in taking right decision regarding preventing contaminating projects.		
domination of 'supply and demand' thought in allocating industry projects. that changed the adopted planning producing serious ecological damage.				

8.2.2.5. *Institutional Setup*

The autocratic governing system has significantly influenced the institutional framework of the State. This regime has not produced society-centric or even state-centric governance. Rather, it has produced a system that is centred around one single individual. It has led to centralization of power in the hands of the ruler, and the absence of an effective independent role of the State apparatus. This regime has resulted in a chaotic and weak institutional setup that has disabled the application of SD/IE as follows, see Figure (8-6):

- Government has monopolized decision making processes away from other stakeholders especially society.
- With the absence of a proper planning, the institutional framework has become weak and unable to accommodate the application of strategic environmental impact assessment studies.

- Institutional fragmentation has led to a state of conflict strengthened by lack of coordination mechanisms. This context has hampered the implementation of several industrial projects due to problems in utilities that are out of the industrial institution mandate.
- Although the State has established mechanisms for overcoming bureaucracy, resolving fragmentation and facilitating policy integration and coordination between bodies involved in the planning process, self interest and conflict spirit have kept them ineffective and the decision has remained centralized.
- The work system as well as the values system have been weakened and replaced with corrupted values in each workplace. This has happened through excluding competent professionals from senior management positions, and replacing them by those who are weak, both professionally and ethically. Over the years, the work system has turned into a sick environment dominated by the ethics of opportunism, adulation, nepotism, and corruption.
- In support, the EIA process, as the only current tool for environmental agencies to ensure that the planning process for IZs is friendly to the environment, is of no value. Corruption and cronyism have controlled the process and emptied it from its function making it ineffective. Corruption has not been only related to those in power, but, more importantly, to the State apparatus itself and with the assistance of environmental bodies ironically mandated by law to protect the environment! This shows the extent to which the institutional setup is defective and disabling sustainability of the planning process of IZs.

Figure 8-6: Institutional setup settings

<p>Chaotic and defective institutional setup</p>	<p>settings are: Institutions suffer from fragmentation and conflict strengthened by lack of coordination mechanisms.</p>	<p>Institutions, politically driven, monopolized decision making processes away from other stakeholders and scientific research.</p>	<p>Corrupted values system has turned the work system into sick environment dominated by the ethics of opportunism, adulation, nepotism, and corruption.</p>	<p>The EIA process is of no value as it is controlled by corruption and cronyism of the institutional setup specifically in environmental bodies.</p>
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8.2.2.6. Regulatory setup

For long years, Egypt has suffered from an autocratic regime that has set legislations and laws to achieve its own benefits. Its tool in doing so has been a corrupt legislative authority, chosen non-reflective of the Egyptian people's conscience and will. This authority controlled the legislation process. Resulted from this process is a chaotic legislative setup, containing a

large number of conflicting legislations with multiple and imbalanced penalties. Characteristics of such a setup are as follows, see Figure (8-7):

- The regulatory setup has not been founded on scientific basis:
 - It lacks comprehensive vision that guarantees balanced distribution of responsibilities/powers among partners of the development process which could achieve real progress in the process. In this regard, laws only mention that environmental agencies in the planning process are authorized to provide specialized technical support and advice when needed, and develop policies and general environmental programs that are legally non-binding to other sectors. The focus of the role of these agencies is practically to only monitor the impacts of the production process and punish the offenders. It means that the role as stated by the law does not act in order to limit the harmful effects starting from preparation and planning. This, as a whole, points out to the obvious weakness in the strength and powers of these agencies, making it difficult for them to play the supposed role in a correct and complete way.
 - Further, the system of political powers between authorities is unbalanced. The regulatory setup lacks practical mechanisms to prevent growing of the role of one body over the others, as what happened in weakening the role of environmental agencies to the advantage of industrial and urban bodies.
 - It also lacks effective mechanisms obliging different bodies to coordinate with each other especially with environmental bodies.

Overall, lack of power given to environmental agencies and mal-coordination with other concerned bodies, have been negatively reflected on the planning process in general, causing lack of sustainability.

- This defective regulatory setup has governed the planning process limiting it in procedural terms. The setup is not detailed and does not contain Egyptian standards that are scientifically correct and updated. Therefore, this flawed setup has restricted the judiciary in supporting the environment and resulted in planning schemes that disrespect the environment. It also has helped deepen the economic perception over the environmental one making the application of environmental thoughts and SD/IE concepts unobtainable.
- With autocracy, the corrupt executive authority has dominated legislative and judiciary authorities. This has led to weakening the judiciary's ability to protect rights, where financial and political influence has intervened in the implementation of laws and

provisions resulting in the absence of prompt justice and the weakening of legal deterrence. This has led to shacking the status of the law allowing people to antagonize and circumvent it; what spread corruption more. The environmental issue clearly represents this context where imbalance has occurred and the community has dealt with the environmental regard with indifference. Furthermore, marginalizing the judiciary's role has led to a loss of trust between citizens, causing the absence of cooperative relations between dealers in general, and the involved parties in IZs in particular to avoid any problems leading to legal accountability. Therefore, the attempts to apply the IE/IS concepts have failed due to lacking the enabling context of cooperation.

Figure 8-7: Regulatory setup settings

Chaotic and defective legislative setup containing a large number of conflicting legislations with multiple and imbalanced penalties.	the legislative setup has not been founded on scientific basis:	The regulatory setup has governed the planning process making it limited to procedures, not detailed and with no correct and updated Egyptian standards.	the legislative and judiciary authorities were dominated by the corrupt executive authority producing:
	lacks comprehensive vision guaranteeing balanced distribution of responsibilities.		weakening the judiciary's ability to protect rights resulting in the absence of prompt justice and weakening the legal deterrence especiall regarding environemntal issues.
	Lacks practical mechanisms to prevent the expansion of one body's role at the expense of another's.		dealing with indifference with the environmental regard.
	lacks effective mechanisms to oblige different bodies to coordinate with each other especially with environmental bodies.		loss of trust between citizens causing the absence of cooperative relations in business.

8.2.2.7. *Networking and information systems*

The initial founding phase of the current IPs program witnessed a good case of networking and relationships between the ex-Minister of industry and investors. This networking has significantly helped in the initiation of the idea of the program. Yet, this case is very rare and could be considered as an exception that proves the entire situation of the institutional setup, as well as the involved stakeholders in the development process, lacking coordination and cooperation between its institutions. The chaos of the institutional and legislative frameworks of the State has significantly weakened the coordination system. Yet, there have been a number of attempts to improve coordination mechanisms within the planning framework in general and regarding planning the State's land use in specific. These attempts targeted

resolving disputes that have arisen regarding mandate over the State's land. Most important of such attempts could be summarized as follows, see Figure (8-8):

- Establishing the National Centre for Planning the State Lands Uses.
- Establishing the Supreme Council for Planning and Urban Development.
- Taking steps towards issuing a unified law for the allocation of the State land assigning the supervision of this matter to one of the authorities.

However, these attempts until the Egyptian revolution in the 25th of January 2011 have failed. Under the autocratic governing system, coordination and cooperation networking have been replaced by a culture of conflict, driven by corruption, between the State bodies and authorities targeting the satisfaction of the Head of State to ensure continuity in position and personal gain. Each body or sector has worked on the acquisition of land and monopolized the decision making process away from other partners and stakeholders.

Instead of securing opening accesses to information to hold the government accountable to people and empower networking and participatory decision making, a cloudiness and abrupt atmosphere has dominated over the institutional framework in order to protect the corrupted regime. Out of this atmosphere was a chaos in the planning system that has prevented the prediction of the future scientifically and maximized corruption.

Such context of cloudiness, chaotic planning, corruption and dominance of conflict spirit instead of team spirit and cooperation behaviour is not an enabling context for IE which depends mainly on scientific planning for the future and cooperation between involved stakeholders.

Figure 8-8: Networking and information systems settings

Lacking networking and open access to information	settings are:	The chaos of institutional and legislative frameworks caused lack of coordination and cooperation among institutions as well as involving stakeholders in the development process.	attempts to improve coordination mechanisms have failed due to culture of conflict, driven by corruption.	cloudiness and abrupt atmosphere has dominated the institutional framework in order to protect the corrupted regime.
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8.2.2.8. Funding

Egypt under the chaotic planning of the corrupted regime, controlling the country for almost thirty years, has deteriorated in all walks of life specifically economically. Hence, the State has not paid attention to integrating sustainable development initiatives of environmental

bodies into the national budget. Therefore, funding for incorporating sustainable development has been limited and mainly coming from international and regional organizations according to their agendas and the commitment of Egypt to international agreements. See Figure (8-9).

Figure 8-9: Funding settings

<p>Limiting fund for incorporating SD</p>	<p>settings are: the state has not paid attention to integrate SD initiatives into the national budget.</p>	<p>Governmental funding for incorporating SD has been kept to a minimum.</p>	<p>Funding has been provided mainly by international and regional organisations.</p>
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8.2.3. Planning Process of the Egyptian industrial parks

Figure (8-10) briefly presents the steps followed on national, regional, and local levels for the planning of current industrial parks in accordance with the context shown previously.

Details of the steps compared to what officially should be are as follows:

8.2.3.1. *National level*

The Ministry of Trade and Industry (MTI) has developed an *industrial strategy* based on partnership between public and private sectors.

- Depending on the relationships of the former Industry Minister with businessmen, by virtue of being one of them, he communicated and made a dialogue with businessmen generating *the idea* of integrating private industrial developers in the development process of the IZs.
- The Government then had a *political will*, if questionable in its purposes, to set a *protocol to reform the legal and institutional* setup to initiate the Industrial Development Authority (IDA). This was to accommodate the implementation of the idea. It was mainly the work of the MTI (without coordination with, or study of, all relevant parties) to amend the legal and institutional setup governing the development of the IZs. It then prepared a proposal which the Minister submitted to the Cabinet for final approval before accreditation by the Presidency.
- The IDA Head conducted a number of *exploratory field visits* to global models for the transfer of experience as well as marketing for the Egyptian economy.
- The IDA involved a number of international developers and financial institutions in a network including a series of workshops that contributed to the formulation of an

operational *framework for the Industrial Developer Program* (IDP). Contrary to the law, other concerned governmental bodies, including utilities and environmental ones, as well as other stakeholders were not involved.

Figure 8-10: Actual planning process of the IPs

National Level Setting up strategies and programs, and taking decisions regarding planning and regulations.		Regional Level Managing to extend utilities.
1	MTI prepared Industrial strategy based on partnership between public and private sectors.	1 Developers played the role of the IDA in managing with the concerned utilities authorities, regionally and locally, to extend utilities to their sites boundaries.
2	MTI minister generated the IDP idea through a dialogue with businessmen.	Local Level Mainly, executive procedures (urban planning and licensing).
3	To implement the idea, MTI set up a protocol to reform the legal and institutional setup to initiate the IDA.	1 Contrary to the law, the IDA seeks city councils to deliver lands to developers.
4	exploratory field visits to global models to transfer experience.	2 Developers choose activities of IPs based on their studies, then selection is approved by the IDA alone.
5	operational framework for the (IDP) through networking with only developers and financial institutions.	3 Urban planning for each IP has been prepared by developers through specialized consultancy offices.
6	Choosing the IPs locations in new cities.	4 Developers through consultancy offices set up zoning regulations inside IPs in accordance with the NUCA's regulations.
7	Marketing and land pricing.	5 Approval of urban planning and adoption of the IPs master plans have been the responsibility of the IDA alone.
8	Setting the program regulations and offering the program to developers.	6 Reviewing the IP master plan and detailed design of the utilities by the EEAA in accordance with regulations.
9	Setting up regulation and governing rules (for the Ips developemnt, urban planning, and environmental consideration).	7 Developers prepared EIAs via consultancy office to be presented to the city council to check whether fulfilled then to be sent to the EEAA for decision taking.
10	Applying to the program, registering developers, qualifying, contracting and land allotment in coordination with developers through dialogues.	8 Developers apply for licensing to the One-Stop window established by the IDA for a preliminary approval. Developers afterwards go through many bureaucratic procedures to get final approvals from many concerned bodies.

- The IDA, without coordination with the concerned parties¹ in violation of the law, has monopolized *choosing the IPs locations* in new cities. Because of the nature of land ownership owned by the New Urban Communities Authority (NUCA), it has coordinated with NUCA regarding the selection of sites within each city.
- The IDA has monopolized *marketing and land pricing*, away from the investment bodies of the State - in violation of the law - and other concerned parties.
- The IDA has prepared alone the regulatory setup of the program (TOR) and offered the program to developers.
- The IDA was fully accounted for *setting up regulations and governing rules*² of the IPs development without coordination with other concerned governmental agencies stated by the law; in particular the EEAA and utilities' authorities.
- For *regulations and standards of urban planning*, contrary to the law³, the IDA has chosen a few general regulations (did not include all areas of planning) from the Unified Building Law. The IDA then modified these regulations for the benefit of developers in addition to advising them on how to overcome some of these regulations.
- With regard to *environmental regulations* legally supposed to be set by the EEAA, the IDA has only put the responsibility for any possible environmental damage on the developer and referred them to the general standards and regulations in the environmental law. There were no case-specific regulations⁴.
- *Developers apply and register to the program and then IDA qualifies, contracts and allots land* in coordination with developers through dialogues, a coordination procedure that is not mentioned in the law. This was to ensure compatibility with developers and flexibility in implementation of the contract.

8.2.3.2. Regional level

- Contrary to legal documents, developers have played the supposed role of the IDA in managing with the concerned utilities' authorities, both regionally and locally, to extend utilities to their sites' boundaries. The IDA role has just been like a secretary that

¹ On top of them is the NCSLP: the basic role of it is to ensure coordination with the concerned State bodies to guarantee choosing best sites

² Related to investment and land pricing, extending utilities, and selection of industrial activities

³ The official framework committed the IDA to coordinate with the General Organization for Physical Planning (GOPP) for the preparation of the regulations and then reviewing them. Then they are to be adopted by the Supreme Council for Planning and Urban Development (SCPUD).

⁴ The environmental standards, stated by law, were formulated in an atmosphere that was not aware of the IDP. This carries an implicit expectation of lacking relevance and not taking into account the specificity of the IPs of the IDP.

receives applications from developers, sends them to the utilities' authorities and receives them back to hand over to developers.

8.2.3.3. *Local level*

- Contrary to the law, as an intermediary, the IDA seeks city councils (the authority over the land) to ***deliver lands*** to developers (the landowners).
- In light of the absence of a national, regional or local vision and in violation to the law, the IDA transferred its responsibility in ***choosing industrial activities*** of IPs to the developer alone, to do it based on his/her marketing and economic studies. Then the selection was approved by the IDA without any coordination with others including the EEAA on top of the list.
- ***Urban planning*** for each IP has been prepared by the developer through his/her specialized consultancy offices⁵. The extent to which the developer and the planning team has followed a scientific method and dialogue to reach the best planning that meets the developer's requirements and wishes has merely depended on the level of the consultancy office.
- In accordance with the law, developers through their consultancy offices set up ***zoning regulations*** inside their IPs in accordance with those regulations already set by the NUCA.
- In light of the absence of a special code for the IPs planning, the ***approval of urban planning*** and the ***adoption of the IPs master plans*** have been the responsibility of the IDA alone without the partnership of others as stated by law. The consultant of the IDA reviews and approves the IPs master plans in accordance with a number of regulations taken from the Unified Building law without covering various planning and environmental areas.
- The Egyptian Environmental Affairs Association (EEAA), the State's apparatus entrusted with achieving the integration of the environmental dimensions in planning, is limited to ***reviewing the IP master plan*** and ***detailed design of utilities*** in accordance with regulations.
- Based on a master plan that is subject to change according to marketing and actual sales and only shows a distribution of the industrial activities types without real allocation of factories, each developer prepares an ***environmental impact assessment (EIA)*** via

⁵ Without identifying restrictions by the IDA for level of the consultancy offices

consultancy offices. Then the EIA is presented to the city council (the administrative concerned body) to be checked, mainly carelessly and without transparency when providing information, if fulfilled in the first place. Then it is sent to the EEAA, ironically after the implementation of the project in many cases, for taking a decision thereon⁶. The EEAA has the right, in some cases, to request the city council to complete, update or correct information regarding the study. The EEAA then issues the approval decision that is sent to the city council, which is in turn sent to the developer to be able to start the implementation of the project, if not already started. The EEAA doesn't obligate developers to submit an environmental carrying capacity report as stated by law.

- Developers apply for *licensing* their IPs to the One-Stop window established by the IDA. Then the IDA only gives them a preliminary approval. Developers afterwards go through many bureaucratic procedures to get final approvals from many concerned bodies, although the IDA is legally bound to help developers in licensing. The dominant issuer on the ground for both: buildings' and utilities' permits, has been cities' councils.

In brief, the overall process is a top down process. It significantly suffers from centrality and monopoly in decision-making of most of the steps by the IDA, the State entity responsible for industrial development. This could be noticed clearly from lacking coordination with all concerned parties and stakeholders not just the private sector, contrary to the law. This is also observed at the regional level when considering its diminished role as a level that is supposed to connect the national level to the local one back and forth. Diminished roles of the regional level that potentially help empower the participatory approach, strengthens the top down process where decisions are made on the national level and sent afterwards to the local level for implementation. This is the case of the planning of the IPs despite the existence of the private sector sharing the IDA in some steps and responsibilities. They both are mainly isolated from other governmental bodies and stakeholders, causing therefore many problems.

8.3. The Egyptian case: reflections on and contribution to knowledge

First, from an international perspective, it was concluded in Chapter (2) that IE lacks a comprehensive theoretical framework. Without such a framework, IE is subjected to the same risk of ambiguity as for SD (Boons et al., 2011, Agarwal and Strachan, 2006). Second, Chapter (2) has also spotted a gap in the contribution of the Arab countries in general and

⁶ In cases of amendment of the IP master plan, it was sufficient to renew the IDA approval without the need to renew the environmental approval from the EEAA.

Egypt in specific (Shalaby, 2003b) to the international discourse on environmental sustainability processes (Esty et al., 2003). Third, it was also concluded in Chapter (2) that the step beyond grand theories and typologies of governance, towards undertaking detailed empirical testing to measure the shift from government to governance, is needed. A focus on governance in a more dynamic and interactive manner is called for to know what forms of governing lead to what sorts of outcomes (Jordan, 2008). Furthermore, Gibbs and Deutz (2007) and Vermeulen (2007) mentioned that many authors, like Welford (2004), have called for more input from planning, as one of the social sciences fields, in guiding the implementation of IE. Fourth, from the local view, Egypt lacks the needed theorization on the process through which IZs are planned. Fifth, the implications of the recent arrangements made by Egypt regarding the institutional and regulatory setup to improve the governance system towards SD have not yet been examined.

This research has covered these spotted gaps. Covering the first gap, Chapter (3) develops a comprehensive theoretical conceptual framework of the planning process of EIPs, representing a first phase of contribution to the knowledge locally and internationally. Further, this research is an empirical test that measured the extent to which the industrial system in Egypt is moving towards governance for SD, and how and why the process has produced unsustainable IZs. It theorizes upon the current process of planning IZs in Egypt and its governing factors. It examines, empirically and in details, the influence of the Egyptian governing system and the institutional and regulatory setup therein on this process. This research by doing so (as discussed in details in Chapters (5, 6 and 7) then synthesized in this chapter) has already covered the other gaps representing the second phase of contribution to the knowledge not only locally but also internationally by filling the gap from the developing/Arab countries' side.

From another side, McManus and Gibbs (2008) see that there is a need to research how decisions regarding industrial development, like industrial locations, are being made; and investigate the level of knowledge and acceptance of industrial ecology, and the barriers to its implementation from the perspective of various decision-makers. This research in Chapter (7) discusses how the decisions on the planning of the Egyptian IZs have been taken and the extent to which IE is accepted therein. It also analyzes different barriers to the implementation of IE concepts and ideas in the Egyptian context governing the planning process of IZs. This section, therefore, discusses reflections of the investigated realities of the Egyptian process/context on the concepts and ideas of the conceptual framework, concluded

in Chapter (3). This stands as a further contribution of this research to knowledge that could potentially help the international discourse on developing more advanced theories on the implementation of IE.

Now, this section re-reads the conclusions of the empirical study indicated previously, in this chapter as well as Chapters (5, 6 and 7) and synthesizes from them what could lead to:

- A new set of barriers to the implementation of IE as empirically investigated,
- An evaluation of IE concepts and ideas that, while mentioned by the conceptual framework, have been proven to be important/marginal issues as emerged from the Egyptian case/context.

IE and barriers to its implementation

Briefly, each of the following points initially addresses each of the IE concepts included in the conceptual framework (concluded in Chapter (3)). Following is a discussion on reflections of the Egyptian case on these concepts:

- The ambiguity of the IE term (Gibbs and Deutz, 2007, McManus and Gibbs, 2008, Agarwal and Strachan, 2006) needs intensive scholarly and societal debates to contextually define IE (Jordan, 2008, McManus and Gibbs, 2008). Furthermore, IE is an interdisciplinary and integrated field of studying industrial systems in concert with nature and society (Geng and Yi, 2005).

Despite the importance of defining IE locally and following an interdisciplinary approach to study it that could guide the implementation of IE in a proper and contextual way, Egypt has not presented a real progress in this regard. This happened due to the absence of the political will to achieve progress, the economic downturn, and the neglect of science all of which have led to weakening the education system and spreading a culture of disrespect for science. There has also been a control of the political decision over the planning framework, making it chaotic and keeping it away from adopting a scientific approach. It lacks not only the local definition of SD/IE but also the planning definitions, concepts, methodologies and integrated planning visions.

- Society has to have the will, the collective will of all societal groups, (Gibbs and Deutz, 2007) to bring about SD and IE. Therefore, setting the system of governance to be society-centric is crucial. To have the context enabling for IS, adopt and support decentralisation

(Geng and Yi, 2005), and participatory⁷ decision making processes at all levels (Boons et al., 2011, ESCWA, 2003).

Yet, Egypt until the revolution of 25th of January 2011 was controlled by an autocratic regime with a very centralized State work system and has not effectively gotten rid of since then. Civil society has almost been marginalized by many means and ignored from decision-making process at almost all levels, sectors and authorities. The tyranny of the regime supported by the absence of the societal will have significantly caused regulatory and institutional chaos that kept the country undeveloped. This context is disabling for the implementation of IE, and, therefore, the Egyptian case is significantly highlighting the importance of society-centric governance. With the growing societal will that has revolted against the former regime triggering its fall, Egypt is supposed to be moving towards involving society in governing the country. Hence, possibilities of applying IE concepts are expected to increase.

- SD and IE require a system of governance that resolves conflicts (between the three pillars of SD: society, economy and the environment) and hence reach coordinated policies (Jordan, 2008) and cause the adoption of a coordinated planning approach to apply IE (Geng and Yi, 2005, Gibbs and Deutz, 2005, Roberts, 2004).

In Egypt, instead of seeking such a system and a planning approach, a culture of conflict between the authorities and various institutions driven by corruption has been nurtured. In light of this culture, governmental institutions have monopolized the decision making process neglecting coordination, cooperation and teamwork spirit; and have thwarted the few attempts to resolve the dispute between those bodies.

- IE is supposed to be not only a system that is merely applicable inside EIP (Geng and Yi, 2005), but also a culture that the community has to adopt.

The Egyptian community lacks the environmental awareness that makes it ready to adopt IE. Weak education system and media, as well as marginalized NGOs, have not helped increase the awareness towards such an important issue.

- To apply IE, a long-term and incremental planning approach has to be adopted (Geng and Yi, 2005, Gibbs and Deutz, 2005, Roberts, 2004). The need for considering this approach is significant for cases that the gap between its realities and IE concepts is huge, like the case of Egypt. Hence, the international discourse on IE is required not to be “evangelical

⁷ Especially through forming stronger connections with all civil society sectors, including NGOs, and academic and scientific institutions on sustainability issues (ESCWA, 2003).

in its optimism for what could be achieved” (Gibbs and Deutz, 2005). The international discourse is required to highlight such an issue and develop conceptual frameworks for IE with incremental phases that could help in building gradually on evolving cases like Egypt towards full implementation of IE.

- Regulatory setup has to be not only context-specific, but also case-specific. Moreover, a shift from a regulation-based to incentive-based approach is a necessity (Roberts, 2004, Shalaby, 2010a).

Egypt suffers from a chaotic regulatory setup containing a large number of conflicting legislations with multiple and imbalanced penalties that do not consider the Egyptian community characteristics. It also lacks a case-specific planning and environmental codes for different industrial programs/types like the IDP program. The IDP program has been regulated according to general regulations taken from planning and environmental laws. Accordingly, possible damage to the environment is significantly expected. Therefore, while the Egyptian case can highlight the importance and possibility of the regulatory setup to be context-specific and case-specific, applying a shift from a regulation-based to incentive-based approach seems to be very optimistic for the Egyptian case, if adopted for new programs on a gradual basis.

- The primary concern of IE is industrial symbiosis (IS) (Boons et al., 2011). IS works best where there is a strong agglomeration of co-located and integrated establishments that have the capacity to utilise waste as a resource in production. The more intense the agglomeration, the greater are the prospects for innovation and synergies (Roberts, 2004, Tudor et al., 2007, Erkman, 1997, Elabras Veiga and Magrini, 2009). This intensity implies not only variety, but also redundancy of the agglomerated establishments where the regional level is argued by some to be more viable than a purely park-based level (Gibbs and Deutz, 2005, Sterr, 2005). According to Korhonen and Snäkin (2005), the regional level “enhances connectance and opens up new possibilities for cooperation” (Boons et al., 2011, p.906). Yet, IS depends mainly on coordination and cooperation between different partners of the process.

Absence of coordination and cooperation is exactly the most important problem and obstacle of the Egyptian context disabling the implementation of IS. As indicated earlier, on the government side, coordination and cooperation have been replaced by a culture of conflict dominating the institutional framework of the State. On citizens’ side in general and that of businessmen in specific, cooperation, in the first place, requires trust between

different dealing partners, and a strong judiciary to protect rights if a problem occurs between partners. Yet, marginalizing the judiciary role in Egypt has led to a loss of trust between citizens trying to avoid any problems leading to litigation. This has caused the absence of cooperative relationships between involved partners in the IZs founding process, and hence the disablement of the implementation of IS. In this regard, there are other two barriers⁸:

- In Egypt, planning IZs in general depends mainly on traditional thoughts. Adopting traditionally separate industries is a concept that is still deeply considered. Applying IS within such a distribution is not expected in an EIP that encourages mixed land uses (Roberts, 2004).
- Further, endorsed an IZ planning is significantly subjected to change according to the respect, given by the administrative bodies in charge of industrial lands allotment, to market requirements and the economic concept of demand and supply. Distribution of industries on the ground becomes chaotic. It does not only disable the implementation of IS but also basic environmental considerations like having separate industrial wastewater infrastructure.

8.4. Recommendations

If not for the Egyptian revolution in January 2011 to recover the societal will in governing the country by getting rid of dictatorship, then getting rid of this regime and securing effective open access to community participation in decision-making would have been on top of the recommendations given by this research. This is for its paramount importance because its absence has had the greatest impact on the deterioration of the country in general and its environment-related products and processes in specific.

Based on the analytical study conducted for the actual process through which the Egyptian IZs are planned, and its governing factors, and the problems/barriers addressed therein to the implementation of IE, the following contextual recommendations could be useful in terms of putting Egypt on the correct path towards IE:

- Secure a society-centric governance and establish the needed legislative and executive institutions therein to show respect to institutionalism, decentralization and participatory decision making. Securing support and national fund for NGOs is significant in this regard

⁸ Same barriers apply for the implementation of the IE concept stating: a shift from activity-based to performance-based appraisal is crucial in the co-allocation process of firms (Roberts, 2004).

to allow them to help in introducing the culture of participation and acceptance of environmental protection, SD and IE to the community.

- Develop a contextual incremental conceptual framework for IE implementation accompanied by local definitions of SD and IE.
- Adopt a long-term multidisciplinary integrated coordinated planning approach for IE. Setting up a comprehensive industrial map for the country is a necessity. With securing the political will to adopt IE and make real progress, it could be more appropriate for the current institutional setup, already centralized, to apply a centralized planning process at different levels, but only as a first phase. This is to encourage community to adopt IE and overcome potential market/coordination failures regarding IS synergies.
- Resolve fragmentation between governmental institutions and apply practical coordination mechanisms.
- Environmental bodies must have a balanced political power as that given to industrial and planning bodies, if not more, to be able to enforce the implementation of their plans and programs targeting the incorporation of SD and IE into the national plan. Reforming the regulatory and institutional setup is accordingly needed.
- Achieve full independence for the judiciary and legislative authorities away from the executive authority.
- Reform the regulatory setup taking the following points into account:
 - Following the scientific approach in reformation.
 - Balanced distribution of responsibilities between institutions.
 - Resolving contradictions and redundancy of laws and regulations.
 - A contextual penalties system.
 - Case-specific regulations.
 - An effective system of accountability which depends on openness and transparency to eliminate corruption.
 - Support the NGOs' work.
- Establish an information system that helps plan for/manage optimal reduction, reuse and recycling of resources and wastes.
- Adopt participatory and learning approaches, and policies that target:
 - Respect for science by the State's work system and the community.

- Securing appropriate fund for scientific research and for the reformation of the education system including planning education.
- Reformation of the current defective values' system of conflict, corruption, nepotism, flattery and seizing opportunities. Recovery of values of respect of the environment, honesty and hard work, is crucial.

8.5. Future Research

However, to verify the validity of these recommendations, more research is needed. As a pioneering study that deals with industrial zones in Egypt as a process not a product, this research addresses variant phases of the planning process to give a comprehensive image of the process and the factors governing its formulation. Investigating the process includes phases of setting up policies, pre-planning, planning, approvals and licensing, and regulation and legislation. Yet, further investigation is needed to empirically examine each of these phases. This is important as developing scenarios for putting industrial development on the way to SD and IE would not be applicable without in-depth investigation on what, how and why each phase in details is constructed.

In addition, developing possible long-term, incremental and context-specific conceptual framework towards the application of the IE/EIPs in Egypt needs more empirical investigation. The research has constructed a conceptual framework of a normative planning process for IE/EIPs. Being a collection of ideas and concepts from different literature, this framework is not applicable to any context. However, the ideas presented by this framework could enrich local scholarly as well as societal debates on how to develop the current process towards IE. Contextualizing this conceptual framework for the Egyptian case (or any other context) is an interesting task to perform. This could be done by conducting an empirical study, using the Delphi method in which a panel of experts are asked to answer a questionnaire in rounds till a consensus is reached. The questionnaire is designed in light of the conceptual framework contextualised in tune with the findings of this research.

Further, In relation to the 25th of January Revolution that puts Egypt on the way towards democracy, an interesting investigation would be about the extent to which a potentially democratic government in Egypt could create a more sustainable pattern of industrial development within a context that still suffers from implications of autocracy.

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I. EGYPTIAN INDUSTRIAL ZONES DEFINITIONS AND TYPES

I.1. Industrial zones definitions:

Industrial zones (IZs) types, given names and definitions vary from country to country. These differences go back to the characteristics/conditions that each of these countries has, the experiences that each developed in the establishment of IZs, and the objectives, each aimed at in the establishment of IZs (Shalaby, 2003). This section adopts the official definition of Egypt, well expressed in variant related laws/decrees, and by different officials¹ whose work/experiences are directly related to the IZs management and development.

Starting from laws, the Unified Building Law No. 119 for the year 2008 defines IZs as:

Areas of land located inside or outside the governorates reins with their external coordinates described on cadastral maps. These areas are allocated to industrial projects and their related service activities in accordance with the provisions of the governing laws of industry and investment in the scope of the strategic plan. (Mubarak, 2008b,p.7)

The definition of the Presidential Decree No. 350/2005 on the establishment of the Industrial Development Authority (IDA) does not differ from the one stated above, but it adds the inclusion of "both existing and new IZs as well as the unused licensed lands owned by companies or individuals that are being transferred to IZs" (Mubarak, 2008b, article 3). The Presidential Decree also excludes "the general industrial free zones, economic zones, craft zones and maintenance workshops which do not fall under the jurisdiction/control of the IDA" (Mubarak, 2008b, article 3). Both previous definitions apply, after the exclusion of the above stated kinds, to five types, according to the governmental view.

I.2. IZs types:

I.2.1. IZs of Governorates:

I.2.1.1. Industrial areas inside the existing cities:

These are the old industrial areas that were developed on the outskirts of existing cities or at a distance which is not far from the urban boundaries. However, with the unplanned urban growth, cities contained these areas which now exist as industrial slums. These areas have no managing bodies to represent them and they depend on the containing cities in their needs for infrastructure and facilities. They are grouped under their governorates, and given names after their containing district or the main company/factory which operates therein (see table

¹ Head of the central administration of industrial zones of IDA, manager of the administration of industrial zones development of EEAA IDA's head's advisory.

A-1). The determination of this type returns to Ac-G-11² and En-G-32, but the latter would prefer not to launch the term IZs on these industries and rather calls it industrial clusters. According to him, the reason is that: "an industrial zone is a large area far from the city and has separate infrastructure/services, a separate administration and a manager, which is not the case for these city-contained sites " (En-G-32). Recently, to find a solution for these cities polluting sources, the State has interfered, first, by prohibiting the establishment of any new industries within cities boundaries and, second, by transferring existing polluting industries within cities to approved newly-established IZs. The Prime Minister's decree, regarding this matter, has been issued on 2005. Since that time, many steps have been made including the required studies and procedures to set this decree into action³.

Due to the current polluting status and the expected imminent disappearance of such type with the full implementation of the previously mentioned decree, this type was excluded from the chosen sample.

1.2.1.2. IZs outside existing cities:

The IZs of this type are outside the urban mass of cities, administratively subordinated and owned by governorates and are established independently by governors' decrees (see table A-1). Authority was given to governorates to establish IZs under the Local Government Act. The Act also stipulated that the Industry Committee of the governorate is competent to manage such zones. Then, as amended by the Investment Law, IZs' management has become the responsibility of the industrial zone board of directors of the concerned governorate (Ac-G-03). The number of existing industrial areas of this type is 64 IZs (En-G-32 and Assal, 2010). They exist on the periphery of some cities distributed mainly on Nile Valley and Suez Canal, see Figure (A-1). Recently, work is going on in some IZs of this kind but owned by GOIMP⁴, while being under the mandate of The IDA⁵ by virtue of the authority given to it by the decree no 350 for the year 2005 (In-G-06).

² An indication for an interview/ee, the code may contain some of the following abbreviations that mean: En = Environmental, In = Industrial, Ac = Academic, De = Industrial Developer or Development Officer in local administration units, Ju = Judge, G = Governmental position (it will appear if applicable), NGO = A member of environmental NGOs boards of directors, **Numbers** = Serial Number of the interview/ee

³ Example on starting this strategy: Cement factories in Helwan are being prepared to be leaving the region which hosted them more than 75 years where the factories lived side by side with the people who suffered greatly from the pollution caused by cement, iron and steel and coke plants. This decree came in context with the strategic plan of Helwan governorate and the Ministerial Committee decision for the replacement of production lines and the transfer of environment polluting industries outside the governorate. A committee headed by Rachid Mohamed Rachid ex-minister of Trade and Industry was formed to develop a plan for transferring the cement plants outside Helwan governorate and resettle them in other areas away from population density. (Ashark-Alawsat, 2011)

⁴ The General Organization for Industrial and Mining Projects

IZs of the Governorates

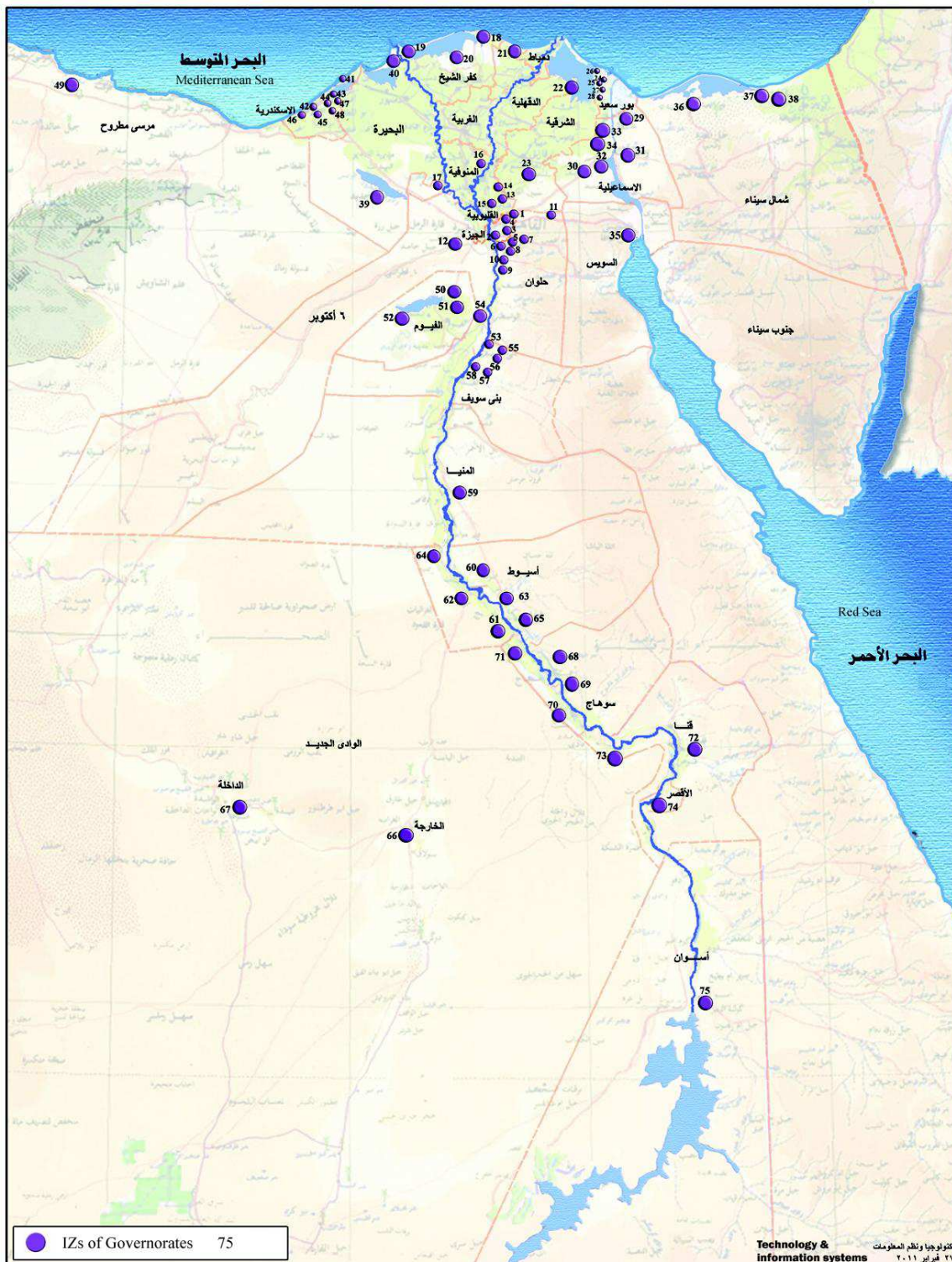


Figure A-1: IZs of the governorates

Reference: (IDA, 2011d)

⁵ Handling here is for the IDA and it means putting down the conditions, contracts, allocations, planning and operating permits which will be mentioned later in details when speaking about authorities and their powers.

Table A-1: Industrial zones of governorates

Governorate	Zone Title
Helwan	Torah and Shaq Al Tho'ban industrial zone
	South Helwan industrial zone
	Katamia industrial zone
	Shaq Al Tho'ban industrial zone (taken hold of
	Al Robeiky industrial zone
	Al Maasara Industrial Zone
	Division Maadi Company for Development and Reconstruction
Cairo	Egypt-Alex. Road - Al Nozha District
	El Salam City Industrial Zone
	El Marg District Industrial Zones
	El Sharabya District Industrial Zones
Alexandria	New Manshia industrial zone
	Al Nasseria industrial zone
	Upper and Lower Mergham industrial zone
	The industrial zone in K 31, Desert Road
	Seibco Industrial Zone
	Ajami industrial zone
	Al Nahda industrial zone and its expansions
	Ohm Zagheou Industrial Zone
Port.Said	The industrial zone C 1
	The industrial zone C 6
	The industrial zone C 11
	The Northwest Bortex industrial zone
	The industrial zone south of Port Said (Al _ Reswah
Suez	The industrial zone for light industries
Dakahlia	Southwest Gamasa industrial zone
	Asafra industrial zone
Sharkia	Belbeis - 10th of Ramadan road industrial zone
Qaliubia	Al Shorouk industrial zone
	Al Safa industrial zone
	Al Aqrasha Industrial Zone
Kafr El Sheikh	Balteem industrial zone
	Metobas industrial zone
	Industrial Zone in mlaha of Moneisi
Menoufia	Mubarak Industrial Zone and its expansion
	Industrial Zones In kafr Dawod
Beheira	Natron Valley industrial zone
	Boseili Desert industrial zone
Ismailia	Al Qantara Shark industrial zone
	The 1st industrial zone
	Technology Valley
	The 2nd industrial zone
	Abu Khalifa Industrial Zone
	Abu Khalifa (Sugar Factory
th Of October6	Abu Rawash industrial zone and its expansions
Beni Sueif	Kom Abu Radi industrial zone
	Baiad Al Arab industrial zone
	The industrial zone 1/31
	The industrial zone 2/31
	The industrial zone 3/31
	The industrial zone 4/31
Fayoum	Kom Oshim industrial zone
	New Kom Oshim
	kouta industrial zone
Minya	Al Matahra industrial zone, east of the Nile

Assiut	Al Awamer Abnoub industrial zone
	Al Zarabi industrial zone in Abu Tig
	Al Safa industrial zone (Beni Ghaleb)
	Sahel Selim industrial zone
	Dairout industrial zone
	Badari industrial zone
Sohag	Al Kawthar District industrial zone
	Al Ahaiwa industrial zone in
	Beit Dawood industrial zone, west of Gerga
	West Of Tahta Industrial Zone
Qena	Kalaheen industrial zone
	Hu industrial zone
Luxor	El Boghdadi Industrial Zone
Aswan	Al Alaki Valley industrial zone
The New Valley	Al Kharga industrial zone
	El Dakhla industrial zone
Matrouh	The industrial zone in K 26
North Sinai	Bir Al Abd industrial zone
	Al Masa'eed Artisans' Industrial Zone
	The industrial zone for building materials, south of El Arish
Reference: (IDA, 2011c)	

I.2.2. IZs in new cities:

The IZs of this type are established by presidential decrees on the periphery of new planned cities. They are owned by the NUCA that is affiliated to the Ministry of housing, utilities and new urban communities. They are also under the mandate of the IDA (Ac-G-03, In-G-06)⁶. There are 21 IZs (IDA, 2011b), shown in table (A-2) and Figure (A-2).

Table A-2: IZs in the new cities

Governorate	Zone Title
Helwan	Badr City industrial zone
	15th of May industrial zone
	New Cairo industrial zone
	Al Shrouk industrial zone
Alexandria	Borg Al Arab industrial zone
Suez	Ataka industrial zone and its expansions
	Petrochemicals - south of the Sumed
Demeitta	New Damietta industrial zone
Sharkia	New Salhia industrial zone
	10th of Ramadan industrial zone
Port Said	East Port Said industrial zone
Kaliubia	Al Obour industrial zone
Menoufia	El Sadat industrial zone
Beheira	Nubaria industrial zone
6th of October	6th of October industrial zone
Beni sueif	New Beni Sueif industrial zone
Fayoum	New Fayoum
Minya	New Minya industrial zone
Assiut	New Assiut industrial zone
Sohag	New Sohag
Loxour	New Tiba
Reference: (IDA, 2011b)	

⁶ The relationship between the two authorities, the NUCA and the IDA, is discussed in details in Chapter 5.

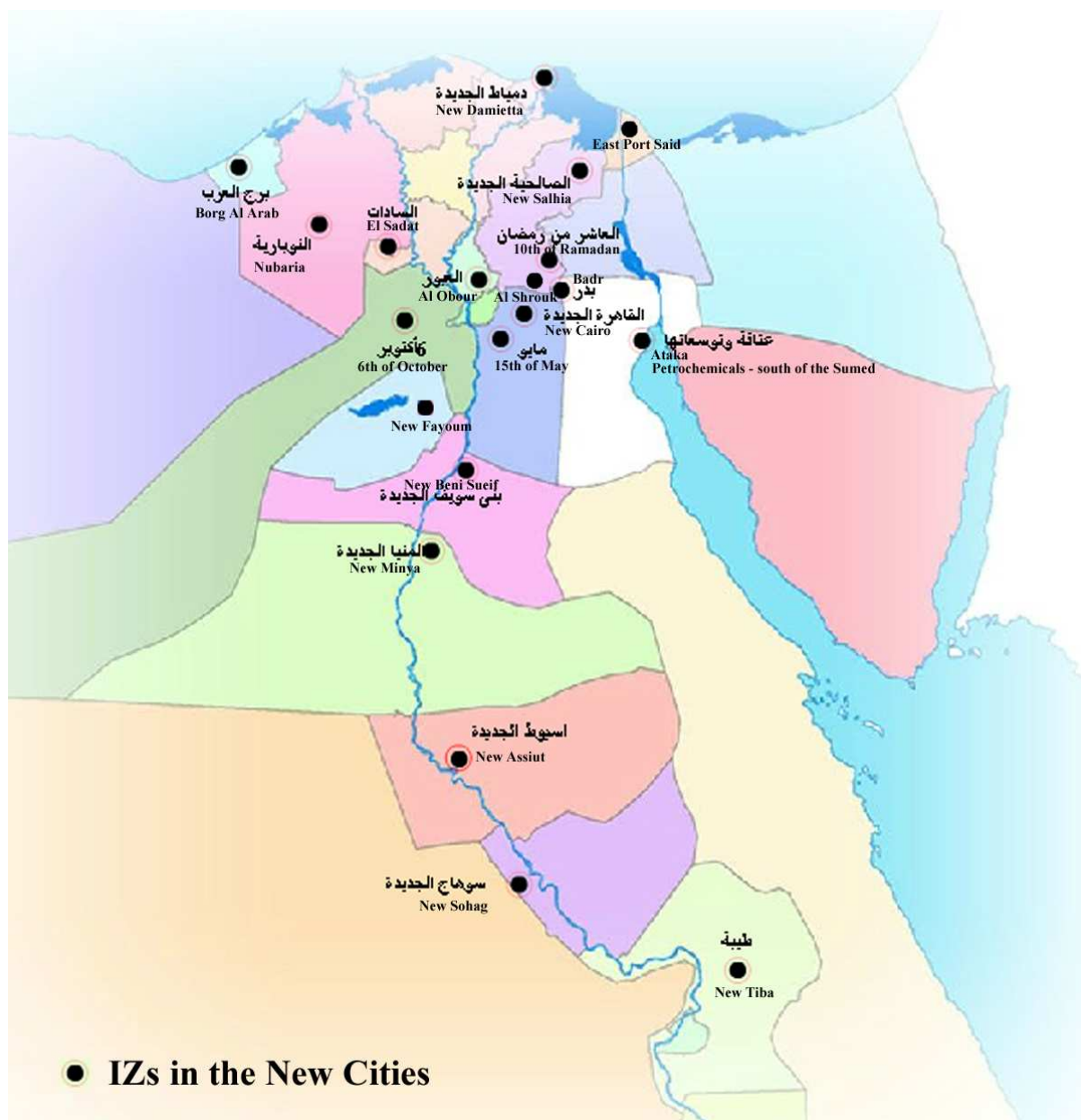


Figure A-2: IZs in the new cities

(IDP, 2011e)

I.2.3. IZs of the Industrial Developer Program⁷:

Creating strong relationship with the private sector has recently become the prevailing strategy of the Egyptian Government (IDP, 2011d). To apply this strategy, the government has made some institutional/legal arrangements. The government established the IDA and gave it the authority to develop IZs in collaboration with the private sector. Accordingly, the decree no 350/2005 establishing the IDA allowed industrial developers to take part of IZs' development. This is understood from the responsibilities given to the IDA. the establishing decree reads:

Setting the conditions and rules that permit private companies to establish, provide infrastructure to, create administration bodies of, and manage industrial zones; and offer investors tracts of lands needed. (Mubarak, 2005, article 2)

Hence, the government created a new program for industrial parks' generation in cooperation with the private, local and international sector, entitled "the Industrial Developer Program". It aims at creating the suitable environment for work, accelerating the development process and easing the burden on the State budget (IDP, 2011d). To do so, the program sets developers responsible for the expenses of the zone internal development, including facilities, infrastructure, services and so on.



Figure A-3: The IDP sites

(IDP, 2011e)

In addition, the program takes advantage of the developer's experiences in managing and marketing the zone, hence, speeding up the marketing process both internally and externally and, thus, speeding up the implementation process (In-G-06). All the current IDP sites are

⁷ This program is discussed in details in chapter 6

allocated in the planned extensions of a number of new cities, such as those of 6th of October City, 10th of Ramadan and Borg El Arab City, where the constituents are available for industry, including infrastructure, transportation means, energy, labour and so on (see Figure A-3). This applies to the already planned three phases of the programme (Ac-G-03).

I.2.4. Heavy IZs:

The previous IZs are not, by location, permitted to encompass heavy industries what led to the idea of establishing IZs for such type of heavy and polluting industries away from urban areas. Heavy industrial zones are established by the decree No. 358/2008 which put them under the mandate/jurisdiction of the IDA. The surface area of each of them is around 300-400 km² of the desert land owned by the state. Therefore, their idea relies on establishing an integrated zones of industries, residential, services and logistics (In-G-06). The first attempt to establish these zones returns to the former Prime Minister Kamal El-Ganzouri who issued a Military Governor's command to establish 27 IZs of heavy industries. However, after appointing the following government, headed by Dr. Ahmed Nazif, the government cancelled the previous command. Through the recent pursuit by IDA, claiming the need for such IZs according to the industrial development plan, IDA began to revitalize the heavy IZs project (Ac-G-03). According to Assal (2009), the proposed number of zones that need to be revitalized is 24 out of 27 previously- issued IZs. A presidential decree was issued to relocate a number of 11 IZs while work is in progress by the NCPSLU to explore the rest of the sites (Arab-Finance, 2011), (see Figure A-4). After that, the IDA is authorized to select the projects and complete the planning and operational steps.

Therefore, the IZs of such type are still in a very early step of the planning process. As investigating the planning process is the focus of this research, this type is excluded from the sampling process.

After excluding the governorate IZs inside cities and the heavy industries zones the sampling process is performed on the other three types: a) the governorate IZs outside cities, b) the IZs in the new cities, and c) the IPs of the IDP. It is also important to mention that (a) and (b) types are both owned and managed completely by the government although they vary in location and mandate. Both types, therefore, represent the traditional way of founding the IZs.

Approved & Proposed Heavy Industries IZs



Figure A-4: IZs for heavy industries

Reference: (IDA, 2011a)

II. EXAMPLE OF CORRESPONDENCES WITH THE INDUSTRIAL DEVELOPERS

Re: Towards Planning Eco-Industrial Parks in Egypt: a request to induct an interview

Hide Details

FROM: mohie shalaby

TO: Dr. yafi mohamed

CC: yosra abdelmoneim

Message flagged

Friday, 13 November 2009, 8:16

Dear Dr. Yafi,

The pleasure is mine to meet you and thanks for your interest, kind and quick reply. I will be waiting for Miss Yosra to contact.

Kind regards

Mohie

Mohie Edeen Shalaby

PhD Researcher

School of City and Regional Planning

Cardiff University

King Edward VII Avenue

Cardiff, Wales

CF10 3WA

<http://www.cardiff.ac.uk/cplan/contactsandpeople/researchstudents/p-z/shalaby-mohie-overview.html>

Assistant Lecturer

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Tel: Mobile (+2)0190015450

Office (+2002)33038438

From: yafi mohamed <yafi_mohamed@cpcegypt.org>

To: mohie shalaby <shalabymohie@yahoo.co.uk>

Cc: yosra abdelmoneim <yosra_abdelmoneim@cpcegypt.org>; info <info@cpcegypt.org>

Sent: Tue, 10 November, 2009 17:39:54

Subject: RE: Towards Planning Eco-Industrial Parks in Egypt: a request to induct an interview

Dear mr mohie shalaby

I will meet you with pleasure

My assistant miss yosra abdelmoneim will constct you to define a meeting

Yosra

Pls check my planning and define a meeting to mr mohie as usual after 1 pm

Best regards

Dr yafi

From: mohie shalaby [mailto:shalabymohie@yahoo.co.uk]

Sent: Tuesday, November 10, 2009 04:48 م

To: yafi@link.net; a.rabie@cpc-egypt.org

Subject: Towards Planning Eco-Industrial Parks in Egypt: a request to induct an interview

السيد الفاضل المحترم/ محمد اليافي مدير عام شركة CPC

تحية طيبة مباركة ...،

مرسله لسيادتكم م. محي الدين سعد شلبي المدرس المساعد بكلية التخطيط العمراني و الإقليمي بجامعة القاهرة و الباحث بدرجة الدكتوراه بقسم تخطيط المدن و الأقاليم بجامعة كارديف بالملكة المتحدة للموضوع التالي:

" نحو تخطيط مناطق صناعية إيكولوجية في مصر: العملية التخطيطية و العوامل المشكلة لها "

“Towards Planning Eco-Industrial Parks in Egypt: the Planning Process and the Forming Factors”

تسعى الدولة و بصورة حثيثة إلى تطوير القطاع الصناعي لجذب الاستثمارات العالمية و من ثم دفع التنمية الصناعية لاجاد المزيد من فرص العمل و رفع مستوى المواطن المصري. و بالتوازن مع ذلك، تبنت الدولة و أعدت إستراتيجيتها الوطنية للتنمية المستدامة لإحداث التناغم بين السياسات و الخطط الإقتصادية و الإجتماعية و البيئية. في إطار ذلك، تهدف هذه الدراسة إلى تحليل و فهم و من ثم التنظير لعملية تخطيط المناطق الصناعية في مصر و تحديد مدى انفاقها مع مبادئ الإيكولوجيا الصناعية Industrial Ecology التي تعتبر الأداة العملية لإنشاء مناطق صناعية مستدامة إقتصاديا و إجتماعيا و بيئيا.

من هذا المنطلق، استخلصت الدراسة إطار مبادئ نظري من الكتابات و التجارب العالمية يعمل على التأسيس للخطوات و للمتطلبات و للعلاقات الواجب توفرها في العملية التخطيطية لإنتاج المناطق الصناعية الإكولوجية. تستخدم الدراسة التطبيقية هذا الإطار في جمع المعلومات من خلال اختبار ثلاث حالات دراسية صناعية لمناطق صناعية مع اجراء مقابلات مع الممنين الذين شاركوا و كان لهم دور في التخطيط (على مستوياته المختلفة: قومية و إقليميا و محليا) لهذه المناطق و من ثم سؤالهم عن عملية التخطيط المتبعة و الدور الذي لعبه كل من شركاء التنمية في هذه العملية و العلاقات فيما بينهم و كذلك العوامل و الأليات التي شكلت العملية التخطيطية. و تخلص الدراسة من ذلك إلى التنظير

لهذه العملية و إلقاء الضوء على ما بها من سلبيات و إيجابيات و اعطاء التوصيات اللازمة لتفادي السلبيات و لتعظيم الإيجابيات و من ثم دعم صناعة القرار في صياغة السياسات الواجب اتباعها لتحسين عملية التخطيط للمناطق الصناعية نحو مناطق صناعية مستقبلية تتسم بالإيكولوجية.

من خلال ما سبق، تهدف مقابلة سيادتكم الى مناقشة مجموعة من الموضوعات للوقوف على و من ثم الاستفادة من تجاربكم و رؤاكم حيال موضوع البحث. هذه الموضوعات هي كالتالي:

- خطوات عملية التخطيط للمناطق الصناعية و دور الشركاء المختلفين و العلاقات فيما بينهم و الأدوات و الآليات المستخدمة.
- العقبات الفنية و الإدارية و القانونية و كيف يتم مواجهتها.
- كيفية انتقال و تداول الأفكار في منظومة تخطيط المناطق الصناعية في مصر.
- كيفية اختيار فريق العمل و التخصصات و المهام الموكلة إليه.
- مشاركة الأطراف ذات الصلة في عملية التخطيط و الآليات المستخدمة لتحقيق التواصل و التفاعل فيما بينهم.

مع التأكيد على أن جميع ما تقدمونه من معلومات أو آراء أو أفكار سيتم التعامل معه بسرية تامة و لن يطلع عليه إلا فريق البحث بالجامعة. و كذلك يؤكد الباحث أنه سيقوم بتزويدكم بنسخة من نص المقابلة حتى يتسنى لكم مراجعتها و من ثم تعديلها وفقا لرؤيتكم قبيل استخدامها كأحد المصادر القيمة للدراسة التطبيقية للبحث.

لذا أرحو من سيادتكم التكرم بالمه افقة على اجراء المقابلة و تحديد المه عد الذي يناسبكم،

ر لسيادتكم عظيم الشكر و الامتنان على مشاركتكم القيمة في اثراء البحث العلمي.

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III. DESCRIPTION OF THE RESEARCH SAMPLE

III.1. *AL Tajamouat IP:*

On the origin of the company and how it has developed, In-28, the Executive Director of AL Tagamouat IP, said that AL Tajamouat Company is originally a company for real estate development which succeeded in developing an industrial zone in Jordan that was one of the first industrial zones owned and managed by private sector. The objective of the company was the development of the first project of an industrial city in Jordan. The idea at that time was not to be an industrial city as it would be a unit of workshops and crafts as there was no strong industry in Jordan to necessitate the foundation of an industrial city. Then she added:

We acquired 500,000 m² and we made the development, planning and infrastructure. We extended our work where we were building crafts, commercial, services and workshops units and offering them for sale or rent. We were trying to facilitate and speed up the person's decision to invest by having something that is ready ... The investor can take 500, 1000 or 1500 m² depending on his/her need. Of course the big move came after Jordan signed the “quiz” convention and foreign plants started coming from different States to benefit from the advantage of exporting to USA “UTI free” ... We started building larger factories 5000, 10000 and 20000 m² and marketing these lands to people who want to open factories in Jordan. Within 6 years we were able to be the largest industrial park owned and managed by the private sector in Jordan. We started to expand our work; through marketing the project abroad not only waiting for people to come from outside Jordan but also going there and marketing the project. The idea behind our project in Egypt was that Jordan has no more capacity for the development of industrial zones than Egypt. It was necessary to have a look at the development of industrial zones in the surrounding region and Egypt had one of the best investment climates in the region. (In-28)

After the success of developing AL Tajamouat Industrial City in Jordan and at the Egyptian Government’s invitation, a joint stock company has been established under the name of AL Tajamouat Investment Company- Egypt, in November 2007 . AL Tajamouat signed an agreement with IDA, in the first stage of the program, to acquire 1.1 million square meters of land in a unique location in 10th of Ramadan city to develop AL Tajamouat Industrial Park (AL Tajamouat IP), see Figure (A-5). The full network of infrastructure of AL Tajamouat IP is planned to be implemented in three phases over seven years while the construction of the ready and tailor-made industrial facilities will be over ten years. AL Tajamouat has developed its service-oriented module which provides many types of industrial facilities with a turnkey solution for foreign and local investors. AL Tajamouat manages a range of integrated investor solutions by an experienced team, which will further facilitate the process

of starting up and operating businesses for manufacturers, in addition to offering auxiliary services¹ (Altajamouat-Egypt, 2011).

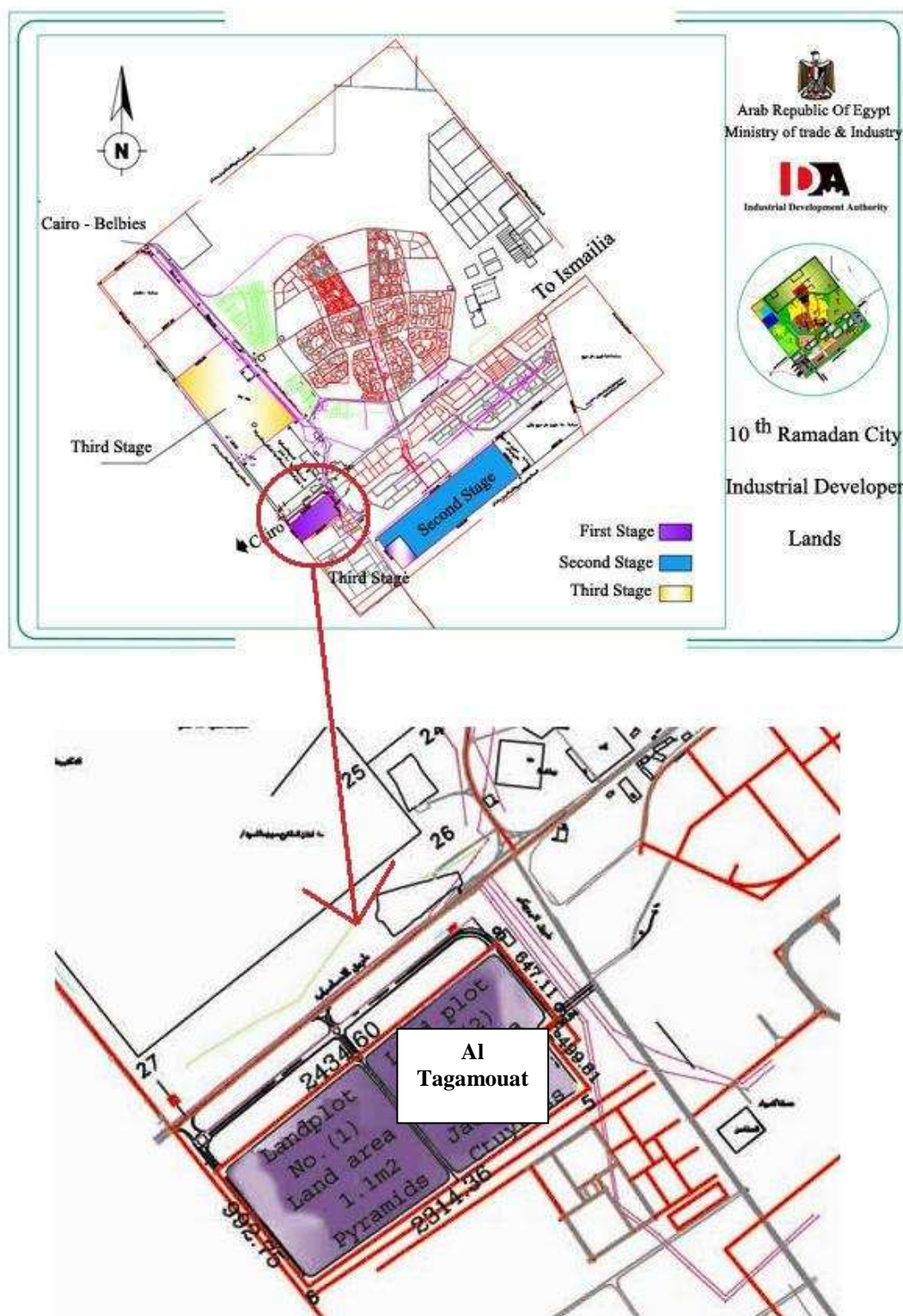


Figure A-5: Al Tagamouat IP location

Reference: collected by the researcher from (IDP, 2011c)

¹ They include labour and managerial dormitories, industrial food catering facilities, commercial units, storage and warehousing areas, and office spaces allied with general maintenance, housekeeping, and security services.

III.2. CPC Egypt IP:

According to the CPC website, CPC stands for ‘Construction Products holding Company’. CPC is a Saudi company, one of a supply chain of Bin Laden Group, where its subsidiaries are dynamic, developed, and reputable organizations committed to the highest work and safety standards in the field of building materials and construction products. CPC, with its highly experienced group of companies and staff members is dedicated with its well-trained work force and is in a strong position to offer complete turnkey projects including engineering and construction products. Its involvement in projects varies from a turnkey contractor to a joint venture partner to a main subcontractor (CPC-Egypt, 2011a). In-43, the Executive Manager of CPC, adds more details defining the company and the start of the project saying:

As Bin Laden group takes large building contracting, they resorted to manufacture high quality building materials in order to maintain a commitment to its due time, . We are running more than 30 factories located in various industrial zones. we want to convey our experience outside Saudi Arabia and engage in the industrial developer scheme in more countries including Egypt while establishing our own industry at the same time, that’s working industrially as well as an industrial developer. Also in Syria we entered industrially and as an industrial developer and we established an industrial complex. We are opening a project in Abu Dhabi, also an industrial complex including uneven areas. As a company we have our constructions company and we do not have other partners,. (In-43)

From the CPC website it could be added that CPC Egypt signed a contract with IDA to acquire 1.5 million m² of land in sixth of October city in the first stage of the IDP, see Figure (A-6). This project is considered to be one of the first Industrial parks in Egypt owned and managed by a private sector company. CPC Egypt is divided into four areas as follow: construction material area, food industry area, textile industry area and the park central services² area. CPC Egypt will acquire for its own use, two lots of land to build its own building material factories (CPC-Egypt, 2011b).

² They include structure facilities: water, electricity, sewage, etc, labour housing, technical school, mosque, clinics, food court, laundry, cafeteria, and other recreation facilities.

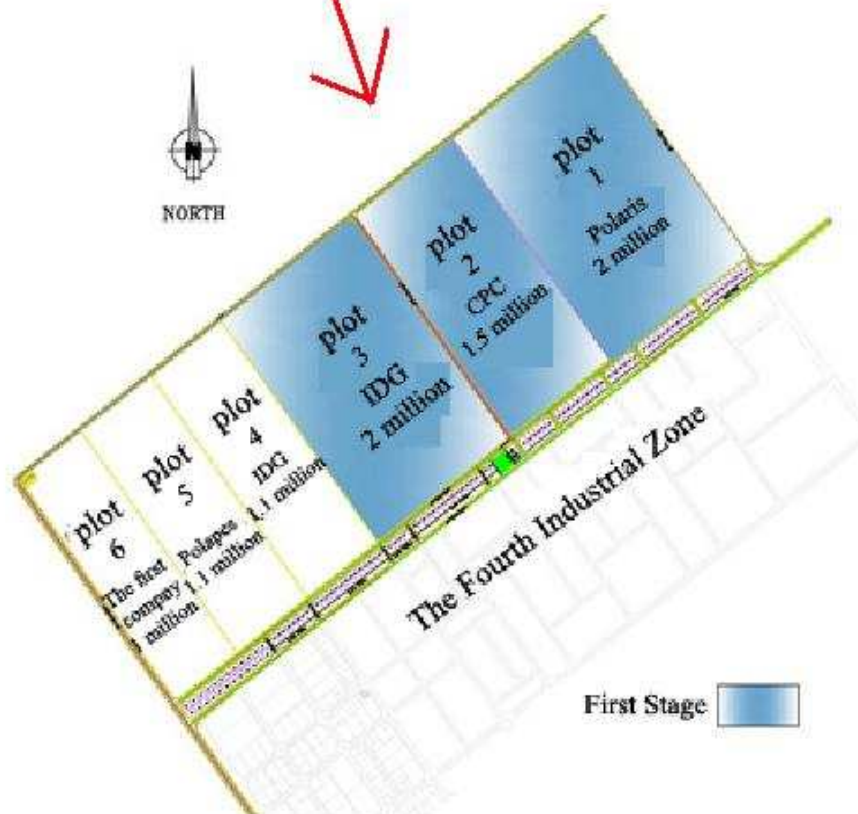
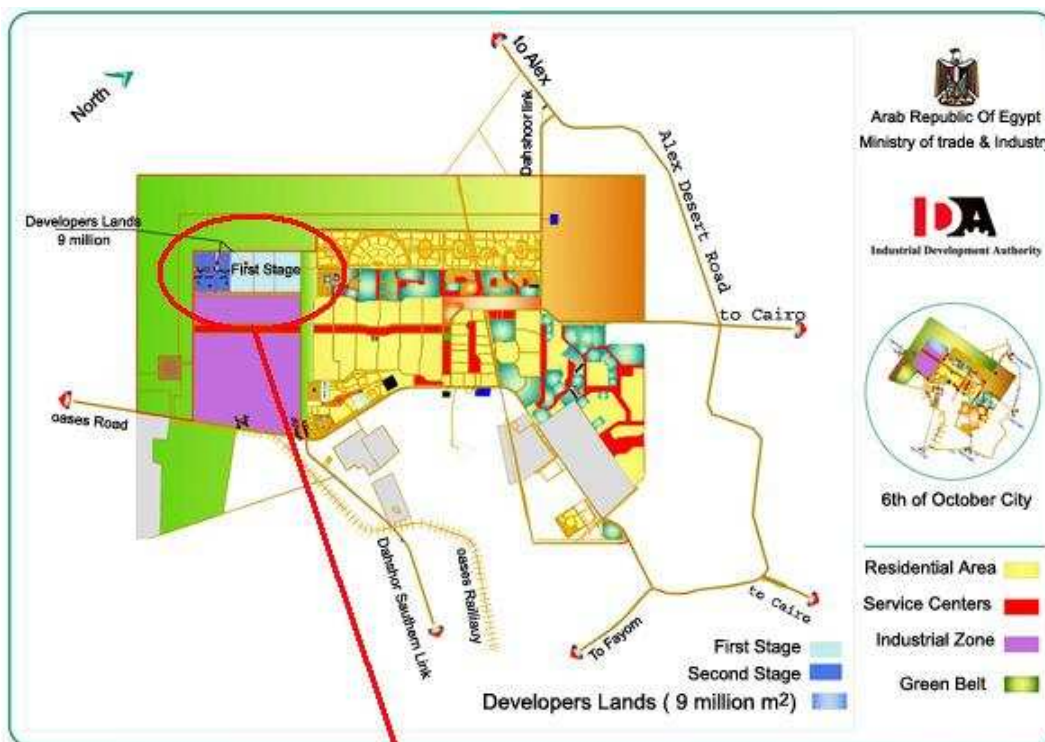


Figure A-6: CPC IP location

Reference: collected by the researcher from (IDP, 2011c)

III.3. The Third Company: IP3

IP3, a company from the second phase of the program, signed a contract with the IDA to acquire around 1 million m² (IDP, 2011a). The IP3 industrial activities are chosen to be mainly in the engineering industries and complementary in various industries like; construction materials, textiles and food industries.

When comparing the three cases, it is possible to argue that Al Tajamouat Company is more experienced in the industrial development field. This is due to its previous involvement, as an industrial developer in establishing, and operating an industrial park in Jordan. This is not the case for CPC which is working only in the area of manufacturing building materials in such a way far from the idea of industrial developer. The third company differs from Al Tajamouat Company despite the fact that its executive manager had been involved in the preparation for a first phase company. As all companies of the first and second phase have not been implemented and hence lack the experience of operating and production. This advantage particular to Al Tajamouat Company has uniquely influenced the process of initiating the IDP, as discussed in details in chapter 6.

IV. GENERAL FRAMEWORK OF THE INTERVIEWS QUESTIONS

Table A-3: General framework of the interview questions

	Main idea		Subject of the question
1	The project story	1	Asking about the project story
		2	Asking the respondent to abstract the project story in a specific steps from the idea, reasons, steps,...
2	Involved partners roles	3	Another way to ask about the story with focusing on the roles of partners and the relationships between them?
		4	In case of the respondent forget a specific important partner or not aware of all partners: I will ask to help him/her to focus on a specific named partner: the governorate, planning team, FESDIZ, firms, champions,
		5	The Government role.
		6	More focusing on the role of the respondent's body in the project?
		7	The way of choosing the IZ location and activity
3	Relationships among partners	8	Focusing on the relationships between partners and the extent to which they were supporting the success of the project?
		9	Tools/instruments used to build these relationships?
4	Legal, institutional and planning obstacles	10	Legal and institutional obstacles and how they been overcome.
		11	Planning regulations obstacles and how they been overcome.
		12	Partners' environmental awareness? Used ways to develop.
5	Ideas	13	The way of gaining new ideas, adopting the ideas, and convincing other partners.
6	Planning teams	14	The choosing of the planning team.
7	Networking and participation by the planning team	15	Evaluating of the planning team way of networking with other partners.
		16	Evaluating of the planning team way of building ideas, participating with others, and the used tools for that.
8	Community participation	17	The respondent vision about how the other partners accepted the ideas and dealing with others.
		18	The value system adopted in each partner. Is this was obstacle or incentive? And then?
		19	Was there a community participatory environment? (Surrounding inhabitants, champions, NGOs and the environmental groups).
9	Supporting tools and incentives	20	Demanding fund and administrative support from other partners/international donors. And how they respond to your demands?
		21	Regulation based approach or substantial incentive program? Which way used to push investors to accept the idea?
10	Recommendations, future plans for spreading the idea and how?		

V. LIST OF INTERVIEW/EE(S) AND ROLE

Table A-4: List of interview/ee(s) and role

Code	Role	Interviewee's Orientation					Profession & Job Nature				Case studies				Interview's Length (minutes)
		Environmental	Development	Academic	Judiciary	Industrial	Governmental	Planner	Consultant	Investor	Existing	New cities	Developers	General	
Ac-01	Lecturer, Department of Regional Development - Faculty of Urban and Regional Planning, Cairo University (FURP) Senior Planer and the project Manager of the planning of a number of Industrial Parks through private consultants. A member of an NGO (refused to dismiss)													32	
Ac-08	Assistant Professor, Department of Urban Planning - FURP. Head of Urban Research Consulting Centre (URCC), FURP Senior Planer and the project Manager of the planning of a number of Industrial Parks through private consultants.													80	
Ac-12	Professor in Department of Architecture, Faculty of Engineering, Aim Shams University. Chairman of Engineering Office for Architecture & Planning (Archplan).													70	
Ac-15	Assistant Lecturer, Department of Regional Development - Faculty of Urban and Regional Planning, Cairo University (FURP) Founding Partner of the Consultant Office for Planning. Environmental Expert at GOPP, URCC.													70	
Ac-44	Lecturer, Department of Urban Planning - Faculty of Urban and Regional Planning, Cairo University (FURP). Project Manager of the Strategic Planning of a number of villages in the Egyptian Countryside for GOPP. Senior Planner and the project Manager of the planning of an Industrial Park.													64	
Ac-55	Professor, Head of the Department of Basic Sciences, Faculty of Urban and Regional Planning, Cairo University (FURP) Consultant for many Ministries and Institutes such as: • Ministry of Housing, Utilities & Urban Development, Egypt (MHUUD) • General Organization for physical planning (GOPP).													83	
Ac-66	Assesstant Professor in Department of Urban Design, Faculty of Urban and Regional Planning. Chairman of Planning and Architecture Office (PAO).													45	
Ac-G-03	Planning Consultant to the Head of the Industrial Development Authority (IDA) - Consultant to a number of governorates and bodies including the General Organization for Physical Planning (GOPP) - Professor, Department of Architecture and Planning, Faculty of Engineering, Suez Canal University (FESCU)													137	
Ac-G-11	Consultant to the Chairman of the General Organization of Physical Planning (GOPP). Head of the Technical Secretariat for planning new cities, GOPP. Lecture, Department of Urban Design, Faculty of Urban and Regional Planning (FURP) - Cairo University (on leave)													90	
Ac-G-38	Consultant to the Chairman of the General Organization of Physical Planning (GOPP).													11	
De-04	Deputy of Architecture & Consultations Eng. Div. Head, El-Araby Group of Companies & Factories, Industrial Sector - Quesna													28	

Code	Description	Interviewee's Orientation					Profession & Job Nature				Case studies				Interview's Length (minutes)
		Environmental	Development	Academic	Judiciary	Industrial	Governmental	Planner	Consultant	Investor	Existing	New cities	Developers	General	
De-28	Project Manager of Al Tajamout Industrial Park in Egypt, Al Tajamout Investment Company for Industrial Parks and Real Estate Development.													73	
De-43	General Director of CBC Egypt for Developing Industrial Zones (Six of October City)													70	
De-64	Project Manager of IP3 industrial Park													60	
De-G-02	Technical Director (Chief of Technical Engineers) - New Urban Communities Authority (NUCA)													28	
De-G-17	Head of Technical Affairs Sector, GOPP													6	
De-G-19	General Director of Technical Affairs Sector, GOPP													27	
De-G-22	Head of Technical Affairs Sector, NUCA													8	
De-G-37	Director of the Administration of Urban Planning - Quesna City - Menufiya Governorate.													50	
De-G-50	General Director of water and sanitation Planning - in the GOPP													11	
De-G-57	Director of the Office of Investment - the Development Council of Six of October City													22	
De-G-61	Engineer, Technical Affairs Sector, New Urban Communities Authority (NUCA).													20	
En-25	Project Manager of Strategic Urban Planning for Small Cities Project, UN HABITAT and GOPP													37	
En-65	General Manager of Environics Environmental Systems on the path to sustainability. Ex-Director of the Environmental Assessment Administration - the EEAA													50	
En-G-13	Environmental Consultant to the EEAA													13	
En-g-16	General Manager of the Legal Affairs, EEAA													22	
En-G-32	General Director of Industrial Zones development administration, the EEAA Member at the charity for Environment and development.													22	
En-G-35	Director of Projects Administration - EEAA													22	
En-G-36	Director of Environmental Assessment Administration in the EEAA													33	
En-G-39	Director of the General Administration of Industrial Improvement & Controlling - in the EEAA													5	
En-G-45	Manager of the Legal Affairs Administration in the EEAA Director of Technical Office of the Assistant Minister of Environmental Affairs for Legal Affairs.													70	
En-G-52	Vice Director of the Department of Environment - the Development Council of Six of October City													22	
En-G-54	Senior Engineer at the department of Environment - Quesna City Council - Menufiya Governorate.													17	
En-G-60	Professor, Department of Urban Planning - FURP. Member of the Board of Directors of the FSEEDIZ. Member of the Board of Directors of The High Council for Planning. Founding Partner of a private consulting Office													40	
In-47	Professor - Agricultural Research Center - Cairo University. Investor and Owner of an Industrial company in Anshas Industrial Zone													15	
In-G-06	Head of the Central Administration for General industrial Zones in the IDA													26	
In-G-23	Vice President of the IDA for Technical Affairs.													15	
In-G-29	Advisor to the Head of the Industrial Development Authority (IDA)													10	

Code	Description	Interviewee's Orientation					Profession & Job Nature				Case studies			Interview's Length (minutes)
		Environmental	Development	Academic	judiciary	Industrial	Governmental	Planner	Consultant	Investor	Existing	New cities	Developers	
In-G-31	Head of the Central Administration of Industrial Developers in the IDA													6
In-G-41	Manager of Quesna Industrial Zone - Menufiya Governorate													40
In-G-42	Executive Manager of the FSEEDIZ													15
In-G-58	Vice Executive Manager of the FSEEDIZ													27
Ju-14	Chairman Judge at Cairo Economic Court													20
Ju-48	Chairman Judge at Giza Court of first instance													90
NGO-30	Professor, Department of Environmental Engineering Sciences, and Vice Dean of the Institute of Environmental studies and research - Ain Shams University													25
NGO-34	Head of the charity for Environment and development													122

VI. IZS PLANNING PROCESS: AUTHORITIES AND COMPETENCES OF THE GOVERNMENTAL BODIES INVOLVED IN THE PROCESS

VI.1. Introduction:

This appendix discusses various concerned bodies within the State that are involved in the planning process for IZs. Authorities and roles of each body will be addressed from what is granted by law to each of these bodies and also from what is imposed by law including mechanisms, coordination tools and institutional arrangements aimed at tightening the relationship between these bodies in order to adjust the production process of IZs in Egypt.

VI.2. Industrial Development Authority (IDA):

VI.2.1. Reasons behind the IDA establishment:

IDA was established by the presidential decree No. 350 for the year 2005 that transfers the entity and the competences of the General Authority for Industrialization to the IDA. The decree also added to the IDA competences related to industrial lands development, encouraging investment in the industrial sector and facilitating the acquirement of the industrial permits (Mubarak, 2005) what will be detailed later. There are multiple reasons behind this conversion, but the main reason as far as what was clarified by Ac-G-03¹ is the policy that was followed by the State on the establishment of IZs in the governorates. Therefore, Governors sought to establish IZs without a general plan of the State governing this work. This resulted in the governorates exaggeration of the State's overdraft budget² for the implementation of the infrastructure. But that had not been completed in most zones what affected badly these zones and prevented them from contributing to the Egyptian industry. This happened in light of lack of powers of the General Authority for Industrialization to intervene in the competences of the governorates with regard to IZs. Therefore, the Government took its decision to re-drafting the General Authority for Industrialization to give it more powers and roles to be able to adjust the system of industrial development in Egypt what produced the IDA with its current competences (Ac-G-03).

¹ An indication for an interview/ee, the code may contain some of the following abbreviations that mean: En = Environmental, In = Industrial, Ac = Academic, De = Industrial Developer or Development Officer in local administration units, Ju = Judge, G = Governmental position (it will appear if applicable), NGO = A member of environmental NGOs boards of directors, **Numbers** = Serial Number of the interview/ee.

² Represented in the National Investment Bank.

VI.2.2. IDA's competences and responsibilities:

(Mubarak, 2008b), as well as its implementing regulations, has singled the IDA as the entity responsible for IZs. This is specified in the matters of planning and building organization in pursuance of the purpose of the law and this is what is understood from the following text:

In the application of the provisions of the attached law..... It is meant by the administrative entity responsible for the planning and organization: for the new urban communities; the NUCA, for the touristic areas; the GATD, and for the industrial zones; the IDA. Article No. 4, (Mubarak, 2008b)

By returning to the presidential decree No. 350 for the year 2005, it is found that the IDA is responsible for the implementation of industrial policies of the State, the industrial lands development and facilitating the licensing process as well as encouraging the investment in the industrial sector. Article No. 2 reads:

IDA shall be the entity responsible for implementing the industrial policies to be set by the ministry concerned with foreign trade and industry and its affiliated entities. It shall also be in charge of motivating and encouraging investment in the industrial sector, setting and implementing the policies of lands development for industrial purposes and making these lands available to investors, along with facilitating the acquirement of the industrial permits for them. (Mubarak, 2005)

Then, the decree detailed the different competences, roles and missions that allow the IDA to implement the formulation of the responsibility stated above. They could be classified as follows:

VI.2.2.1. Setting Policies and deciding on establishing IZs:

The decree has singled out the IDA for setting the general policies and plans necessary for developing the IZs, in coordination with the governorates and other concerned entities. IDA shall exclusively have the power to adjudicate the requests for establishing the IZs or expanding those already existing along with setting the conditions and rules connected therewith, whether the IZs are established or run by the governorates or other entities affiliated to the State or the private sector (Mubarak, 2005). In-G-06, Head of the Central Administration of IZs of the IDA, confirmed this matter by saying:

Regarding the entities that control the establishing of IZs: The IDA is the only body that is authorized to adjudicate the establishing of IZs. Okay? And this is according to the presidential decree establishing it, and which granted the IDA this authority.

In addition to the above; the IDA is authorized in setting the general policies and plans necessary for training the labour in the field of industry and supervising the projects financed by foreign grants or loans and affiliated to MTI³. It is also authorized in setting the necessary

³ Ministry of Trade and Industry

policies and mechanisms for connecting the industrial sectors development requirements with the scientific research activities and their related technology (Mubarak, 2005).

VI.2.2.2. Drawing up industrial development studies and plans:

Concerning planning, the IDA is responsible for drawing up the industrial development studies and plans sectorally and geographically, following up and encouraging their implementation. This is plus determining the lands to be appropriated for industrial purposes in coordination with the NCPSLU. Also, it is responsible of determining the industrial activities and products and the related service activities in coordination with the EEAA⁴, the governorates and the other entities of the State and the private sector (Mubarak, 2005). What confirms the competence of the IDA in this regard, De-G-57⁵ assured in her response to a question about the IDA competences compared to those of the City Council, where she works, with respect to the planning process of an IZ located in the same city belonging to the industrial developer program, she said:

Before the issuance of the plan and before approving it, there is not any role for the Council or the Projects Administration in the planning process. Only the IDA was in charge of the whole work and also they approved the plan and then informed us about it.

It is clear from the above that the preparation of planning for the industrial development sites is a pure responsibility of the IDA. Due to the recent establishment of the IDA and also to a prior knowledge of the researcher that the planning of many of the IZs has been done away from the IDA, this made him wonder about an explanation for the dissimilarity between the legal text and its application. The following are some answers from the concerned experts:

First: in existing IZs, the one responsible for planning is the owner whether governorates or NUCA through their own consultants whether private or governmental bodies. In-G-06 gives that meaning by saying:

Concerning all current IZs in Egypt nowadays, governorates were in charge of planning them through their consultants then we continue after them.

Also in the same regard, Ac-G-03, IDA Head's Consultant, declared that:

NUCA has given the industrial sites already planned to the IDA then the IDA just allocated investors on the land lots.... like what the NUCA has already done in the North extension of Six of October City.

As a completion of the above, En-G-60, a member of the Board of Directors of the Supreme Council for Urban Planning and Development⁶, said:

⁴ Egyptian Environmental Affairs Agency

⁵ Director of the Projects Administration of one of the new cities councils following NUCA.

⁶ Details of this council role will be shown later in this appendix.

The NUCA has established the new cities and allocated October, Ramadan and El-Sadat cities as industrial cities. And then the planning schemes began through the GOPP⁷ ... or through the GOPP in cooperation with international consultancy offices.

Secondly: In-G-06 explained that regarding the new IZs currently proposed, the planning will be the responsibility of the IDA by one of two ways: either by the planning and technical team of the IDA or by offering the IZs to the consultancy offices to do the planning task. In detail he said:

Regarding the planning, we, as the IDA, are responsible of it ... I mean, for example," we were just talking on the subject of IZs for heavy industries, because of their importance we will do its planning ... First there is coordination with the entity competent of raw material for industry such as the authority responsible for mineral resources/wealth to set the materials kinds, quantities and so on. Then the technical team of the IDA sets the proposal for industrial activities and products. Now we have determinants of industrial projects that could possibly be established in this zone. After that the subject is to be sent to the planning team to go through the physical planning according to these determinants ... Or for the already completed IZs (meaning the new zones within the provinces or new cities, non-heavy zones), I will put them up to the consultancy offices.... The entire new IZs will be offered to the specialized consultancy offices. The next step is to make a short list and evaluating the offers then the chosen offices will be given the zones.

And by asking Ac-G-03 for his role as a planning consultant for the IDA Head, he said about the IDA's request from him to prepare the planning for the IZs in the governorates:

... and also if there is a governor who has an IZ that he could not or failed to plan it, the IDA tells me to take it and plan it in-house just to speed up the process.
(Ac-G-03)

Thirdly: As for IZs for industrial developers, the developer is responsible for preparing the IZ planning. In this regard, In-G-06 talked about how to set the planning by developers saying:

...after selecting companies which succeeded as developers, each of the chosen will be given around one million square meters in October or Ramadan cities to establish an industrial park. The developer sets the planning concept to be reviewed by the IDA. After the approval, the developer goes into the details and presents a master plan. All the planning determinants of this master plan are already accredited. So, our planning consultant, [Ac-G-03], reviews the master plan, according to these determinants, preparing for the accreditation by the IDA. After that, the developer continues with the master plans of sewage, water, electricity and so on.... On this way, the developer carries the responsibility and the load of IZs planning on behalf of the State.

That is what has been confirmed also by Ac-G-03 by saying:

⁷ On the base that GOPP is the urban planning consultant for the State according to the law and this will be detailed latter in this appendix.

The developer when preparing the planning for his IP, he is the one who brings the planner... So, the developer makes his own arrangements and chooses any specialized consultancy office to do the work.

VI.2.2.3. Industrial lands development:

Regarding tools and mechanisms of industrial lands development, (Mubarak, 2005) states that the IDA is competent in setting the conditions and rules regulating the exploitation and development of IZs' lands and pricing them for investors. In this regard, In-G-06 confirmed that the projects terms of references (TOR) as well as the lands allocation are completely made by the IDA without interference from any other entity, by saying: "The Regulations, planning and lands allocation are all made by the IDA" (In-G-06). About this, he gave an example on the industrial developer program, explaining the remaining lands development steps and mechanisms such as: putting up of lands, receiving companies and evaluating them and selection of qualified companies. In a response to a question on whether the IDA is competent to prepare such steps and tasks he replied:

Yes yes yes, go for example for the TOR which has been prepared for the Industrial Developer Program, it is from the IDA without the participation of any other parties. Completely from the IDA.... Then it has been put up for the companies wishing to enter the program. They then entered, took the TOR, and presented their documents. The evaluation followed by the selection of the chosen companies has been done. All is done by the IDA. (In-G-06)

IDA also sets the conditions and rules enabling the private sector companies to establish, extend public utilities to, and manage the IZs (Mubarak, 2005). In-G-06 explained regarding this point that the IDA works in this concern as a regulator and facilitator for the private sector companies aiming at accelerating the lands development and easing the matter on the State regarding this program. He gave an example to explain the role as a regulator in details, as being about the settling of the developer program in the governorate, saying:

One of the Governorates wanted to enter the Developer Program, where the Governor said that I've IZs which are not yet developed, he asked: can I work with you? I said you are welcomed. The Governor will provide the land which is 600 acres and we will apply the same procedures. The land is owned by the governorate so it will be allocated on the X, Y, Z bases.... I contracted with the Industrial Developer then I send him to contract with the governorate, the original owner of the land, but according to the contract between me and him: There are 4 years to put industries into operational phase, extend all the infrastructure, present a bank letter of guarantee in favour of the governorate and finally having the capability of financial and technical marketing. All the details of both contracts are documented. The governorate, as the owner, with me (the IDA) as a regulator and we both follow up the developer and so on. Ok? Now, how can the developer contract the end-customer? He has a contract model to follow attached to the original TOR. After finishing with the end-customer I then review according to the regulating rules between me and the developer. (In-G-06)

He also explained the IDA's role as a facilitator, saying:

I have allocated a piece of land to a developer, I contact, as an example, the ministry concerned with electricity saying: I have a developer who has this land and his electricity requirements are 70 mega and so and so ... What is your plan to provide this electrical capacity? Their response is that tasks 1, 2 and 3 will be done in time plan of so and so ... If everything is ok and there is compatibility between the ministries' time plan and the developer's one, I then link/join/engage both parties to each other and so on ... OK? (In-G-06)

Regarding land pricing as an important step in lands development policies, In-G-06 explained that the IDA after evaluating sites and choosing one of them as an IZ, it sets up a committee to determine the price. As an example mentioned by him concerning the Endowments lands, saying:

We established, by a decree of the Prime Minister, a committee concerned with evaluating the lands prices. It includes three banks proposed by us. We set up a stir committee to examine the endowment lands that have been nominated and succeeded as IZs, and then place the price. Now another process starts once the initial assessment of the price is determined. It will be sent to the Minister of Endowments as a land owner. If agreed on the price, it will be submitted to the Prime Minister for the final approval. Now we can buy the land and start working on it.

VI.2.2.4. Improving the investment atmosphere:

IDA is authorized in setting the general rules for motivating the investors within the IZs, binding them to definite criteria for production, operation and exportation, or other development targets, and working on providing the proper atmosphere for investment in the IZs in cooperation with the GAFI. These rules are to be submitted to the Cabinet for approval. IDA is also competent to the marketing and advertising of the IZs by Issuing books, magazines, publications and advertising materials to promote the IZs and projects in cooperation with GAFI (Mubarak, 2005).

Perhaps one of the most important tools that provide improvements of the investment climate is the reformation of the legislative framework and simplification of the procedures. Accordingly, Decree No 350/2005 has entrusted the IDA with the task of studying the legislations related to industry and suggesting what is proper regarding them (Mubarak, 2005). In relation to this, Eng. Amr Assal, Head of the IDA, explained the matter in a TV interview through a program entitled "Happening in Egypt" on 16/5/2010, saying:

Our role at the MTI⁸ and the IDA is to review the existing laws and to simplify the procedures.... People suffer from multiplicity of agencies and taking licenses from several entities. We have to unify them and reduce procedures.... Eng.

⁸ Ministry of Trade and Industry

Rasheed⁹ issued 420 ministerial decrees cancelling old ones that hinder the investment. The remaining part is to amend the current law, The Unifying Industrial Law, what is taking place now. (Assal, 2010)

In an affirmation of what has been done regarding the issuance of the Unifying Law of Industry, the IDA has conducted a comprehensive inventory of legislations, laws and decrees related to the industrial activity in Egypt (A-Ahram, 2009). In a statement to Al-Ahram newspaper in its issue dated 11.8.2009, Amr Assal said adding to the above:

This move comes within the framework of the MTI's Plan to issue a uniform law for the industry aimed at unifying legislations, laws and decrees organizing the industrial activity and updating them. Additionally, it also aimed at cancelling the decrees that do not comply with encouraging and accelerating establishing the industrial investment. Once issuing the targeted law; 34 laws, most of them issued for more than 50 years will be cancelled. (A-Ahram, 2009)

VI.2.2.5. Approvals and licenses:

IDA in this concern is authorized to set the conditions and rules regulating the approvals and licenses required for the industrial projects and their issuance, and for issuing the certificates of entry in the industrial register (Mubarak, 2005). The Building Law also states in its article No. 23 what confirms that the competent administrative entity, which is the IDA in the case of industrial lands, is in charge of accreditation of the planning schemes. The text proofing reads:

The competent administrative body¹⁰ approves/accredits the detailed planning of IZs and craft zones in accordance with the regulations issued by SCPUD¹¹. The same provisions and procedures for the lands division apply to the projects division in both the IZs and craft zones taking into account the regulations, the terms and conditions set in the executive regulations of this law. (Mubarak, 2008b, Article 23)

This is what has been confirmed and explained by Ac-G-03 saying about his role in the IDA in reviewing and then approving projects:

When a scheme comes to the IDA, I technically review it ... So, my role through the IDA is reviewing/examining all IZs planning schemes whoever the planner is including those done by the GOPP and those related to the Industrial Developer ... I only review the planning according to the regulations stated in the contract between the IDA and the other party and there is nothing else in my role regarding this issue. (Ac-G-03)

In addition, De-G-31, Head of the Central Administration of Industrial Developer, also mentioned that the IDA is the entity that reviews/examines the IZs schemes and approves

⁹ Ex-Minister of MTI

¹⁰ Refer to article 4 of the same law also mentioned at the start when speaking about the specializations of the IDA in this appendix, to understand that the building law has defined the concerned administrative authority for IZs to be the IDA.

¹¹ Supreme Council for Planning and Urban Development.

them. In the same context, In-G-06 gave the details in this respect giving an example on the Industrial Developer program, saying :

When an IZ land is being allocated to a developer [After allocating a developer to an IZ land], I, as the IDA, work with the developer on the details. First: he presents a master plan. All the planning determinants of this master plan are already accredited. So, our planning consultant, [AC-G-03], reviews the master plan, according to these determinants, preparing for the accreditation by the IDA. After that, the developer continues with the master plans of sewage, water, electricity and so on. (In-G-06)

Moreover, the IDA may mandate any of the concerned State entities for issuing approvals and licenses (Mubarak, 2005). In an interpretation of this issue, De-G-57, Director of the Projects Administration of one of the city councils that follow the NUCA, explained that the IDA authorizes them already in issuing the building licenses for industrial projects within the city, whether before or after the enactment of the new Building Code No. 119/2008. This is because of the lack of the proper/qualified team to perform this task in the IDA.

It is concluded from the above items (from a to c) that the State through the decree No 350/2005 gives the IDA many powers that were within the scope of other State bodies and also were not available at the General Organization for Industrialization. In particular these are; the powers of planning, organization and land development, and setting up the development conditions and rules for dealing with them. In this regard, and in an answer by De-G-57 on whether there are any differences between pre-and post-establishment of the IDA, she replied:

Yes of course, it [she means the IDA] became in full charge of the industrial lands. We were in full responsibility for Lands: marketing, putting out and allocating the lands were tasks that were controlled by us. It was completely our responsibility as NUCA from A to Z. The only thing that the investors were in need to bring from the IDA¹² is just the certificate of entry in the industrial register. Now, the IDA became in full control while we only issue the building license and collect the land price; that is it. (De-G-57)

VI.2.2.6. Coordination with infrastructure authorities:

In regard with infrastructure, IDA's role is to coordinate with the governorates or the other State or private sector entities that take charge of extending the public utilities to and managing the IZs to make them available to investors, through the Industrial Lands Subsidization Fund (FSEEDIZ) (Mubarak, 2005). That what has been confirmed by Ac-G-03 saying:

Regarding the new cities, I gave you the brain which is the centre of businesses which is the IDA while I did not give you the arteries which is the NUCA, How

¹² She means the General Organization of Industrialization

come!? They handed IZs to the IDA, but the whole infrastructure is subordinated to the NUCA. In the first stage, the NUCA extended the needed infrastructure to the IZs. When the industrial extensions happened, the NUCA asked the IDA to pay for the infrastructure saying that we have no budget for these extensions and they are not in our plan. IDA said: Pay! Pay what?! I am not in charge of paying for the infrastructure. That is it. I mean, you gave me a body without vessels, how could the blood feed the body? (Ac-G-03)

It is clear from the foregoing that the law did not give the IDA the authority to extend utilities and even entrusted the task of coordination with the concerned authorities to the FSEEDIZ. In this regard, the text of the law is weak especially when compared to similar provisions of other laws and in particular Law No. 59/1979 concerning the establishment of the NUCA (Assadat, 1979). This law dictates in a clear way and gives authority to the NUCA to establish, extend and operate the utilities¹³. Hence, an important question emerged here which is: Through this framework, what is the role played by the FSEEDIZ - as one of the tools of the IDA - in the coordination with relevant agencies in establishing and extending utilities? This is what will be answered in detail during the talk later on the FSEEDIZ as one of the bodies involved in IZs' planning process.

VI.2.2.7. Coordination with other parties:

As regard to coordination with other parties concerned in IZs and following up the implementation of the business, (Mubarak, 2005) obliged the IDA in coordination explicitly, first: with the NCPSLU in regard to site selection and identification of lands. Secondly: with the EEAA with respect to the identification of the industrial projects activities and related services. On follow-up, the decree gives the IDA the power to follow up and evaluate the industrial projects in coordination with the concerned authorities to ensure that there is no violation regarding the use of IZs (Mubarak, 2005, Article 4) . On the other hand regarding the extent that the law makes the State bodies concerned with IZs obliged to coordinate and cooperate with the IDA, the decree text is obligatory to these bodies in the coordination and cooperation with the IDA but only with regard to its competences prescribed by law not with respect to establishing and development of IZs generally and to the utilities and infrastructure in particular. Article No 14 of the Decree stipulates:

¹³ Article No 13 of the Law No. 59 of 1979 stipulates that: "... The Authority [NUCA] is competent to approving and issuing licensing necessary for the establishment, the management and the operation of all activities, projects, buildings, utilities and services that are under its mandate. All of this is in accordance with the laws, regulations and decrees in force." As stated also in Article No. 28 of the same Law that the NUCA is competent to: "... studying and implementation of regional facilities and services utilities for new urban communities projects..... exploring the best ways to implement the regional facilities in the new urban communities' sites to ensure the economic relevance of the projects involved, land distribution/division and establishment of internal facilities either directly through the authority/agency or through concerned development bodies or via any other way that deems suitable for the authority.

The State competent authorities, concerned with the IZs, shall coordinate and cooperate with the IDA to enable it to perform its duties prescribed in this decree. (Mubarak, 2005)

In this regard, Ac-G-03 confirmed on that the system of coordination between government agencies is defective/faulty and that the IDA in this context will not be able to implement something that is not within its power. His words are as follows:

The coordination system is full of problems, and therefore what is within your hands is the only thing that you can do. I mean, what is in the IDA's authority, on the ground, is only the land. There is no water, electricity, roads, gas or oil, and even the drugs industry technology belongs to the Ministry of Health. Everything is scattered. It was better when IZs were under the control of the NUCA, I mean, at least the utilities were ensured. But with the IDA, I give you something that you cannot utilize. (Ac-G-03)

The question now that arises is: what mechanisms and institutional arrangements that the IDA uses to coordinate with those concerned with IZs? Regarding this matter, In-G-06, Head of the Central Administration of IZs of the IDA, replied that the IDA uses the tool of committees whether permanent or temporary to coordinate with any authority according to the importance and time granted to a matter to have it done. In details he said:

This means, there is a permanent committee between the IDA and the NCPSLU. As for the Ministry of Mineral Wealth, there is a permanent working committee to identify the heavy industries zones. Furthermore, there is a committee between me and the governorates according to the IZ type and its land owner. For example, if the land belongs to Endowments, there is a committee between me and them. Hence, it is a multiple specializations working group dealing with each other because there is a legal procedure, a technical one and so on. Therefore, both sides work with each other through a team work in which each of them has its role done according to the establishment decrees of both sides. (In-G-06)

Regarding the coordination with the EEAA, In-G-06 illustrated that there is permanent work committee with it for examining the industrial projects schemes and in particular, what is related to the proposed activities, saying :

When I reach as the IDA the step of an IZ with a master plan, at this point I involve the EEAA.... There is a permanent committee with it to get the schemes accredited. It does some amendments, actually they are very minor ones, but at least it does not deny an investor when he/she presents a master plan and say "No, I do not know anything about you". So, the EEAA has an important role in accrediting an existing master plan with proposed industrial activities. (In-G-06)

From another side, De-G-57 confirmed the existence of sessions and regular/periodic meetings that gather them with the IDA while some of these meetings are only between the heads of both sides. She said:

Yes, there are many meeting between the NUCA and the IDA.... and of course there are also meetings between the heads of both sides for approving projects....

So, there is exchange in the opinions between the IDA and the NUCA through periodic meetings between both bodies. (De-G-57)

VI.3. Fund for supporting the establishment, extending public utilities and development of IZs (FSEEDIZ):

The establishment of FSEEDIZ returns to the State's desire to overcome the administrative and financial obstacles/constraints facing the development and operation of IZs in Egypt and to make them eligible for attracting investments (In-G-42, In-G-58). Therefore, (Mubarak, 2005) that established the IDA, stipulates in its article 10 the establishment of FSEEDIZ and specifies its purpose and scope of work as follows:

A fund shall be established for supporting the establishment, extending public utilities and development of the industrial zones in Egypt. This will subsidize land prices as well as the industrial and service activities related to them in these zones, in such a manner that leads to achieving the IDA's targets with regard to the industrial development as prescribed in Article 2 of this decree, and in a manner that leads to bolstering the industrial zones ability to attract investments and encourage investment competition. (Mubarak, 2005)

In addition to the previous talk about the aim of FSEEDIZ and its work, Ac-G-03 explained that the expenditure on extending the IZs utilities was made in a random way that made many zones unable to operate in spite of the huge budgets spent. Hence, FSEEDIZ came to correct this by supporting the establishment of what is missing for each zone to be able to run and not to support new IZs in establishing their utilities. His words were as follows:

The purpose is because utilities have been extended but in an incomplete way. Each zone needs just a small thing to be put in operation like a generator, maintenance or any tiny work. FSEEDIZ is in charge to do this work and put the IZ on operation.... I mean, not establishing utilities from scratch. For example of what happened on the time of the [ex-]Minister Ibrahim Suleiman, the construction work for a sewage station has been given to contractors who spent the budget on concrete works. Finally the building has been built but without the mechanical works. Where are the mechanical works? They replied that they are going to import them but they will cost money and so on. He cheated the State and worked on too many stations that most of them do not operate because of the lack of mechanical and electrical works..... So, FSEEDIZ entered the process to complete the station that needs small work to be operated not to support the new IZs or those that are completely vacant from utilities. (Ac-G-03)

On the other hand, In-G-06, Head of the Central Administration of IZs of the IDA, disagrees with what is explained by Ac-G-03 explaining that FSEEDIZ serves the existing zones that have not completed their utilities and also supports the new IZs in their internal utilities, where he said:

When I determine the industry type of an IZ, I can approximately say that.... these are my needs from infrastructure, from where can I get them? I have to pay to get them. There is a fund that supports both existing and new IZs. This is in

coordination with the Ministry of finance that I take a budget from according to a plan listing the existing IZs that have shortage in their utilities for the budget to compensate this shortage. OK, for new IZs, I will send to the Ministry of Finance that I've got a new zone which completed so many steps and it is now under our mandate, so I need a budget to extend its infrastructure. I mean, pay for the internal infrastructure: water networks, sewage networks, roads networks, and so on. The external works are very important, for them I will coordinate with the concerned State authorities to provide them. (In-G-06)

And perhaps the strategy that FSEEDIZ currently adopts is that; In-G-58, Assistant Executive Director of FSEEDIZ, explained it could be interpreted that there is no difference between the former and latter statements but the latter completes the first. Therefore, FSEEDIZ is initially pressing its work, since its establishment, on inventory and assessing the existing IZs with incomplete utilities. As a hierarchical thinking to suit the State budget, FSEEDIZ has chosen one IZ from each governorate to support the establishment of the incomplete utilities and putting the IZ into operation. Then it will continue the work on the existing IZs till putting them all on run while new ones will be supported in the FSEEDIZ future plans (In-G-58). Furthermore, Eng. Amr Assal, Head of the IDA and the FSEEDIZ's Board of Directors, added in a TV interview through a program called "Happening in Egypt" on 16/5/2010, a new dimension of FSEEDIZ's strategy and its role in the development of regions that are not attractive for investments aiming at achieving a balanced industrial growth over the national level, saying:

The role of FSEEDIZ is specifically to assist IZs development and put all the required incentives which help industry success in these ones ... The objective of FSEEDIZ was to provide utilities for the needy IZs ... To complete the existing utilities and as we said it was concerned with Upper Egypt, Delta, the New Valley and Sinai. Therefore, through FSEEDIZ, we were able to provide the utilities necessary to attract industry there.... When we talked about the industrial developer, what did we do?: FSEEDIZ budget is directed to support development in the governorates while the industrial developer shares us and funds the attractive areas for investment like Cairo and Alexandria ... and we directed our investments to Upper Egypt and Delta. (Assal, 2010)

FSEEDIZ is a separate entity of MTI. It has a board of directors that is formed by a decree from the Minister of MTI. The board chairman of the IDA shall be the head of the FSEEDIZ's board of directors (Mubarak, 2005, Article 10). Eng. In-G-42, the Executive Director of FSEEDIZ, justified the separation of FSEEDIZ as an entity from the IDA to the desire to give it the needed freedom of movement away from routine complications that may arise if it is a part of a massive entity like the IDA. Furthermore, this was for it to be granted the needed competence in communicating and dealing with various ministries and bodies which qualify it to play its role quickly and easily (In-G-42).

FSEEDIZ's resources shall be formed of the appropriations and money to be allocated for it by the State (Mubarak, 2005, Article 10). It succeeded after just two years from its formation and through the budget of about a billion Egyptian pounds to attract investments of around 5 billion pounds and run 492 factories (In-G-58). In the same window and in other updated words, Eng. Assal stated that:

The total fund that has been given to the FSEEDIZ till today is one billion and 450 million pounds ... It supported, by using this amount, 33 IZs in 24 governorates. (Assal, 2010)

VI.4. Ministry of State for Environmental Affairs (MSEA) and its executive body: EEAA¹⁴:

According to the official website of MSEA, the mandate of the first full-time minister of environmental affairs at the Cabinet was by the Presidential Decree No. 275/1997 under the title of Minister of State for Environmental Affairs (EEAA, 2011). Wikipedia defines the term "Minister of State" as:

A minister without a portfolio, is a member of the Cabinet, has the right to vote and is directly linked to the Prime Minister. (Wikipedia, 2011)

This definition is similar to the case of the Minister of Environment in Egypt, as MSEA does not have an organizational entity or an administrative body and depends on the presence of EEAA as the executive organ of the MSEA. EEAA's board of directors is chaired by the Minister of MSEA while the Executive Chair of the EEAA is assigned as the Vice Chairman of the board (EEAA, 2006). EEAA has been established by the Law No. 4 of 1994¹⁵, which stipulates that:

An agency for the protection and development of the environment shall be established within the cabinet under the name "Environmental Affairs Agency". The Agency shall have a public juridical personality and shall be affiliated to the competent Minister for Environmental Affairs. It shall have an independent budget and its head office shall be located in Cairo. Branches for the Agency in the governorates may be established by a ministerial decree and priority is to be given to industrial zones. (Mubarak, 1994, Article 2)

VI.4.1. EEAA's competences:

By returning to Law No. 4 of 1994 and the amended version No. 9 for the year 2009, it is found that EEAA's competences are basically limited to setting the policies and plans necessary to preserve the environment while it is not responsible for their implementation. However, it is in charge of following up the implementation of those plans in coordination

¹⁴ Egyptian Environmental Affairs Agency.

¹⁵ This body has replaced the one established by the Presidential Decree No. 631 of 1982 in all of its rights and obligations in accordance with the provisions of Article No. 4 of Chapter II of the Law No. 4 of 1994

with the concerned administrative authorities (Mubarak, 1994, Mubarak, 2009). That is illustrated by the following text:

The Agency shall formulate the general policy and lay down the necessary plans for the protection and promotion of the environment and follow up the implementation of such plans in coordination with the competent administrative authorities. The Agency shall have the authority to implement some pilot projects. The Agency shall be the national authority responsible for strengthening environmental relations between Egypt and other countries and regional and international organizations. The Agency shall recommend taking the necessary legal procedures to adhere to regional and international conventions related to the environment and prepare the necessary draft laws and decrees required for the implementation of such conventions. (Mubarak, 1994, Article 4, Mubarak, 2009).

Within the frame of these competences, the Environmental Law details all the responsibilities, roles and missions through which the EEAA can achieve the purpose from its establishment. Those missions include different stages of the development process starting from submitting the technical opinion to the decision taker/maker. Then there is setting plans and strategies necessary for environmental protection then organizing planning and development reaching to the coordination with the concerned authorities and their follow-up in the implementation of those plans. Finally, there is the mission of taking the legal procedures against offenders. With multitasking and diversity of EEAA's competences, it is worth mentioning here that this section will only study the tasks that are related to the planning process which are in the focus of the research. Those tasks can be listed as follows:

VI.4.1.1. Processing of environmental information and expressing the technical opinion to decision-makers:

Regarding expressing the technical opinion to decision makers that require collecting related data, EEAA is competent to collect national and international information on the environmental situation and the changes affecting it on a periodical basis in cooperation with the information centres of other agencies. Additionally, it participates in the preparation and implementation of the national programme for environmental monitoring and thereby makes use of the data provided in management and environmental planning. Furthermore, it is competent in compiling and publishing periodic reports on the main environmental indicators and outlining them in an annual report on the environmental situation to be submitted to the President of the Republic and the Cabinet, a copy of which shall be deposited at the People's Assembly. It also prepares draft laws and decrees related to the fulfilment of its objects and it expresses its opinion on proposed legislation related to the protection of the environment (Mubarak, 2009, Article 5). EEAA also gives its opinion regarding the scheduling of

hazardous wastes and possibility and conditions of disposal (Mubarak, 2009, Articles 30 and 31).

VI.4.1.2. Preparation of studies and setting environmental program plans:

EEAA in this regard is competent to set the various environmental plans of the State. This includes the preparation of studies on the environmental situation, formulating the national plan for the protection of the environment as well as the environmental maps of urban areas and areas to be developed, preparation of an environmental contingency plan, participating in the preparation of programs to face environmental disasters, laying down a plan for environmental training and supervising its implementation, and participating in the preparation of the national strategy for the integrated environmental management of coastal areas. Furthermore, this involves preparing the programs for the environmental education of the public and assisting in their implementation as well as the training programs for the basic education stage in coordination with the Ministry of Education. Lastly, it is in charge of preparing the draft budgets required for the protection and development of the environment and proposing economic mechanisms to encourage different activities and procedures for the prevention of pollution (Mubarak, 2009, Article 5).

VI.4.1.3. Formulation of the regulatory environmental framework for development and planning:

In this concern, EEAA lays down the criteria to be followed when planning and developing urban area. It also sets the principles and procedures for assessing the environmental effects of projects as well as the criteria and conditions which owners of projects must observe before the start of construction and during the operation of these projects. Additionally, EEAA lays down and follows up the rates and percentages necessary to ensure that permissible levels of pollutants are not exceeded (Mubarak, 2009, Article 5). Furthermore, it shall, in cooperation with MOF, set a system of incentives for agencies, establishments, individuals and others for their environmental protection activities or projects (Mubarak, 2009, Article 17).

Based on the foregoing and as pointed out earlier, it can be seen that the EEAA could be considered as the environmental advisor of the State. Since the competences of the EEAA are confined/limited to expressing the technical opinion when needed, setting strategies and plans, laying down standards and requirements governing the process of planning and development. In addition, the Environmental Law does not obligate the EEAA to implement those plans as well as not giving it legal force necessary to ensure the achieving of such

environmental standards and criteria in the planning process. The only instrument that the law has given to the EEAA to intervene in the development process is to assess the environmental impacts of projects. In confirmation of this meaning, in a question to one of the prominent officials¹⁶ of EEAA on the authority granted by law to the EEAA to interference by rejection or modification in the planning process, his answer was:

You know the Egyptian system and how approvals could be gained, from the important entities like GOPP and the IDA. Everything is submitted to the Cabinet after approvals from those bodies. Then, what is our role? If they consulted us, we give them the environmental dimensions that we need for application. Then the decision is to be issued by the Cabinet, when this happens, you cannot do anything despite the work is possible to be defective¹⁷. However, we do our best to activate the role of the EEAA in site selection and ranking, monitoring and inspection on factories, and studying the EIA..... Therefore, all what we do is ONLY studying the EIA report individually: distance from residential areas, distance from the environmental areas and so on.... Anything else is non/away of our business. (En-G-32)

Within the same meaning and in an answer to a similar question to the previous one but about the EEAA's role in the development sites selection, one of the EEAA's advisors¹⁸ confirmed the previous answer, saying:

There are stipulations that we put, but the EEAA does not intervene in the site selection process as it a higher policy. This is the role of the Government, ministries and the prominent players who do this task. However, some conditions exist, and this is the only thing we do. (En-G-13)

Away from the EEAA's officials, in a short brief response over a question on the extent to which the EEAA intervenes in the planning process of IZs, Ac-G-60, member of SCPUD's board of directors and member of FSEEDIZ's board of directors, answered: "No, they do not intervene and even most of the current IZs have not been basically evaluated by an EIA". In-G-06 also confirmed during his speech on the planning process steps that the EEAA does not intervene in the process except in the step of reviewing the planning schemes after its completion, he said:

Once I announce an area as an IZ and it is done with a master plan for it after calculating my requirements, I send the master plan to the EEAA, and coordinate with it: I have this IZ that I gained the mandate on it by the decree no X. The proposed vision of the IDA it to allocate the industrial activity Y according to this master plan. Could you please approve it? Then the EEAA approves it according

¹⁶ In order not to inflict any harm to this official, the researcher will refer to him as being a senior official of the EEAA who is by virtue of his position aware of the planning process.

¹⁷ Starting from here it is noticed that the official speaks with a low voice when mentioning negative things about important people according to him and raises his voice again when talking about positive things from his point of view.

¹⁸ In order not to inflict any damage to this consultant, the researcher will just point to his location as a consultant of the EEAA without exposure to other details.

to the environmental determinants. ... When I finish the work on an IZ and have a master plan for it, I then insert the EEAA into the process. I mean, as an example, in the Industrial Developer Program, we worked and then worked till we reached an existing master plan with distributed activities that in principle is approved from the IDA according to the contract, I ask the EEAA: what is your opinion now? So, the EEAA intervenes in this point ... " (In-G-06)

VI.4.1.4. Environmental Impact Assessment (EIA) study

Thus, The EIA studies value has been maximized based on that EIA is the only instrument that has been given by law to the EEAA to intervene in the planning process of IZs by assessing environmental projects prior to their implementation. This is understood from the above and as confirmed by Ac-G-11, Head of GOPP Consultant, saying: "We have nothing in the Environmental Law except the EIA". In another way but in more details, En-G-36, Manager of the EIA administration of the EEAA, confirmed the same meaning as above in a response to a question on the tools given by law to the EEAA to ensure that the planning process complies with the environment, where he said:

The Environmental Law is a national legislation concerned with organizing foundations for environmental protection in Egypt. It put two instruments to avoid the negative effects of projects.... A substance called Article No. 34 law 4/94 saying that any proposed activity has to comply with the zoning and its nature. This is the first one¹⁹ ... The second stated by Article Nos. 19 and 23 talking about a required study that is called: Environmental Impact Assessment of projects. Any project has to present a study that shows the environmental feasibility from this project. This study shows the environmental impacts resulting from the project and how as well as the procedures to reduce them and the follow-up of implementing such procedures through an environmental management plan for the project. So, these are the articles of the law that ensure avoiding any adverse effects from any project. (En-G-36)

Hence, after proving the importance of the EIA from the foregoing, it is imperative now to have enough knowledge on this tool and analyse it to identify the role of the EEAA in its application and also its usefulness. Law No. 4/1994 and its amended version No. 9/2009 define the EIA as:

¹⁹ The Law attributed to the Regulations to specify the competent authority of approvals for the suitability of the site and the rest of the details. This is what could be understood from the following text: "It is necessary that the site to be held by the project is appropriate for the activity of the establishment to ensure not exceeding the permissible limits of air pollutants. Also, the total pollution from all establishments in one area has to be within the authorized limits. The executive regulations of this law shall determine the enterprises subject to its provisions and the competent authority for approvals on the suitability of the site and the permissible limits of air pollutants and noise in the area held by the enterprise." (Article No. 34 - Law No. 4 of 1994 that has been amended by the Law No. 9 of 2009). As the old executive regulations are contrary to the text of the provisions of the amended law and that the new executive regulations have not been issued until the time of writing these lines, therefore proceedings to deal with this article which include identification of the hand responsible for the approval for the suitability of the site is still not known. Hence, this tool will be considered from the tools through which the EEAA can intervene in the planning process until a new declaration.

Studying and analyzing the environmental feasibility of proposed projects, whose construction or activities might affect the safety of the environment in order to protect it. (Mubarak, 1994, Mubarak, 2009)

In terms of obligation, the same law is outspoken when stating this issue by saying:

Any natural or legal person, general or private, is obligated to present an EIA study of the establishment of the project to the competent administrative authority or the licensing authority before starting the implementation of the project. Conducting the study is to be according to the elements, designs, specifications, criteria, and the environmental loads of each activity type that are issued by the EEAA in coordination with the competent administrative authorities. The competent administrative authorities are obligated to present the IZs' maps that declare the permitted industrial types according to the environmental loads of each type. (Mubarak, 2009, Article 19)

It is understood also from the text that the Law obligates those in charge of conducting the study to do it according to the EEAA's criteria. In this concern, En-G-36 stated that the EEAA has issued a guide explaining what Article No. 19 states, saying:

First thing that article 19 stated that the submission of the EIA study has to be according to the specifications and criteria issued by the EEAA. Hence, it is must to have guidelines or a guide for any study to organize it whether for the procedures of the study or for the specifications of how to do it. Actually, this guide was issued and released in 1996. Regarding the EIA it includes articles and actions required starting from doing the study and ending with issuing the decision by the EEAA on the study.

As for the role of the EEAA, as well as the competent administrative authorities on this study, we find that the law obligates the licensing authority to send such a satisfying study to the EEAA. The EEAA has the authority to ask for further needed data required to give a decision on the study. Law (Mubarak, 2009) stipulates the details of this matter as follows:

The competent administrative authorities or the licensing authority shall send the EIA study satisfying, mentioned in the preceding Article, the EEAA need, to express its opinion thereon and propose measures required to be taken in the field of preparations and systems in order to treat the negative environmental effects. The EEAA is authorized to ask the study presenter for further data, designs or explanation necessary to express its opinion thereon. The EEAA is obligated to send its opinion issued in this assessment to the competent administrative authority or the licensing authority within a maximum of thirty days from the date of receiving the study or from completing the study or implementing the EEAA's suggestions regarding the study. Otherwise, the assessment shall be deemed accepted by the EEAA. The project has to start its activity through the licensing period given to it, otherwise the environmental approval shall be deemed not existing. (Article No. 20)

By analyzing the above articles Nos. 19 and 20 of the law, it is concluded that the law does not commit the entrepreneur by a specific timing for the submission of the study. The words "before implementing the project", stated in Article 19, open the way in front the owner: from

the time of land allocation and passing through conducting financial and economic feasibility studies then planning and design of the project and at last, licensing the project. After all of the previous steps, and to start the implementation/construction works he/she must present an EIA to gain the environmental approval. The Act also does not specify a time that the competent authority must complete the study in or send it to the EEAA, while the Law obligates the EEAA by a maximum of a month to give its decision. Therefore, the balance is missing here: the speed that the EEAA is obligated to give its decision in does not harmonize with allowing time to the owner and the competent administrative authority to conduct, complete and then send the study to the EEAA. This claims that the priority is given to investment and those doing it at the expense of the environment and those responsible for protecting it. What confirm this claim is that the building Act No. 119 of 2008, in articles from 39 to 42 upon stating the procedures and documents required to give a building license for a project, does not mention any document/approval which must be obtained from the MSEA or its executive body, the EEAA, including the EIA itself to obtain the license to start the construction works. This means that the owner is permitted by law to start the construction works of his/her project without the need to obtain an approval from the environmental authorities or even visit its building (Mubarak, 2008b, Articles from 39 to 42). In another confirmation on this concern, in a response from De-G-57 to a question on the timing of obtaining the environmental approval for a project she replied:

This subject took a long time and many meetings by the IDA discussing many decisions on it and after submitting a final one, people have complained against it. Recently, I have heard that the final agreed decision has been changed again. The last decision was due to the incident where there was a problem in Sadat City, that the investor has built his factory without obtaining the environmental approval. When he tried to run the factory, a problem occurred as a food factory was adhering to this pollutant factory that we talk about. When submitting this case to the EEAA, it refused it and said that the new factory cannot be in the same area with the other one. ... To avoid putting the investor in this situation again, as it is not logic to let him/her go and pay a lot of money in his/her land and building then we tell him/her that your factory has been refused. So, we agreed; the NUCA and the IDA, that any investor must obtain the environmental approval before obtaining the building license for his/her factory. Just a few days ago, I was in the IDA, they said that it is now done that the environmental approval will be obtained after the building license as people complaint against the time wasting. For me, I still disagree their decision, because letting the investor pay for land, drawings and a building then the project is to be refused! What to do with the factory then? This situation and similar ones direct/enforce the EEAA to approve the factory as it is already implemented whatever its nature! Again, they told me that it is now confirmed that the environmental approval is after the building license!

Hence this matter here may raise an enquiry on the feasibility of the EIA study in the case just shown above. It also may give an indication; that needs further investigation when analyzing the case studies in chapter 6, on the weakness or the desire to weaken the environmental decision in the development process aiming at reducing obstacles in front of investors. The MSEA and its executive body, the EEAA, have no authority by law to intervene in the planning decision as explained before. Furthermore, the only tool by which they can intervene which is the EIA study, its decision is marginalized to the extent forcing the environmental authorities to accept and approve the existing status whatever its nature as confirmed by a number of officials and experts as it will be explained in the case studies analysis.

VI.5. General Organization for Physical Planning (GOPP):

Based on what has been stated by GOPP's website, the GOPP was established by the Presidential decree No. 1093/1973 to be affiliated to the Minister of Housing and Construction²⁰. GOPP shall set the rules of the general policy of urban planning and prepare the plans and programs of urban development (GOPP, 2011). With the release of the Building Law No. 119/2008, the term of sustainable urban development has emerged as follows:

GOPP is the State's entity in charge of laying down the general policy for planning and sustainable urban development, preparing the plans and programs for this development at national, regional and urban levels, and reviewing and approving the urban schemes at the local level in the framework of national, regional and local goals and policies for planning and sustainable urban development. GOPP is authorized to verify the application of such schemes and programs in accordance with the previous mentioned goals and policies, and raises its reports thereon to the competent minister for submission to the SCPUD. (Mubarak, 2008b, Article 5)

Law 119/2008 gives details of the variant responsibilities, roles and missions that allow the GOPP to apply the competences stated above. They could be classified as follows:

VI.5.1. Laying down general policy for planning and preparing the strategic schemes:

GOPP sets up and implements the National Program for the Preparation of the Strategic Plans for Urban Development at various national, regional, and governorates levels, as well as the strategic plans of cities and villages (Mubarak, 2008b, Article 6). This is according to what GOPP conducts, in coordination with the competent authorities, of researches, sectoral and planning studies, and taking into account the military vision and requirements and of the defence of the safety of the State. (Mubarak, 2008b, Article 10). GOPP is also competent to review, approve and follow-up the implementation of the strategic plans of towns, villages

²⁰ The Ministry is now called: Ministry of Housing, Utilities and Urban Development.

and their urban boundaries (Mubarak, 2008b, Article 6) through specialized consultancy offices via regional centres of the GOPP (Mubarak, 2008b, Article 11) as described in the following text:

The regional centres for planning and urban development prepare the project of the strategic master plan for the city or the village through experts, consultants, agencies, and the specialized engineering and consultancy offices that are registered with the GOPP. (Mubarak, 2008b, Article 11)

Within the previous outline, Ac-G-11 confirmed that the GOPP is currently working on the national planning for the Republic, saying: "the national scheme is currently under preparation by the GOPP", in addition to the preparation of the strategic schemes for cities, saying:

Of course, in accordance with the new law No. 119, the strategic scheme became the basis of preparing variant schemes.... State is in the frame of the preparation of strategic plans for all cities, villages and hamlets as you know. Therefore, cities like Zagazig and Ismailia are existing cities and that is why the GOPP is working on them.... We are also now preparing schemes for Badr, Al-Sadat, Tenth of Ramadan, Alobour, and New Cairo. (Ac-G-11)

Hence, it follows from the previous text that GOPP has the full authority granted by law in planning existing cities that follow the governorates. But, with the fact that the other cities mentioned at the end of the previous text are new cities that belong to the NUCA²¹, the researcher wondered about the specific role of the GOPP in these cities and the relationship between the two bodies in this regard. Ac-G-11 explained that the GOPP serves as a technical consultant for these projects and he detailed the nature of this role saying:

New cities are cities that belong to the NUCA. Therefore, a decree to redo the strategic schemes for the year 2027 has been established for these cities to give them updated plans.... We as GOPP are not the owners of such project but the NUCA is the owner. All the new cities are put up through the NUCA but we as GOPP are the technical consultant of this project. We are the technical working group to deal with the consultant²²: we prepare the TOR, we take it to the consultancy offices, and then receive the work presentations as well as the technical reports presented to both the GOPP and NUCA. But, we as GOPP take the technical side of the work. In brief: we have the lead in the technical side. (Ac-G-11)

About the reason behind the GOPP being responsible for such role, Ac-G-11 answered:

GOPP, as it does the city planning as well as the strategic schemes of the Egyptian cities, so it has the experiences that allow it to support the NUCA in planning such schemes especially as there are 12 new cities. Therefore, the GOPP carries the technical role in helping the NUCA, but in the natural frame, the NUCA is the base.

²¹ Details of this authority role will be shown later in this appendix.

²² He means the consultancy office that contracted the NUCA to do the work.

VI.5.2. Regulating the exercise of planning and urban development:

Regulating the practice of planning and urban development through: (a) developing capacities of urban planning departments of the Local Units (Mubarak, 2008b, Article 10), (b) developing mechanisms for the implementation of the schemas at different levels and for detailed master plans, (c) assessing and updating information and physical indicators in coordination with the information centres at various levels, (d) to propose and express opinions on laws, regulations and decrees regulating urban planning and development (Mubarak, 2008b, Article 6), and finally, (e) preparing works guidelines of urban schemas (Mubarak, 2008b, Articles 2 and 6) including the identification of methods, rates, and criteria for preparing and pursuing the application of such schemes (Mubarak, 2008b, Article 10). As a confirmation of GOPP's role in preparing the works guidelines specifically regarding the IZs as the research focus, Ac-G-38, Consultant of the GOPP's Head and is responsible for reviewing the works guidelines for the planning of IZs, answered a question on this regard, saying:

Currently, the preparation of these guidelines is being finalized. The origin of the initiative is the cooperation between the IDA and the GOPP to implement the Law, which states that the GOPP is obligated to prepare the guidelines of the planning for different uses.

On detailing the role and steps followed in this regard, he continued saying:

Ac-G-03²³ has prepared, individually, the draft of the guidelines which has been presented to the GOPP as the entity responsible of reviewing and accrediting the guidelines technically. The GOPP through its urban planning consultants reviewed the guidelines and requested some amendments thereby.... The revisions have been done also through workshops where the drafts have been checked by all the competent authorities: EEAA, Fire Fight Forces, Ministry of Interior, Ministry of Defence, and so on..... Through workshops that Ac-G-03 attended in addition to representatives from the concerned authorities as well as the consultants group I mentioned before. (Ac-G-38)

As regarding the role of the GOPP in the accreditation, he answered:

The competent authorities approve the final formulation that has been accredited by the GOPP after conducting the amendments expressed by the consultants and representatives from various authorities. The final formulation then, is to be submitted to the SCPUD for the final accredit. The SCPUD then circulates the accredited guidebook to the Republic and through this step it is given the power as a law. (Ac-G-38)

Ac-G-03, the preparer of the guidelines, confirmed what has been told by Ac-G-38. His answer on a question in this regard was:

²³ He works as a Consultant for the GOPP and as an Advisory for the Head of the IDA.

GOPP appointed and contracted me to prepare the IZs' Guidelines, for the planning of IZs ... The Law says that it is a must to have guidelines/guidebook, the GOPP prepares guidelines for the expense of other entities ... As it is the entity responsible for planning, so they told me that the first guidebook to start with is for industry ... They received the guidebook and they, in the GOPP, are now reviewing it ... It is supposed that the IDA is reviewing with them.... The planning consultants and those from the EEAA and from other authorities have also attended the discussion meetings.

GOPP is authorized to do some additional roles related to the cooperation with the administrative bodies competent of uses of different lands and of the industrial lands on top of them as the research focus. GOPP as the entity in charge of urban planning in Egypt and with its team-works specialized in planning as stated and explained above, supports the IDA in some planning matters that are not explicitly mentioned not only in the Law 119/2008, which organizes the role and powers of GOPP, but also in the decree establishing the IDA No. 350/2005, which regulates in turn the role and powers of the IDA. Some of these tasks are related to the assessment of the validity of proposed sites to allocate IZs on them. In-G-06, Head of the Central Administration of IZs of the IDA, explained GOPP's role in the last mentioned task when he was talking about the process's steps of planning IZs, saying:

...The second step is to evaluate these lands to decide whether they will work or not? Keep it clear in your mind that I am talking about the lands' nature, as evaluating the need of such lands to be presented to the governorate requires another study. But this area of land with particular planning determinants is qualified or not, is the issue I am talking about. So, we work with the GOPP, Ac-G-03 and another consultant with him called Dr. Ayman Elhefnawy, GOPP's vice president, do you know him? ... We sat together in many meetings working on putting the related evaluating criteria as well as thier different relative weights²⁴....

In addition to GOPP's role regarding the technical side of the preparation of strategic planning for the new cities as stated and explained earlier, the GOPP also, based on the previous text, technically supports the IDA in some aspects of planning, as in the previous example: the evaluation and selection of the qualified sites as IZs, without the obligatory/necessary legal provision to do so.

VI.6. *Supreme Council for Planning and Urban Development (SCPUD):*

It is issued by the meeting of the Ex-Prime Minister with Ministers of MED²⁵ and MHUUD²⁶, Chairman of GOPP and the Secretary General of the Cabinet on 07/08/2008 to discuss functions and organizational structure of SCPUD where the council is: the entity

²⁴ Then the expert went on mentioning the evaluation details which are outside the framework of the research focus in this point.

²⁵ Ministry of Economic Development.

²⁶ Ministry of Housing, Utilities and Urban Development.

tasked with achieving the objectives of urban development and coordination among the authorities concerned with the process of planning and urban development. It is also tasked with achieving the link between the economic development plan of the State and the urban development plans (Almasry-Alyoum, 2008). SCPUD was established according to (Mubarak, 2008b), which stipulates:

A supreme council for planning and urban development shall be established and having the legal status, and will be based in the city of Cairo. It is to be formed under the leadership of the Prime Minister, the membership of the competent ministers, heads of the authorities concerned with urban development and uses of state lands, and ten experts who are specialized in related issues nominated by the competent minister, at least half of them are not from the Government nor the local administrative units. A presidential decree shall be issued to constitute the council and its basic system. (Article 3)

The Presidential Decree No. 298 has been issued on 9/10/2008 on the formation of the SCPUD according to the previous provision (Mubarak, 2008a). In the light of what is stipulated by (Mubarak, 2008b), Building Law, as the SCPUD is minutely competent to the following:

VI.6.1. Accreditation of policies and Planning:

SCPUD shall adopt the goals and policies for planning and urban development and urban harmony at the national level (Mubarak, 2008b, Article 4), which its proposals are put by the related competent authorities²⁷. They are to be sent to the Technical Secretariat of SCPUD to prepare the necessary studies thereby and to report its findings to SCPUD for adoption (Mubarak, 2008a, Article 1). It is also competent to the accreditation of strategic plans for urban development at the national, regional and governorates levels upon the presentation of the competent minister (Mubarak, 2008b, Article 10).

VI.6.2. Adoption of the determination of the areas that need re-planning and those non-planned, and the projects outside the urban area boundaries:

SCPUD is also authorized, upon the competent governor's presentation, to adopt the identification of re-planning areas and those not planned according to the output of the strategic master plan or the detailed plan of the city or village (Mubarak, 2008a, Article 7), as well as the adoption of its plans, programs, priorities and mechanisms of implementation and funding sources. It is also authorized to adopt the new urban development projects that are established outside the urban area's accredited boundaries (Mubarak, 2008b, Article 4), which is detailed by (Mubarak, 2008a) as follows:

²⁷ GOPP comes on top of these authorities.

In case of a request to establish a new urban development project outside the accredited boundaries of the urban area of the city or village within the strategic plans that are prepared at the governorate level, the requesting party shall prepare the necessary studies on the project ... The project and studies that have been prepared thereby are displayed to the Technical Secretariat of the Council for consideration in coordination with NCPSLU and the Operations Committee of the Ministry of Defence. It then prepares a report thereon for submission to the Council. In case of SCPUD approval on the project; it will then be raised to the President of the Republic to issue the necessary decrees. The Technical Secretariat of the Council shall conduct the necessary specialized qualitative studies. The SCPUD is authorized to set up quality specialized committees to express their opinion in the submitted issues. (Article 8)

VI.6.3. Coordination and following up:

SCPUD is competent to coordinate between ministries and entities concerned with urban development and uses of the State lands for the preparation and application of the national strategic planning scheme and to enable development partners to implement their roles and responsibilities towards the achievement of national goals. In this regard, Ac-G-11 confirmed in his answer to a question on the problems of coordination between agencies involved in planning, explaining the SCPUD's role in addressing these problems as well as involving all parties in the planning process, saying:

...but now, there is a glimmer of hope ... The new law established an entity and called it the Supreme Council for Planning. It has very great power in conducting the planning processes in Egypt. It really gathers different disciplines with different quality committees. This means it tries to join relevant parties to each other and coordinate between them in different subjects. Therefore, when taking a decision, it will be taken based on the multiplicity of perspectives and taking into consideration the different interests. It has full authority in the planning processes in Egypt. For example: city like Sadat, imagine if it has been connected to Cairo by a metro line, there will be a huge amount of accessibility. Or if it is linked to the Nile Delta through a high way as it is now attracting labour from the Nile Delta much more than from Cairo. Imagine what will happen to the development right there? Then who will take such decisions? Is it the Roads and Bridges Authority or the IDA or the GOPP? Who? The strategic plan addresses such solutions, and this is the glimmer of hope. Because the SCPUD decides what will be done even outside its authorities and that the coordination must be done between x and z to have y done.... Now, such actions are now taking place, so there is a glimmer of hope as well as promising work ... (Ac-G-11)

Regarding follow up of the application of the schemes, SCPUD is also competent to evaluating the overall results/outcomes of the application of the national strategic scheme and regional strategic schemes (Mubarak, 2008b, Article 4). This shall be based on the annual report prepared by GOPP, which includes what have been executed from the programs and projects included in the Five-Year Plans of the State. Additionally, it is competent to evaluating the role of the different authorities concerned with management and

implementation and identifying the most important achievements and obstacles facing the implementation process. In this regard, SCPUD commissioned the concerned ministries and agencies to follow up the implementation (Mubarak, 2008b, Article 6).

VI.6.4. Organizing the Legal framework of urban development:

Building Law gives the SCPUD the power to propose and express its opinion regarding drafts of laws related to urban development (Mubarak, 2008b, Article 4). It is also singled out to review legislations and propose amendments in light of the emerging matters (Mubarak, 2008b, Article 5). Regarding necessary regulations for the licensing approvals, the SCPUD is competent to collect all the regulations stated/prescribed in the related laws and decrees. Then it shall issue a decree including them to be within the regulations necessary to issue a statement of validity of the site for building and licensing (Mubarak, 2008b, Article 4).

Details of this role are as follows:

SCPUD shall address all the State authorities to determine the regulations for the issuance of licenses for each entity. These authorities shall send the regulations they have to the Technical Secretariat of SCPUD to prepare a report thereon and submit them to the SCPUD. In case of approving such regulations, they will be included to the ones necessary for the issuance of licenses. SCPUD shall issue a book including all those regulations to be distributed to ministries, governorates and concerned authorities to obligate them with it without having to get approvals from the competent authorities when issuing a license. The SCPUD is also competent to accredit the planning and building regulations of each of the NUCA, the General Authority for Tourism Development and the IDA within the scope of its competence and after the coordination with the competent minister.” (Mubarak, 2008b, Article 2).

To confirm on this from the field side, on a question that was directed to Ac-G-38, Consultant of the GOPP’s Head and the official responsible for reviewing the guidebook of planning IZs, concerning the accreditation procedures of the guidebook, he answered confirming the SCPUD’s role in the final accreditation, saying:

The concerned authorities approve the final formulation ... Then, it is to be submitted to the SCPUD for the final accredit. It then circulates the accredited guidebook to the Republic and through this step the guidebook is given the power as a law.

VI.7. The National Centre for Planning the State Lands Uses (NCPSLU):

The NCPSLU has been established by the Presidential Decree No 153/2001 (Mubarak, 2001). According to what has been mentioned on the NCPSLU’s website, it is aiming to assure the complete coordination between the State’s entities to: achieve the best possible use of the State lands, follow up the development of such lands and tighten the monitoring over these lands aiming at the full protection against possible assaults. The NCPSLU is also competent

to studying the national key projects to guarantee the maximization of the national revenue (NCPSLU, 2011e). This is also confirmed by Dr. Nazif, the Ex-Prime Minister, after opening the Centre that follows him directly, saying:

The NCPSLU has an important role in the light of the development movement that Egypt witnesses in all fields whether agriculturally, industrially, and on the touristic and urbanism levels. The Centre's role is to achieve the needed coordination between all sectors to reach the best uses of the State lands according to the development goals of Egypt and according to the resources Egypt has whether for agriculture or for the residential areas. (Abdelkreem and Gamaledeen, 2007)

Dr. Nazif also explained that the NCPSLU, which follows the Cabinet, will be having a comprehensive perspective for the development. It will break up the clashes to gain access to the largest return for one major resource which is the land (Abdelkreem and Gamaledeen, 2007). Article No. 2 of (Mubarak, 2001) prescribes the competences of the NCPSLU in coordination with the concerned parties. These competences could be classified as follows:

VI.7.1. Coordination and breaking up the clashes regarding the mandate over the State's lands

Coordination between different ministries on the uses of the State lands outside the agriculture rein, and also in relation to the pricing rules of the land, its selling system, collecting its value and organizing its protection. This includes a possible coordination with the Ministry of Defence on the uses of such lands what does not contradict with the defence plans for the State (Mubarak, 2001, Article 2).

A set of annual recommendations books have been issued by the NCPSLU and the researcher studied three of them that have been published (NCPSLU, 2011a, NCPSLU, 2011b, NCPSLU, 2011c). They work on clarifying and detailing the centre roles as prescribed by its establishing decree and they have been circulated to the State agencies. For example, the third book is about a request from the NCPSLU to the governorates to follow a set of procedures that allow it to activate its role as a member of the committee responsible for deciding on the use of the governorates lands. In this book, the NCPSLU asks for the accredited schemes, sites areas proposed to be used, the nature of projects proposed to be established on these lands according to the development plan and the cadastral maps necessary for these sites. The NCPSLU asks also for that the required data are to be sent to it well in advance before the convening of any meetings. So that the Centre can set up its studies in coordination with other stakeholders and to reach the desired results that achieve the desired consistency between the governmental developmental schemes and the general economic plan of the State. Consequently, those results will then be at the disposal of the governorates and will

generally help them in their developmental orientations (NCPSLU, 2011a). When reaching this point, the NCPSLU would be on its way to achieve the aim of its establishing.

In addition to the preceding competences, regarding the State lands allocation, the NCPSLU is competent to express its opinion on requests from State bodies to modify previously allocated land uses or allocate and add new land. It also expresses its opinion on the clashes between these bodies and each other or between such entities and individuals on determining who is competent to manage, use and dispose of any lands reserved for them outside the agriculture reins (Mubarak, 2001, Article 2). Therefore and to explain the use of the words "express the opinion" previously mentioned and which might be understood as weakening the Centre's role, the researcher questioned a number of the governmental officials, such as (In-G-06, Ac-G-11, Ac-G-03, En-G-32, and In-G-29), about their visions on the role of the NCPSLU and the extent to which it is powerful. Those officials confirmed that the Centre is the key to receiving requests from different bodies, studying them, coordinating between the various State bodies, then expressing its decision and finally issuing the Prime Minister's decree regarding this decision. Since the decision-making within the NCPSLU is the authority of its board of directors that directly follows the Prime minister, so deciding on any matter by this board is the foundation that is followed by routine procedures that will not change anything, up to issuing the Prime Minister's decree. In-G-06 confirmed this meaning by saying:

The owner of a land is to be determined by the NCPSLU.... It has been established since 2004²⁸ ... It counts the lands that are already allocated and those required to be allocated currently and in the future for a specific body, and puts all these data on the general map of Egypt. It then breaks the clashes between these bodies after coordinating with the Army and other concerned bodies. It will finally announce the owner. As an example, we requested it to allocate some lands to establish a number of heavy industry projects. It studied this subject and then announced a number of sites as IZs after coordinating with all authorities. The final step was issuing the establishing decree for such IZs: these sites with coordinates x,y,z for each are allocated and under the mandate of the IDA to establishing industrial projects and so on....

²⁸ In spite of that this statement about the year of the establishment of the National Centre is incorrect, but it is very close to the reality. Despite the decree that established the Centre was on 2001, the Board of Directors of this Centre has not been formed until late 2004 and early 2005 (refer to the Ex-Prime Minister's decrees Nos. 46/2004, 242/2004, 731/2004 and 467/2005). In addition, the opening of the headquarters of the Centre, as stated before, was in 2007. Thus, this explains the matter is that the work of the National Centre has not been sensed by the organs of the State till 2004 or 2005. So, it is worth mentioning that this will be taken into consideration when talking about the implication from this Centre on the planning process of IZs.

VI.7.2. Studies, counting and planning:

The NCPSLU is competent to prepare the necessary studies and environmental and technical researches related to the State lands outside the reins. Additionally, it prepares the inventory and evaluation of these lands and then laying down the master plan of their development and uses according to State policy, hence, the mapping of land uses for all purposes, as well as detailed maps drawn from the general planning. It then delivers to each ministry the map showing the allocated land uses for this ministry's activities. Each ministry will alone have full authority to dispose, oversee and development of such uses. The Presidential Decree also authorized the NCPSLU to share the concerned bodies in selecting and identifying sites for new key projects of the State (road-rail-sea ports and airports - economic areas ... and so on). Furthermore, it is competent to documenting the urban areas boundaries for cities and villages and preparing studies on extensions or modifications of these boundaries. It is also the entity responsible for the inventory of the annual programs for the development and use of the lands of each ministry- with the retention of all data on the State lands outside the reins, which is allocated to each ministry-, the annual uses of these lands, and what is left unused (Mubarak, 2001, Article 2).

Meanwhile, through studying the previous competences specially those related to planning, it might seem that there is overlapping between the SCPUD and the NCPSLU. To clarify the distinction in competences between the two, the researcher directed a question on this meaning to In-G-06. He explained that the role of the NCPSLU is to study the State lands outside the reins of the governorates, break up the conflict between various State bodies in jurisdiction over these lands, and issue the official decree that regulates this issue. On the other hand, the SCPUD is competent to manage the planning matters within/inside the reins/control of the governorates. His answer was exactly as follows:

²⁹... So the National Centre the (NCPSLU) has a role. Ok, there are IZs that are established inside the governorates? No, this centre is responsible for the lands outside the reins called the State ownership but those inside the reins of the governorates, governorates are responsible for its planning. According to the new law, the Unified Building Law, a body has been established called the Supreme Council for Urban Planning (SCPUD), The governor prepares the strategic planning for his/her land uses and accredits it from this council. (In-G-06)

VI.7.3. The relationship between the NCPSLU and the bodies that have mandate over the State lands:

The relationship between the NCPSLU and the bodies that have mandate over the State lands is formulated from two things: the first is the Board of Directors which contains one

²⁹ This text is a direct continuation of the previous text of this expert.

representative from each body and the second is the general framework, which is set up by the centre due to the nature of this relationship. Regarding the Board of Directors, it is headed by the Deputy Premier who is also the Minister of agriculture. Many Decrees which form the board of directors have been issued by the Prime Minister (Nazeif, 2004a, Nazeif, 2004b, Nazeif, 2004c, Nazeif, 2005). By studying the evolution of these decrees, it was noted; the absence of the MSEA from the first formation (Nazeif, 2004a) and it appeared directly in the second formation with both the Minister of Water resources and the Military survey Authority (MSA). In the same formation, GAFI has confirmed that MSA is the only body responsible for lands data base (Nazeif, 2004a). The third formation has confirmed also that MOD is still the only body responsible for keeping the database for all activities (Nazeif, 2004b). As for the fourth formation, Ministry of petroleum has been added and each representative from the NUCA³⁰, GATD³¹ and GALR³² has been exchanged by another one from each related ministry. This made the formation completely from ministries representatives plus the Director of MSA. The Ministry of Trade and Industry (MTI) stays not represented in the NCPSLU board of Directors and even in any of its bodies in all the four formations. This arises an important question on the reason behind the exclusion of the MTI and not any other mandate authority (Nazeif, 2005) and therefore emergence of the wonder on how the coordination is being done regarding the lands allocated for industrial activities.

With regard to the relationship framework created by the NCPSLU, as indicated in (NCPSLU, 2011d), the NCPSLU is engaged by equal relationships to Ministries of Housing, Agriculture and Tourism, all governorates, the NUCA and the MTI. Despite of the absence of the industrial authorities in the board of directors as mentioned before, but NCPSLU sets it right and puts the MTI as a mandate authority connected to it by a relationship that is equal to the other authorities stated before. Deviated from this pattern; first, the presence of the MOD in a special place due to its strategic importance and to response to the duties that the Establishing Decree imposed upon the NCPSLU regarding the coordination with the MOD. Second, the GAFI and the investors have been separated from other bodies. Probably, that is because of the attention paid by the Centre to investment as one of its aims priorities. NCPSLU's website states encouraging investment as the second of seven goals, (NCPSLU, 2011e) reads:

³⁰ New Urban Communities Authority

³¹ General Authority for Tourism Development.

³² General Authority for Land Reclamation.

2. Attracting and directing the foreign and local capitals to invest in funding and establishing the developmental projects to serve the State lands in all fields.

It is also found that each of the Ministries of Environment, Oil and Culture is connected to the NCPSLU through what so called a “special relationship (Atypical)” as stated in NCPSLU (2011d). Therefore, this relationship could be understood as weakening not as strengthening. What confirms this understanding is that the important ministries such as Industry, Housing, Agriculture, Tourism and the Governorates, which are all mandate authorities, have ordinary/typical relationships with the NCPSLU. It is thought that what could be understood here is that the coordination and follow-up with the latter authorities is regular/typical while it is not with ministries like Environment, Culture and Petroleum or only when it is needed on intermittent cases. What confirms this meaning is what In-G-06 said about that the IDA being linked by a standing coordination committee to the NCPSLU, saying: "Means, there is a standing committee between the IDA and the NCPSLU to present the topics....".

VI.8. Local Administration – Governorates

VI.8.1. Competences of the Governorate’s Executive Council (ECG) and the Governor:

The Governorate’s Executive Council (GEC) composed from the governor as a chairman and membership of both assistants of the governor, heads of towns, cities and districts, heads of departments, agencies and public bodies within the scope of the governorate, and general secretary of the governorate as the council’s secretary (SIS, 2011). GEC shall set up, in conjunction with GOPP through its regional centres, local physical goals and policies at the governorate level in accordance with the needs identified by the Governorate’s Local People's Assembly (GLPA) within the framework of the national goals and policies (Mubarak, 2008b, Article 9). The Governor after approval by the GLPA is competent to accredit the detailed schemes for zones whatever its uses are. (Mubarak, 2008b) describes this in details as follows:

A decree by the competent governor is issued after the approval of local people's assembly of the governorate for the accreditation of detailed plans for downtown areas, areas that need re-planning, unplanned areas, industrial zones, craft zones, areas allocated as urban extensions and areas of distinguished value, in accordance with the principles and standards for those areas contained in this law. (Article 16)

This is in addition to projects for land division as stated in the same law as follows:

The competent governor issues, upon the presentation of the general administration of planning and urban development, a decree to accredit the land division projects and its list of conditions, including the obligation to implement internal utilities, or modify these projects or those existing within the urban area boundaries of the city of village, in accordance with the planning and building

regulations approved in the strategic master-plan and the detailed plan ... (Article 20)

VI.8.2. Competences of the General Administrations of Planning and Urban Development (GAPUD):

A general administration of planning and urban development (GAPUD) exists in each governorate based on the Article No. 8, (Mubarak, 2008b). Within its administrative scope, GAPUD is responsible for urban planning matters prescribed by law. At the level of local planning for the governorate, it is involved in the formulation of the development needs and priorities and this is what (Mubarak, 2008b) explained as follows:

The general administrations of planning and urban development formulates, according to the works guidebook of the urban planning schemes prepared by the General Administration of Urban Planning with the participation of the competent local unit, local people's assemblies, the competent executive bodies, and representatives of civil and private society, the urban development needs and priorities at the local level within the framework of the objectives and regional and local policies and proposes the necessary projects and action plan for achieving them. (Article 11)

It is also competent at the level of local planning for cities and villages to prepare the detailed plans of cities and villages based on the regulations of planning and building of the strategic master plan approved for the city or village (Mubarak, 2008b, Article 14). Furthermore, GAPUD prepares the detailed plans for different uses as well as programs and priorities of the integrated development projects of the approved master strategic scheme (Mubarak, 2008b, Article 8). It does the previous tasks through experts, consultants and agencies and specialized engineering consultancy offices registered with GOPP (Mubarak, 2008b, Articles 8 and 14). All are under the supervision of the regional centre of the GOPP of each governorate (Mubarak, 2008b, Article 8).

In addition to the above, GAPUDs shall determine the areas of re-planning and prepare its plans and programs, priorities, and mechanisms for its implementation as well as the funding sources. This is based on that the governors will submit these issues to the SCPUD for accreditation (Mubarak, 2008b, Article 4).

In a summarizing and confirmation of the foregoing and in particular on IZs in governorates, In-G-06 explained that governorates are responsible for the planning of IZs within their reins after the accreditation of the strategic plans by the SCPUD, saying:

... Ok, there are IZs that are established inside the governorates? No, this centre (he means the NCPCLU) is responsible for the lands outside the reins which are called the State ownership but those inside the reins of the governorates, governorates are responsible for their planning. According to the new law, the Unified Building Law, a body has been established called the Supreme Council

for Urban Planning (SCPUD), The governor prepares the strategic planning for his/her land uses and accredits it from this council.

VI.9. *New Urban Communities Authority (NUCA):*

The NUCA has been established by (Assadat, 1979), the Law No. 59 of 1979, in order to curb the urban infringement upon agricultural areas, and redistribute the inhabitants far from the narrow strip of the Nile valley with the creation of new civilized centres for achieving community stability and economic prosperity through the establishment of new attracting areas outside the scope of the existing cities and villages (NUCA, 2011). The NUCA is the only entity responsible for the establishment of new urban communities and is the mandate-holder thereby by virtue of Articles 2 and 9 of the same law mentioned recently (Assadat, 1979). This is stated clearly in Article NO. 2 of this law as follows:

An authority shall be established called New Urban Communities Authority ... Is to be - without the others - the State entity responsible for the establishment of these urban communities. (Assadat, 1979, Article No. 2)

While the ninth Article reads:

A decree of the Prime Minister after approval by the Cabinet to allocate the State-owned lands, which are chosen to establish new urban communities.... Any natural or legal person is prohibited after the issuance of this decree to possess, put hand or assault any part of the lands allocated for the purposes of this Law. It is also prohibited to conduct any business or construct any establishments, facilities or purposes in any way except by permission of this body [NUCA]. (Assadat, 1979, Article No. 9)

Within the frame of the above, the Law singled out the NUCA with a range of competences and authorities to achieve the goal of its creation. Assadat (1979) stipulates:

The Authority is competent to study, propose, implement and follow-up plans, policies and programs of the establishment of new urban communities, according to the economic and social development plan and within the general policy of the State. (Article 28)

In light of this general competence, NUCA's competences as stated in details by the Law could be classified as follows:

VI.9.1. Laying down the policies of establishing new urban communities and organizing and following up their implementation:

The NUCA lays down the policy and prepares the plans and programs of the urban development to establish new urban communities and coordinates between them and plans and puts programs for production and services. And in so doing, the NUCA is also competent to organize, coordinate and exchange advice with ministries and agencies involved in urbanism activities and related fields. Regarding lands and organizing their development, the NUCA is authorized to divide the new urban community to cities, villages, zones, and

districts and set the regulations and building specifications in each of them. It also promotes/markets for the sale, lease or exploitation of their lands (Assadat, 1979, Articles No. 28). The NUCA is also competent to the approval and licensing necessary for the establishment, administration and operation of all what falls within its competences whether they are activities, projects, realizations, buildings, utilities or services (Assadat, 1979, Article No. 13). To facilitate and govern the organization of the new urban communities' development, the NUCA is authorized to establish a council to develop the new urban community and manage the utilities and projects therein (Assadat, 1979, Article No. 44). Concerning the following-up, the NUCA must follow-up the implementation of urbanism plans of new urban communities and overcome what may object the implementation from physical or technical obstacles, as well as assess the achievements (Assadat, 1979, Article No. 28).

VI.9.2. Sites' selection and planning:

The NUCA is competent to conduct studies necessary to choose the most appropriate locations for new urban communities and for their planning (Assadat, 1979, Article No. 28). It is explained by Article 7 of the same Law, reading:

The Authority (NUCA) shall select sites necessary for the establishment of new urban communities and prepare general and detailed planning for them, in accordance with the general plan of the State. Sites' selection and planning are tasks that are to be done by the NUCA, by its organs or by contracting with persons, companies, consulting firms and local and foreign bodies, in accordance with the provisions contained in this law in this regard. (Assadat, 1979, Article 7).

VI.9.3. Studying and implementation of projects and infrastructure:

The NUCA is authorized to work on the implementation of businesses and projects in the new urban communities including services' projects. With regard to utilities, the NUCA is competent to studying and implementation of the regional utilities as well as implementation of interior utilities whether through the NUCA directly, through concerned development councils or in any other way it deems appropriate. It is also competent to oversee the implementation of these projects either alone or through its development councils in every new community (Assadat, 1979, Article 11). In this regard and to explain what powers and control have been given by law to the NUCA over new urban communities, Assadat, 1979 briefly but strongly states that:

The Authority (NUCA) in order to achieve its objectives is authorized to conduct all the actions and works that will implement the determined programs and priorities and it may contract directly with persons, companies, banks and local

and foreign bodies, in accordance to the rules prescribed by the Authority's interior regulation. (Article 11)

To clarify and confirm the previous legal article, Ac-G-11, GOPP Head's Advisory and Chairman of the technical secretariat of planning new cities, in dealing with the differences between GOPP and NUCA confirmed on the authorities and powers given to the latter as the owner on its mandate over the new cities. Also, he confirmed on GOPP's role as a planning consultant to the NUCA, saying:

Both two authorities are subordinated to the Ministry of housing. The NUCA has many many many other tasks in the frame of lands allocating and work within cities themselves.... We in GOPP play a technical role helping NUCA but in the normal case, it is in full charge. It is in charge of contracting and dealing with investors as well as doing the internal coordination with them while we play an advisory role.... This combination happened because the NUCA is the owner of all the new cities ... Cities like Zagazig, Ismailia are existing cities and that is why GOPP is in charge of their planning while new cities are subordinated to the NUCA. (Ac-G-11)

Regarding IZs within the new cities, In-G-06 interpreted the nature of NUCA's competences of land ownership and preparing and accrediting the planning schemes, saying:

... Industrial zones within the new cities were and are still owned by the NUCA, we [the IDA] regulate these zones: we set up industrial regulations, how to allocate lands and to whom, how to ensure a serious action from investors and so on. But industrial zones within October City and its extensions are controlled by the NUCA. On 79 when some new cities have been established like El-Sadat and Tenth of Ramadan, they were integrated cities including urban, residential areas and touristic areas. Since 2006, we have the mandate over industrial zones in the new cities but they are still owned by the NUCA. ... There are 8 million m² within October City, they are planned and accredited by the NUCA as an industrial extension and we just added them to the industrial developer program...

VII. NATURE, IMPORTANCE AND KEY REASONS BEHIND THE IDP

The current strategy for industrial development of the Egyptian Government aims at pursuing policies of economic diversity in investment and establishing closer relationships with the private sector through flexible regulations and legislations. In addition, focusing on the competitive advantage in Egypt represented in availability of distinct opportunities for investors and achieving maximum benefit in all areas of industry. Egypt is thus to enter a new era of cooperation between the Government and the private sector through the creation of a new generation of industrial zones with cooperation of the private sector both locally and globally, to help create the necessary work environment to grant the rights to develop, manage and operate lands - on the long-term - to private entities under the association agreements between the Government and the private sector (IDP, 2011d). About the nature of the IDP and its purpose as it is in its initiators' understanding, In-G-06¹, Director of the Central Administration of the IZs in the IDA, said:

The industrial developer is part of the State plan according to the IDA establishment decision where it stated that the industrial zones are to be developed through the way of the industrial developer, what does this mean? It means that the private sector contributes with the State in the development. Meaning that other than having the State working on its own in 2 millions square metres of land providing utilities networks and other things, no, I want the private sector to contribute in all of this within the approved industrial zones.... This is a parallel development method with the State.... By this way, I speed up the development and I take spending money off the State disbursement. I give the developer the responsibility of the promotion and marketing because it is a regulation to have promotion and marketing qualities to be able to marketing internally and externally. Through this way, I help him and he helps himself too ... (In-G-06)²

It could be said from this statement that the importance of the program and its benefit is due to achieving strong industrial development without burdening the State through the partnership between both the public and the private sectors. This is confirmed by ME, the Executive Director of CPC³, saying:

The primary benefit of the way of the industrial developer as an example of the private public partnership, is that it will guarantee a horizontal expansion and large powerful growth of the industrial base, which the State will not be able to

¹ An indication for an interview/ee, the code may contain some of the following abbreviations that mean: En = Environmental, **In** = Industrial, Ac = Academic, De = Industrial Developer or Development Officer in local administration units, Ju = Judge, **G** = Governmental position (it will appear if applicable), NGO = A member of environmental NGOs boards of directors, **Numbers** = Serial Number of the interview/ee

² Amr Assal, The Ex-Head of the IDA, confirmed on the same meaning (Assal, 2010).

³ CPC is one of the companies joined the IPs Program as an industrial developer. It is one of the case studies this chapter is analyzing.

achieve, why? Because, there will be investments within the zone which will be provided by the developer. (De-43)

In-G-06, Director of the Central Administration of the IZs in the IDA, adds to what is mentioned above that the importance of the developer is due not only to the contribution in the establishment and marketing but also to the contribution in the management of the IP maintaining its quality and level of service provided. In this regard, he said:

The developer goal is not to make the infrastructure and that's it, not the goal is the management after operation which is most important as he is not a contractor he is a park manager and operator so his process involves the establishment while the management and maintaining the quality is the important part according to the contract between him and me ... (In-G-06)

There are many reasons for establishing such program where De-43, the Executive Director of CPC, pointed out that the program is a normal result of the ambitious plans made by Egypt for the advancement of the country, saying:

Why did Egypt want to make private industrial zones? Because in the last 5 or 6 years very ambitious plans have been put and it is really the first time to have such plans which are realistic seeking the development of the country, accommodating workers and raising the living standard of people. For this to happen, the agriculture does not guarantee it. The services sector has started to guarantee it, although they are somewhat slow and the State carries a large part of operating. Therefore, the industry is the base for this with the partnership with the private sector. (De-43)

He adds a further reason to what is mentioned before that the failure to deal seriously by investors who were allotted small plots of lands that provided by utilities, which they did not develop, led the State to changing the thought through partnership with the private sector and with giving part of the responsibility to it along with tightening the conditions for development, saying

There is a daunting amount of industrial zones in many countries in the world that has led these countries to be industrial without the State having to pay a lot of money. In Egypt, we did not have such vision ... They decided from 3 years after discovering that investors in the new cities took lands without working in them, they decided to somewhat change their minds. The first thing is to take the lands from those investors then to put some conditions upon the ones who will take lands and at the same time to create new zones where the developers will share in. (De-43)

Others including Ac-G-03, the Consultant of IDA Head, have a different point of view referring to the weakness of the State budget and its incapability to extend utilities which led the State to have a partner, saying:

... You gave the best areas you have which are in the new urban communities to the industrial developer because you do not have a budget to extend the main

infrastructure ... So they brought the developers and asked them to extend the infrastructure. (Ac-G-03)

Amr Assal, Ex-Head of the IDA, confirmed on the limited budget of the Government and this is the reason behind involving the private sector in the existing IZs development aiming at directing this limited budget to develop other IZs in Upper Egypt to achieve good balance in development, saying:

Our resources are limited. Today, we are able with our resources to provide utilities for 2 million meters every year. We still have land in some small towns, for 4 years we are still providing utilities and the investor is waiting to build the factory. We do not want to enter this cycle; taking land without utilities and the investor waits for us, does not build the factory and the employment does not work, and we keep watching each other and say we are fine this way. No, to provide 10 million meters, we had an important goal in the Ministry that development has to be balanced at the level of all of Egypt. Not to concentrate on 6th of October and 10th of Ramadan and therefore all funding coming to us from the Ministry of Finance has not pumped one pound in Cairo or Alexandria. All funding went to Upper Egypt, to the Delta, to Sinai and to the New Valley and resulted in 830 new project as a result of pumping a billion and 450 million pounds in 33 industrial zones in 24 governorates which we spoke about yesterday. (Assal, 2010)

Therefore and as a summary for what is mentioned before, it could be said that the reasons behind this program are due to the weakness of the State budget that pushed the State to enter a partner. What helped the State doing so are the plans put aiming at solving industrial development problems and on top of which not dealing seriously by the investors with the lands they possess. This led to changing the thought and the involvement of the private sector in the management and giving it part of the responsibility.

VIII. QUALIFYING PROCESS OF THE IDP

After offering the program and announcing for one of the IDP phases, the IDA starts the qualifying step, Figure (A-7), and then carries out the final evaluation and choice of companies followed by preparing for contracting procedures. IPs developers confirmed and praised the dialogue formula and style of participation adopted by the IDA through workshops in the qualifying step. It was in an attempt to reach the best possible models for IPs as well as to prepare a preliminary consensual draft of the contract (De-28, De-43)¹. De-43, the Executive Director of CPC, adds that the IDA rejected some companies which had real estate perspective to insure real industrial development.



Figure A-7: Qualifying step in details

Reference: (IDP, 2011b)

In a clarification of the nature of the proceedings, De-28, the Executive Director of Al Tagamouat IP, confirmed² and praised the dialogue formula and style of participation are a preliminary consensual draft of the contract, where he said:

The IDA had an integrated team. They distributed the TOR including prequalification documents. They asked for our previous work, the CV of our administrators as well as our marketing plans that we have used, the way we communicate with our customers, how we follow up with clients, how we build and what will we build. This means that there were preparatory workshops for more than one time. Also there was a workshop convened by the IDA with all industrial developers after we all have presented the prequalification documents. They held a workshop, where all developers were there and everyone presented his/her best ideas for developing the best model for IPs. Of course, they took all the ideas from all people and then, made the contract which was distributed on all of us. We discussed this contract as they put conditions and obligations of the

¹ An indication for an interview/ee, the code may contain some of the following abbreviations that mean: En = Environmental, In = Industrial, Ac = Academic, **De** = Industrial Developer or Development Officer in local administration units, Ju = Judge, G = Governmental position (it will appear if applicable), NGO = A member of environmental NGOs boards of directors, **Numbers** = Serial Number of the interview/ee

² De-43, the Executive Director of CPC IP, shares De-28 in the same understanding but used different words.

Egyptian Government. Then they chose 5 companies from the proposing developers of the first-generation. We were one of the chosen companies. (De-28)

De-43, the Executive Director of CPC, agreed consistently with the overall steps, adding the IDA rejection of some companies which had real estate perspective, not an industrial development perspective, saying:

The project was globally launched. When we entered the project, we made a pre-study. We presented the pre-study of the project. We made it internally and presented the idea to the IDA. They chose us among people who presented good projects ... They attracted some local developers. A Turkish group came as a developer running in development in Turkey and another Egyptian group. Some other groups applied but had a real estate perspective, meaning land speculation. So, they were rejected. (De-43)

With the presence of management experience in dealing with the program and also with the many companies wishing to obtain more lands; the IDA, starting from the second phase, chose evaluating the companies using total points standard. In this way, competitive criteria are determined for the presented offers. That is with the relative weight of each criterion reflecting the viewpoint of the IDA and reflecting its priorities at the time of TOR preparation. Competitive criteria are divided into four main groups: development activity, level of service, technical competence and financial efficiency (IDA, 2008b). De-64, the Executive Director of IP3, confirmed on the application of this on the second phase of the program saying:

Second phase differs from the first phase of the program in that in the second the selection of developers is based on an assessment using the total points standard (experience - reputation - the financial capacity - ..), and when there is equality between companies, the project feasibility study as well as the master plan are used to differentiate between the applying companies. (De-64)

IX. ENVIRONMENTAL PLANNING APPROVALS (EIA STUDIES) OF THE IDP

This appendix discusses the EIA studies as an important step of approvals and licensing that the developer should legally complete. This is examined by analyzing what has been done in this regard in the case studies of the IDP. This appendix deals with the nature and type of the EIA and how is it prepared, approved, what are the parties involved and the role of each partner. Then it addresses problems of application of the procedures and their impact on the actual feasibility of the study and if it achieves its purposes or not. It ends by a conclusion that, from the procedural form, the developer is the one who prepares the study through his choice of consultancy offices to be presented to the city council for reviewing its readiness and send it to the EEAA for taking the appropriate decision. This is done in shape, but the mentioned procedures are affected by many influences, which make the study lack its actual feasibility. These effects were based on the strength of the legal and institutional position of the IDA and the developer when compared to the EEAA which is marginalized with the EIA by which it can intervene to adjust the planning path and make the planning of the IPs compatible with the environment.

IX.1. Nature of the study:

Starting from the contract applied between the IDA and the industrial developer and in particular in the development plan and sales that stipulates requiring the developer “to divide the total area to specific industrial areas according to types of targeted industry and after approval by the EEAA to neighbouring industries places” (IDA, 2008a, p. 33). According to En-G-36¹, Director of the environmental assessment Department in the EEAA, that this is done through preparation of the developer to the master plan and then submitting for approval by the IDA followed by the developer sending it with EIA study for reviewing and audit opinion (En-G-36). The developer prepares the EIA study through specialized technical offices and submits it to the competent administrative authority which is the city council; where the IP lies, for reviewing the fulfilment of its items before sending it to the EEAA for review and decision, what was confirmed by several specialists as well as all developers interviewed by the researcher. In this context De-43, the Executive Director of CPC said:

We made the environmental study for the entire region by a consultant who will also present the study to the council ... We made something called the

¹ An indication for an interview/ee, the code may contain some of the following abbreviations that mean: **En** = Environmental, **In** = Industrial, **Ac** = Academic, **De** = Industrial Developer or Development Officer in local administration units, **Ju** = Judge, **G** = Governmental position (it will appear if applicable), **NGO** = A member of environmental NGOs boards of directors, **Numbers** = Serial Number of the interview/ee

environmental impact of the IP but the distribution of plants (factories) did not happen². (De-43)

De-G-31, Head of the Central Administration of the industrial developer in the IDA, also confirmed on the above and added clarifying the role of the EEAA in the study of the plan and reassurance of considering the environmental regulations by saying:

For the master plan, we put a condition after its adoption that the developer brings an approval on activities. He goes to the EEAA they tell him: No; change this activity, put it here and this activity here and so on. The same activities could stay by the way but they redistribute them and change their locations. Also it is possible after some time while he is adopting for example textile activities that need boilers: these boilers have problems because they need certain treatment stations and he did not prepare the zone for it. Therefore, he has to choose between two things; change the activity or put a treatment station and thus he adds to the master plan and has to amend it again with me. (De-G-31)

About the nature of the study; En-G-36, Director of the environmental assessment Department in the EEAA, which is responsible of reviewing and thus deciding on these studies, explained the nature of the study and its divisions. He added that the developer is asked to make the study for the IP as a whole and then each plant therein has to present another study for itself, detailing this by saying:

The EIA study is divided into 3 sections: basic data brought from library studies; references or literature or through field studies for specific measurements. The second section is a description of the project thoroughly and the third section is the environmental management plan and environmental monitoring plan. The investor within the scope of industrial developers program presents a study for the EIA of the IP as a whole. As this is what happened in the integrated tourism centres; for example one who takes Marsa Alam area and makes development of the whole region and says I will make hotels, rests, business and shopping centres, roads and so on, for this he makes an EIA study for the centre as a whole. Therefore, what applies to tourism centres normally applies to industrial developers. As long as we have a base we follow; it is to be applied to the centre as a whole and to the activity/factory after that. But here there is something is to be considered: the study as I said has 3 sections. The base line already exists, where the factory does the second study will not put the base line as I already have it and will only make the other two sections. (En-G-36)

En-G-52, Deputy Director of the Environmental Administration of Sixth of October City council, which is the department that receives the study from the developer and review its completeness before sending it to the EEAA, confirms on the foregoing saying:

For those developers, each zone individually prepares a complete study. I mean for example I have a zone called Polorice and there are CPC and Sami Saad: All of them are developers ... Each large zone of these made an EIA alone but not

² This means that what is done is the EIA based on the adopted plan, which presents the distribution of industrial sectors without plants (factories) allocation.

from level (B) which is the small one. No it made on the highest level which is level (C)³. (En-G-52)

Thus we notice the reduction of the level of study from (C) to (B) although the probability that the factory is one of the activities stipulated in the EIA guidelines to make a study of level (C). About the reason behind this, En-65, one of the former senior officials in the EEAA and current Chairman of the Board of Directors of one of the major specialized consultancy offices in environment and sustainability in Egypt, replied that this is their vision they put in the modification of the EIA guidelines reasoning that by the following:

When we made the guidelines, concerning the EIA, which we made here for the EEAA, we say, you people if the category (C) is inside an industrial zone with a strategic EIA it is lowered one grade and grade (B) is lowered one grade. Do you understand what I mean? On the basis that a large part of the issue is solved, as long as it follows the regulations and environmental management systems of the industrial zone as a whole, the industrial zone puts a cover as long as it is inside I lower it one grade. (En-65)

But the potential impact of the factory on the pollution carrying capacity of the region is the same in both cases which means this amendment is incorrect. Because the reduction in the level of the study means that the plant is not required to submit a study on the pollution carrying capacity of the region containing it what represents more stress on the environment. This was confirmed when asking En-65 about this issue and, he answered with no logic and his answer included contradiction. This brings us to the purpose of that amendment to the EIA guidelines and the degree of environmental awareness for both who make it or adopt it specially that it contravenes the environment law which included the carrying capacity study to the EIA studies.

En-65 added another dimension of the nature of these studies and considered that what the IPs do can be put as a start on the way to the strategic EIA. He clarified the main reason for resorting this kind of studies is the entry of the private developers and that the EEAA created pressure, even if that was undisclosed, on the IPs exploiting their eagerness to speed marketing their land plots and attracting investors to impose making a study for the industrial zone as a whole :saying

Before that, they used to ask factories to make an EIA, now it is raised to a higher level because the IZ now makes a strategic EIA. Not all existing IZs make, only new ones [He means the IPs], and this is a good development. They become doing a strategic EIA, to which level? Now at least the process exists and the

³ The assumed level of the study that the investor provides is linked to the level of his own project and its classification according to its negative impact on the environment according to the declared lists and enacted in this regard ranging from the white, gray and black lists offset respectively by the level of study to be done, starting from level A, then B and then C.

EEAA started, to my knowledge, and this is an undeclared policy but if you are inside an IP, they will not agree for you as a factory until the whole region has a strategic EIA. Thus they use the factories to press on the IP. Before that, it did not matter for anyone because the IZs followed the governorate. They now know how to do such story because there are private developers who take the IPs and it makes a difference to them as they sell their land plots. Their money is on the scale now as if it is known that EIA's here is not accepted investors will go to another zone. So, now he exerts pressure on the IPs. (En-65)

It is understood from the above that the undeclared policy concerning forcing the developer to do an EIA for the IP as a whole is not based on legal obligation, or at least there are legal loopholes to prevent its application otherwise the EEAA would not have made a deal with the NUCA to ensure its application. This is affirmed by En-G-36, Director of Legal Administration in the EEAA, by saying:

We made a deal with the NUCA concerned with the industrial cities that regarding the zones they gave to developers; the developer in order to get an approval of establishing a factory that he required to submit an EIA for the whole area including the inner divisions. (En-G-16)

From the above we can draw that with respect to the IDP, the agreement between the NUCA and the IDA requires that each IP, as a whole, do an EIA of level (C). So that, each factory or activity within the IP prepares a separate study of level (B) for its project. The study on level (C) for the IPs is considered by some as an introduction or a beginning of the application of the strategic EIA.

IX.2. Problems of the EIA Studies:

There are numerous problems for the EIA studies ranging between administrative and legal problems as well as application problems. As previously explained in chapter 5, the answers from a number of governmental officials⁴ were about the intervene of the EEAA is only through review and approval of the EIA. That section of chapter 5 had ended with a question about the actual feasibility of implementation of this study as compared to its problems. These cons vary from the intended weakening of the study in order to reduce the obstacles facing investors, or putting the EEAA in front of an existing situation by allowing the implementation of projects on the ground and then ask for the approval on the environmental study. Through the identification of problems of application in the IDP cases, we can confirm or deny the problems mentioned in the previous chapter what this part addresses.

The start of application problems is because the contract, as we mentioned when talking about environmental studies, is not obligatory to the developer more than to present a master

⁴ Refer to Appendix VI, the section entitled "Environmental Impact Assessment (EIA) study.

plan showing the main divisions of industrial types targeted in the IP. This must be done in a maximum period of three months of signing the contract. Therefore, this is often done without completing marketing and therefore without actual implementation for what is already settled based on actual sale of the land plots. Moreover, the general distribution provided by the developer is always subject to, as previously mentioned, to the industrial demand. This in total means that the EEAA approves a general distribution subject to often change. Thus, how is this reconciled with the guarantee of achieving the objective of the environmental study? Directing this question to In-G-06, Director of the Central Administration of the IZs in the IDA, he stressed on that the revision regarding the amendments arising from marketing is made in parallel by the EEAA with the IDA, saying:

Some developers have joined the program and after taking the land and working they found that marketing for themselves has a majority for an industrial activity that was minor. He can send me asking to change. I study it and I say ok, adjust the master plan, redistribute the activities, and redo the environmental approval in parallel with me. The EEAA approves the developer's master plan in parallel with me so that when the end customer submits his studies things go right. So, yes I can amend for the developer according to the regulations I have. (In-G-06)

En-G-36, Director of the environmental assessment Department in the EEAA, confirmed the above, adding that the developer is asked to submit distribution of the industries activities shown in the master plan. And in case of changing, the developer has to provide a complementary study or just notification in cases of compatibility of activities. Thus the developer must coordinate with the EEAA in each step taken in which there is a change from what has been approved, and exactly he said:

No, there is something called sectoral division: what is the sector? Is this sector nutritional or building materials' or what? The developer says I will make nutritional with building materials', another one says plastic with mineral materials', and a third one says I will make it all assembling cars. OK, if he said in the study I will make plastic and no one comes for plastic so, he makes a complementary study; he must tell me. It is not according to the demand as this takes place in old zones depending on clients' needs. How come this happens here as well? Why is it called developer then? He presents a master plan and adopts it from the IDA ... He can only change it after returning back to the IDA and to be able to change it, the IDA will request an approval from the EEAA again. But there is something: for example, if it is plastic industries zone and a paper factory comes, there is something called compatible activities. Actually, the paper is consistent with plastic. In this case, he can send us and we can say we don't mind ... Thus every step he takes he must coordinate with me if there is a change from what we agreed upon ... But if the change is within the same activity he does not come back to us. (En-G-36)

Moreover, to complete the picture, En-G-36 was asked about their action in case of the developer's change is within the same activity in response to the industrial demand and if the

developer is obliged to refer to the EEAA before selling, he replied: No, as the factory itself will make a separate study.

From the foregoing it can be concluded that; first: with the mere notification in case of changing the activity within what En-G-36 called compatible activities, the developer, additionally, can change the industrial types as he wishes responding to industrial demand as long as it is within the same chosen industrial sector without reference to the EEAA. It is known that many industrial sectors include a wide range of industrial activities types that could be consistent with each other among themselves or with neighbours, while this consistency does not occur in case of other types. This wide range of types, for example in engineering industries and in miscellaneous industries, is considered as an advantage by some developers aiming to benefit from it in marketing⁵ based on what En-G-36 stated. This leads to difference in the image approved by the EEAA than what can be imagined to happen, and on the actual feasibility of making an EIA under these rules. Second: In light of En-G-36's statements, that there is no restriction to land surface areas as long as the developer did not alter the industrial activity. This raises a question on the impact of that on the IP carrying capacity associated with surface areas and number of industries not just their types. It is known, according to the updated regulations for the Environment Law in 2005, that the term carrying capacity has been added to the elements are to be measured, by the environmental study provider for a project of level (C) within an area already having sources of pollution. This is to check the degree of the IP acceptance or environmental capacity to accommodate new activities. Such as making an industrial extension of an industrial zone or adding a group of factories to an existing industrial zone (En-G-36). By knowing that the IPs are examples of the projects identified by En-G-36 under non-compliance with the change of surface areas of the inner land plots, will the industrial developers be obliged to present a carrying capacity study? En-G-36 answered as follows:

Actually it is supposed to be so, but with the developers working in remote areas with little or no high industrial density, so they do not make it. But if the developer works in an existing industrial zone or making an extension for it; in this case I request a carrying capacity study from him. (En-G-36)

Since all industrial developer sites are merely extensions of already existing industrial zones, see Appendix III for maps, and that 6th of October city and 10th of Ramadan city are considered from the most intensive industrial sites, these are the two cities that include the three case studies of industrial developers program. The size of contradiction in En-G-36's

⁵ Referee to chapter 6 in the section entitled "Choosing IPs activities", for the quotation of De-64.

talk can be noted and his trial to justify the non-obligation of the developers with this study. We conclude from this that the EEAA does not oblige the industrial developer to present a carrying capacity study as well as it does not consider the possible impact of non-compliance with industrial land surface areas within the industrial activity.

In addition to what is previously mentioned, this part identifies what the developers themselves do as well as their views on the problems have been addressed before. In a question about the amendments that occur on the plan linked to the industrial demand and marketing and if it requires a re-approval from the EEAA?, De-43, the Executive Director of CPC, answered no. in details he said:

No, no, we have a view on the projects ... and each factory presents an EIA of the project. The factory that we find, from the start, messy and will not work properly with us we refuse it. If a factory needs an opinion we ask the IDA and it states this is within the activity A, B, C. (De-43)

Therefore, it is understood from this statement other than that stated by En-G-36, the director of the environmental assessment administration, concerning that the developer coordinates with the EEAA step-by-step in case of the change. This is also confirmed by De-64, the Executive Director of IP3, more clearly and powerfully than what told by De-43, saying:

The role of the EEAA is limited only to the approval of the EIA on the master plan, which shows the land plots without the actual allocation of industries. This means it shows one type of activity such as engineering industries which includes many industrial types. Thus, they are just filling papers and it is just a routine work because this master plan completely changes linked to selling. (De-64)

As a completion to the application problems and by asking En-G-36, Director of the Environmental Assessment Administration in the EEAA, about the obstacles they face, he answered in a way confirming what was mentioned in the previous statement that the study in its entirety is just filling papers and routine work. As the IDA does not give any weight/interest where the project is implemented without the EEAA approval. Then they, the EEAA, are surprised by sending the study at the time of implementation. He explained the reasons for his rejection of this by saying:

The project is being implemented and we are surprised by receiving its EIA! ... We give opinion on two things: the location and the impact of the project on the site. The location could be inappropriate and the project is already implemented, how can I give a decision! (En-G-36)

En-G-16, Director of Legal Administration in the EEAA, confirmed on the same problem mentioned by En-G-36 and saying that it is a common problem. He also supported the

researcher by many variant official letters⁶ as examples of a lot of letters directed to him from many local administrations (Sixth of October and other cities councils and local administrations) reporting cases on operating factories that did not gain the environmental approval (Variant-Local-Administrations, 2009, En-G-16). Asking En-G-36 about how this happens while contradicting the law, he replied:

As I told you, there is no coordination between the authorities. The IDA is supposed to send to me, as soon as it allots the land to the investor, his model and it does not do that. It allots by itself and tells the investor to go and build. After he takes the building license and implements, and he wants the operating license they tell him go to get approval from the EEAA. Now the law obliges him and it used to be before that as well. Generally, the legislation is obligatory but the problem is in the penalty, as the violation has no penalty as law No. 4 did not include a penalty concerning the EIA but the new law No. 9 now exerts a penalty. It also specified that the study is to be submitted before the project implementation. (En-G-36)

The viewpoint of the competent administrative authorities in the industrial cities, represented by the Deputy Director of the environmental administration of sixth of October city following the NUCA, came confirming on that the problem of projects implementation without the approval of the environment comes on top of the problems they face⁷. She added that this problem is common but it is in the way for solution because the law No. 9 has put financial penalties of up to one million Egyptian Pounds for implementation without having the environmental approval.

En-G-36, The director of the environmental assessment administration, adds another problem which, is the lack of seriousness from administrative authorities in reviewing the studies and to assured their compliance and accuracy before being sent to the EEAA, clarifying the repercussions of that by saying:

The second thing is that some authorities do not revise the studies and do not make sure they meet all the elements. They just send them as they are. I ask for completing the uncompleted elements and this is the role of administrative authorities. Of course, this increases time for the project owner and thus he is negatively affected. (En-G-36)

En-G-16, Director of Legal Administration in the EEAA, confirmed on the foregoing, adding the administrative authorities' lack of transparency in providing information, explaining the following:

The lack of transparency of the authorities sending the EIA in the point regarding the detailed maps, where it is supposed that the authorities make a form or a map

⁶ See Appendix X for a copy of some of these letters.

⁷ The researcher conducted some interviews with other environmental specialists and governmental environmental administrative that all of them confirm the same problem such as: (Ac-G-11, Ac-09, Ac-15).

or an estimated drawing for the proposed location for the establishment of industry noting that the drawing area for the proposed industry site does not decrease than 6 km². They have to tell me the different uses in the vicinity of the 6 km² surrounding the location as most industries have a safety level of 6 km such as fertilizers, cement, iron, and steel industries. They are supposed to have a map and the map showing the existing industries, not to write that they don't exist. This land is designated for this industry and this for that industry and so on. What do they do? they say this is an unoccupied plot, unoccupied, and so on ... Those doing the EIA are blind; they just see through paper. They just judge through paper. They do not go to the site ... He has a fertilizer factory surrounded by unoccupied plot No. 60 and 70. I do not know what 60 is to be designated for nor what 70 is designated for nor 80 for what. The information for me is anonymous (vague) and you send them a letter but they don't reply. Did you get me? This is what happens on the ground. (En-G-16)

IX.3. Conclusion

Based on the above we can conclude the following:

Concerning the legal obligation; we find that the contract between the IDA and the developer obliges the developer to obtain an approval from the EEAA on the master plan presented through the EIA prepared by the developer through specialized technical offices. This master plan is to be submitted to the competent administrative authority, which is in our case the city council that ensures the fulfilment of the study before being sent to the EEAA for revision and then taking the decision.

About the nature of the study; the EIA is divided into 3 sections: basic data, description of the project and its details, and the environmental management and monitoring plans. The industrial developer is required to make an EIA for the IP as a whole with its three divisions what is called level (C). Then each manufacturer wishes to settle in the IP makes a further study for his factory containing the second and third sections what is called level (B) without the need for the first section, as it had already been submitted in the IP one. The main reason behind demanding the IPs to present a complete study is the shift from IZs owned by the Government to involving the private developers as partners in the process. As the EEAA performed pressures on the developers taking benefit, of their eagerness for speeding up their lands marketing and attracting investors, in imposing making the study for the IP as a whole. This was applied through an agreement made between the EEAA and the NUCA. It is worth noting that this is an undeclared policy and not based on legal obligation. Or at least there are legal loopholes to prevent its application otherwise the EEAA would not have resorted to a separate contract to guarantee its application. Therefore the competent administrative authorities, including the IDA and the NUCA, do not deal very seriously with this study and perhaps the absence of legal obligation, together with the perception that the environment is

luxury (something complementary) are behind the lack of respect for the EIA study as well as the attempts of neglect that conducted by those authorities.

With regard to the problems facing the study in practice, we find that they start by the adoption in the revision only (according to the contract) of a master plan, which does not display more than sectoral division of the industrial activities without actual allocation of factories. This leads to expansion of the range in front of the developer to choose types which some might correspond with each other or with neighbours while this consensus does not occur in the case of other types. This is linked to the industrial demand and thus the image varies from that approved by the EEAA. Thus, this means that such study is just a form that lacks a real feasibility. What confirmed this more is the non-legal obligation (according to the contract) for the developers to take consent of the EEAA in the case of any amendment or change. Any change to the plan means practical change in carrying capacity measurements of the IP contrary to what had been approved by the EEAA. In addition, we find the EEAA contradictory permit which leads to the understanding that developers are not bound basically to doing carrying capacity measurements.

The administrative legal problems are presented in weakening this study to reduce the obstacles in front of the developers. We find that while the project is implemented without obtaining the approval of the EEAA, the EEAA is surprised by receiving the project EIA study at its time of implementation. This means putting the EEAA in front of de facto and therefore it becomes impossible to change the location if it is inappropriate or avoiding its impact either internally or on its surroundings. This happened due to the disappearance of fines from the law but it continued to happen despite adding fines to the amended law⁸, owing to the lack of the seriousness of the Government in operationalizing these penalties especially on big/important investors. Adding to the above confirming on marginalizing the role of EEAA and its only tool, the EIA, is what stated by the EEAA from complaints from the competent administrative authorities in non-transparent dealing and not providing correct

⁸ A fine has been developed for offenders in the amendment of the Environment Law, which was in 2009, but has not been activated to the time of the research interviews, and still seriousness is lacking in the transfer of offenders to court. This is affirmed by the Director of Legal Department of the EEAA in his answer to a question from the researcher on the move of the environmental legal records after amending the law, he said:

I did not make legal records yet and I refuse doing them ... Because what do they send me? Pulp toaster- plastic crusher — I will show you the models [see Appendix X for some of these models] they sent to me and you will laugh. I mean they (Department of environmental assessment) sent me things I'm sorry will bother you psychologically.... Heavy factory do not be sent, these kinds enter on Saturday and take the approval on Thursday. On the other side they send me to complete for a restaurant; the chimney is retort or non-conforming, or the model was not clear, oh he sent to the district council not to the General Secretary and so on while they don't send the heavy and important factories.

information about the projects to push the EEAA to approve the projects. Also the lack of seriousness of administrative authorities in reviewing the studies assuring their completeness and correctness before being sent to the EEAA. This leads to the EEAA request of completing which means prolonging the duration of the process on the project owner.

X. OFFICIAL CORRESPONDENCES REPORTING ON OPERATING PROJECTS THAT DID NOT GAIN THE ENVIRONMENTAL APPROVAL

Arab Republic of Egypt
Cabinet of Ministers
Ministry of State for Environmental Affairs
Egyptian Environmental Affairs Agency

جمهورية مصر العربية
رئاسة مجلس الوزراء
وزارة الدولة لشئون البيئة
جهاز شئون البيئة

الإدارة العامة لشئون البيئة
١١
٢٠٠٩/١٠/١٢

المرجع: لوائح صندوق رقم (١٠)

السيد المهندس / مجدى حسن فرحات

رئيس جهاز تنمية مدينة ٦ أكتوبر

تحية طيبة وبعد . . .

بالإشارة إلى كتاب سيادتكم الوارد لنا بتاريخ ٢٠٠٩/٨/١٩ والمرق به البيانات التكميلية لنموذج التصفين البيئي (ب) بخصوص إيداء رأى الجهاز في مشروع شركة خضر الهندسية لتصنيع المعادن (لإنتاج أسوار حديدية ، أبواب حديدية) ، باسم/ محسن حسن محمد خضر ، بالعنوان قطعة رقم (٩١) محور خدمى ثاني - المنطقة الصناعية الثالثة - مدينة ٦ أكتوبر.

أشرف بالإحاطة بأنه بعد مراجعة للنموذج والبيانات التكميلية المقدمة ، تبين أن المشروع قائم ويعمل بالفعل منذ ٢٠٠١/١٠/١٢ كما ورد بالبيانات التكميلية وبناءاً عليه يتم مراجعة الوضع البيئي للمشروع من قبل إدارة شئون البيئة بالجهاز للتأكد من توافق المشروع مع اشتراطات ومعايير القانون رقم (٤) لسنة ١٩٩٤ بشأن حماية البيئة ولائحته التنفيذية والمعدل بالقانون رقم ٩ لسنة ٢٠٠٩ وفى حالة توافقه يتم السير فى إجراءات الترخيص وفى حالة عدم توافقه يتم اتخاذ الإجراءات القانونية اللازمة تجاه المشروع.

ودرجى التكرم بالتوجيه نحو موافاتنا بأسباب إقامة المشروع وتشغيله قبل الحصول على الموافقة البيئية المسبقة من الجهاز علماً بأن المادة رقم ٨٤ مكرر من القانون رقم ٩ لسنة ٢٠٠٩ المعدل للقانون رقم ٤ لسنة ١٩٩٤ قد فرضت غرامة مالية من ٥٠ الف إلى مليون جنيه على المنشآت التى تقام قبل تقديم دراسة تقييم تأثير بيئي طبقاً للمادتين رقمي ١٩ ، ٢٠ من القانون ونفيد سيادتكم بأنه سيتم المراجعة البيئية للنشاط بمعرفة الإدارة العامة للتفتيش البيئي بجهاز شئون البيئة.

وتفضلوا بقبول فائق الاحترام،،،

رئيس قطاع الإدارة البيئية
فاطمة أبو شوك
(د.ك/ فاطمة أبو شوك)

صورة للإدارة العامة للتفتيش البيئي

٢٠ طريق حلوان الزراعى - خلف فندق سوفيتل المعادى - القاهرة الرقم البريدي ١١٧٢٨ ت ٢٥٢٥٦٤٥٢ فاكس ٢٥٢٥٦٤٩٠
30, Misr Helwan El - Zyrae Rd., Maadi - Cairo. P.O. 11728 Tel. : 25256452 - Fax : 25256490

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Arab Republic of Egypt
Cabinet of Ministers
Ministry of State for Environmental Affairs
Egyptian Environmental Affairs Agency

جمهورية مصر العربية
رئاسة مجلس الوزراء
وزارة الدولة لشئون البيئة
جهاز شئون البيئة

الموضوع: نموذج تصنيف بيئي (ب)

الإدارة المركزية لتقييم التأثير البيئي

التقييم ٤٠١٠ / / 5061
التاريخ ٢٠٠٩/٩/٧

السيد الأستاذ/ توفيق عبدالمجيد توفيق

سكرتير عام محافظة حلوان

تحية طيبة و بعد،،،

بالإشارة إلى كتاب سيادتكم الوارد لنا بتاريخ ٢٠٠٩/٩/٧ والمرفق به نموذج التصنيف البيئي "ب" بشأن مشروع/ مطعم نائل كنتري كلوب، ملك/ فؤاد أحمد حامد، بالعنوان/كورنيش النيل - حدائق حلوان - محطة الدواجن - محافظة حلوان.

أشرف بإحاطة سيادتكم بأنه بعد مراجعة النموذج المقدم تبين أن المشروع قائم ويعمل منذ عام ١٩٨٣ كما ورد بالنموذج وبناء عليه يتم مراجعة الوضع البيئي للمشروع من قبل إدارة شئون البيئة بالمحافظة للتأكد من توافق المشروع مع اشتراطات ومعايير القانون رقم ٤ لسنة ١٩٩٤ بشأن حماية البيئة ولائحته التنفيذية والمعدل بالقانون رقم ٩ لسنة ٢٠٠٩ وفي حالة عدم توافقه يمنح المهلة المقررة قانوناً لتوفيق الأوضاع البيئية للمنشآت مع ضرورة التأكد من حصوله علي كافة الموافقات اللازمة من الهيئات الأخرى قبل منحه الترخيص.

ونفيد سيادتكم بأنة سيتم المراجعة البيئية للنشاط بمعرفة الإدارة العامة للتفتيش البيئي بجهاز

شئون البيئة.

أحمد حبيب العالم

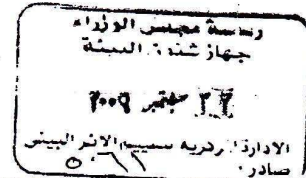
محمد عيسى

وتفضلوا بقبول وافر الشكر والاحترام،،،

رئيس قطاع الإدارة البيئية

(د. فاطمة أبو شوكة)

صورة للإدارة العامة للتفتيش البيئي



٢٠ طريق حلوان الزراعي - خلف فندق سوفيتل المعادي - القاهرة الرقم البريدي ١١٧٢٨ ت ٢٥٢٥٦٤٥٢ فاكس ٢٥٢٥٦٤٩٠

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جمهورية مصر العربية
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وزارة الدولة لشئون البيئة
جهاز شئون البيئة

رقم: ٥١٣٠ / ١١ / ٢٠٠٩

5130

الإدارة العامة لشئون البيئة
١١ / ٢٠٠٩

السيد الأستاذ / حسن فهمي محمد
رئيس قطاع مجمع خدمات الاستثمار

تحية طيبة وبعد

بالإشارة إلى كتاب سيادتكم الوارد لنا بتاريخ ٢٠٠٩/٩/٩ والمرفق به البيانات التكميلية لنموذج التصنيف البيئي (ب) بخصوص إيداء رأى الجهاز في مشروع شركة يوتيرن للملابس الجاهزة والتريكو " صلاح الدين فضل وشركاه " ، باسم / صلاح الدين محمد فضل وشركاه ، بالعنوان الكيلو ٢١,٥ طريق الإسكندرية القاهرة الصحراوي خلف حسن علام - حي العامرية - محافظة الإسكندرية.

أتشرف بالإحاطة بأنه بعد مراجعة النموذج والبيانات التكميلية المقدمة ، تبين أن المشروع قائم ويعمل بالفعل منذ ٢٠٠٥/٣/٢٨ كما ورد بالبيانات التكميلية لذا يرجى التكرم بالتوجيه نحو موافقتنا بأسباب إقامة المشروع وتشغيله قبل الحصول على الموافقة البيئية المسبقة من الجهاز على أن يتم مراجعة الوضع البيئي للمشروع من قبل إدارة شئون البيئة بالمحافظة للتأكد من توافق المشروع مع اشتراطات ومعايير القانون رقم (٤) لسنة ١٩٩٤ بشأن حماية البيئة ولائحته التنفيذية والمعدل بالقانون رقم ٩ لسنة ٢٠٠٩ وفى حالة توافقه يتم السير فى إجراءات الترخيص وفى حالة عدم توافقه يتم اتخاذ الإجراءات القانونية اللازمة تجاه المشروع.

ونفيد سيادتكم بأنه سيتم المراجعة البيئية للنشاط بمعرفة الإدارة العامة للتفتيش البيئي بجهاز شئون البيئة.

كما نحيط سيادتكم أنه قد صدر بتاريخ ٢٠٠٩/٣/١ القانون رقم ٩ لسنة ٢٠٠٩ المعدل للقانون رقم ٤ لسنة ١٩٩٤ حيث تتضمن المادة (٨٤) مكرر توقيع غرامة مالية قيمتها من ٥٠ الف إلى مليون جنية على كل من يخالف أحكام المادتين (٢٠،١٩) من القانون بشأن تقديم تقييم التأثير البيئي للمشروع قبل البدء فى إقامته ويرجى مراعاة ذلك والتوجيه لدى المعنيين بذلك .

وتفضلوا بقبول فائق الاحترام،،

رئيس قطاع الإدارة البيئية

(د.ك/ فاطمة أبو شوك)



صورة للإدارة العامة للتفتيش البيئي

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٢٠ طريق حلوان الزراعى - خلف فندق سوفيتل المعادى - القاهرة الرقم البريدي ١١٧٢٨ ت: ٢٥٢٥٦٤٥٢ فاكس: ٢٥٢٥٦٤٩٠
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XI. EXAMPLES OF TRANSPARENCY PROBLEM OF THE CITY COUNCILS

This Example of problems that De-28¹ reported is in giving surrounding roads levels so that the engineering team can complete the utilities detailed plans and begin implementation. Obtaining this information delayed nearly nine months because of a piece of paper that is already available at the city council. In addition, the council pushed them for executing incorrectly or by changing the inputs in a conflicting way and demanding an amendment, which caused them both financially and time harm. In details De-28 explained this, saying:

There is information conflict, we received took the land in an official record on 24/2/2008; a record signed in 10th of Ramadan council for the whole land plan. For me to be able to do any planning for any project, I make a topographical survey and after that when making a comparison of my work, my level with roads level; for about 9 months we were not able to take the roads level from them ... You are talking about a level, for me to carry out my main roads and make the fence I need to know the levels. I've got a major road which is Ismaelia desert road and here I have Robiki, thus I have two main roads not a bystreet. We took the land on 2/2008. They gave us road schemes (plans) on 3/2009; the road level, swedge connection and everything. We stayed with our plan ready and all our work ready but unable to implement because we have a difference of 1.5 m in some places and 70 cm in others. They keep on telling us to implement and they will consider our level. We told them this will not work out as we have general main roads that you took off and you left the extension. If I became higher than the extension by 1.70 m or you became lower than me by 1.70 m; are you going to lower the street to become two levels! This can't be ...Also we did not know about the sewage network, which means I started not to know how you will join me to it. Once they say here, once they say there and another time they say we will put 4 points here so that you and the neighbour are shared. We work this, and then they say; No I will supply you from here. The difference is that if I follow this I will put a pump station and if I was supplied there I will depend on gravity so I won't need the station. We adjusted the plans about 4 times which means that if my consultancy contract worth amount (x), I paid 40% more for redesign differences. Redesign, redesign, every while and it takes time. Our consultancy office take it, studies it, gives it to us to revise with the council, and then we return it back to him again and so on. This takes a month or a month and a half delay each time. (De-28)

¹ An indication for an interview/ee, the code may contain some of the following abbreviations that mean: En = Environmental, In = Industrial, Ac = Academic, **De** = Industrial Developer or Development Officer in local administration units, Ju = Judge, G = Governmental position (it will appear if applicable), NGO = A member of environmental NGOs boards of directors, **Numbers** = Serial Number of the interview/ee

XII. UNLAWFUL PARLIAMENTS AND LEGISLATIVE IMBALANCE

Normatively, the legislative authority is a sincere expression of the community conscience. Meanwhile, the role of the judiciary is the protection of what the community expressed and demonstrated of conscience. The role of the executive authority comes as the hand by which the judge disguises those who violate the rule, or protects those whose rights have been violated. Here, the importance of legislation comes because if it became corrupt, everything follows in the system crashes (Ju-48)¹. Is the Egyptian legislature an honest (a sincere) expression of the conscience of the Egyptian community? Voluminous studies, articles and investigations both locally and globally that talk about election fraud in Egypt at all levels and in particular the parliamentary elections, put us in front of the fact that the legislative authority in Egypt, especially in Mubarak's ruling period are unreflective of the conscience of the Egyptian community. The last two councils (People and Advisory 'Shura') were dissolved after the 25th of January Revolution. The crude forgeries that took place in them were considered by many as one of the main reasons that led to the outbreak of the revolution (Gharieb, 2011, Abdesalam, 2010, El-Ebrashi, 2010, Khamas-Hawas, 2011, Abo-Bakr, 2011b). In this context, Ac-55 emphasized on the corruption of the legislative authority creating a flawed legislative framework which took into account only the interests of its authors, saying:

The legislative framework is flawed and thus it adversely affects the judiciary, restricting it as if it does not exist. Why is it flawed? If we come to the MPs ..., we will find 10 appointed members and 200 of 444 members the Court of Cassation ruled them as invalid membership. Thus, to whom does their loyalty go? To those who brought them in. Thus, they will not listen to nor consider the interests of someone else other than those who brought them. (Ac-55)

Therefore and as Ac-55 mentioned, the defective legislative framework has negatively affected the judicial authority and almost eliminated its existence. This is consistent with what a number of those belonging to the judiciary believe, like (Ju-14) and (Ju-67). In addition to those judges, Ju-48, who emphasized on the corruption of the legislative authority and its results which is the biggest problem experienced by the judiciary in Egypt. He added:

The basic point that struck the entire process by flaw is that the Egyptian legislative authority is unreflective and is an unreal expression, of the Egyptian society ... Therefore what is the result? The result is a legal legislative defect

¹ An indication for an interview/ee, the code may contain some of the following abbreviations that mean: En = Environmental, In = Industrial, Ac = Academic, De = Industrial Developer or Development Officer in local administration units, **Ju** = Judge, G = Governmental position (it will appear if applicable), NGO = A member of environmental NGOs boards of directors, **Numbers** = Serial Number of the interview/ee

weakening the judicial authority and disabling the law because ‘each pot exudes its including’ [Arabic proverb]. (Ju-48)

Hence, what judicial authority representatives meant along with the experts, and specifically which could be understood from the previous text of (Ju-48) about the corruption of the legislative authority being like a container (pot) containing rotten things and thus will only exude rotteness. The legislative flaw was a result of the corruption of the legislative authority, which accounted for legislation and led it to serve their own interests and the interests of those who brought them to legislation sites. From here we can say that the beginning of the negative impact of the corrupt legislative authority was by guiding the legislations production away from the universally recognized democratic mechanisms. This produced conflicting laws and cumbersome to justice, in particular regarding the respect of the environment. The next section works out on explaining this as one of the most important factors affecting the planning process of the IZs through weakening the role of environmental laws in ensuring respect of this process to the environment.

- **Corrupt legislature: monopolizing the legislations production:**

This section discusses the legislation production in Egypt that caused legislature imbalance and weakened the legal deterrence towards environmental issues leading to weakening the role of environmental agencies and in particular their only tool to ensure the planning process of the industrial zones (IZs), EIAs², respect environment. This appendix answers: how is the legislation production performed? How could it be related to democratic ways producing legislations?

Legislations production in all democratic countries has the same bases that do not change. Their path is clear where the parliament, elected by the people, does not dispense the people themselves. This path does not accept introducing laws projects to MPs before they mature in an expanded community dialogue including those in power, experts, the opposition, and stakeholders. This is supposed to involve the naysayers before the supporters³ (Hammad, 2011). Is this what is happening in Egypt?

² Environmental Impact Assessment studies

³ In Britain, for example, the new legislations, even the legislative amendments, are not forwarded to the House of Commons before passing by stages ensuring achieving general consensus, regardless of who proposes laws. These stages begin with consultation. This is a task entrusted to the Ministry or Body which the legislation is in the sphere of its competence. They explore the opinion of the experts and civil organizations in conjunction with governmental agencies. The most importantly is to open a transparent community dialogue and consultation with the public through different communication means. The most important of these means are the media and direct meetings to find out the opinion of the people, actors in the society, and people of interest. Then the legislation is referred to the House of Commons to take another stage again before the vote, called the reading stage. This is followed by drafting before being presented to members for discussion and vote. If the law is

In answer to this question and to find out how legislations have been made in Egypt, Dr. Emad Alhusseini, Professor and academic researcher, explained that the legislations do not depend on the scientific method. They are made without reference to the experts and those who will be affected by them.

On the other side, they are issued by the MPs without discussion and always with a mechanical approval without reference to the people (LCHR, 2009). Ac-55 agreed with this argument, explaining the disruption of that procedure and the reason behind this imbalance, by saying:

The legislative framework is in a mess because it is not based on professional and scientific knowledge. The legislative framework outlines should be established by professional specialists. The legal specialists then formulate the drafts of the legislations to be presented to the parliament to express opinion. In Egypt where do drafts come from? They come from the National Democratic Party (NDP) and from the parliament that is under the control of the NDP!! That is why the law states that every technical authority in the government puts what it requires as general outlines. It is then forwarded to the State Council to be presented to the Opinion and Legislation Committee for adoption and legally formulated in the general legal framework of the State. Then it is presented to the parliament for approval and thus implementation. Here in this case, it is not presented to the relevant technical authority neither to the State Council. Thus this is a considerable disruption. But why is this happening? This is because of the monopoly of power within a certain elite. (Ac-55)

Therefore, from the two former statements it is generally understood that the disorder and chaos in the legislations are due to that the parliament accounted for the development of legislations away from the scientific method without the involvement of any other party. It even excluded the official technical authorities, the body proposing the legislation or that the legislation lies in its competence.

Focusing more on the environmental issue in question and under study in this research, Ju-48 agreed with the former conclusions about the nature of the defect governing the legislation in Egypt. That is as a result of the takeover of the legislature by the task without the involvement of experts and community. He also denounced ignoring the democratic mechanisms and community participation, which had been applied in Egypt before. Where, the opinion, of judges and the people of expertise, was considered regarding penalties and their likes under the monarchy. But this and surprisingly disappeared as the reliance became only on the specialized committees of the parliament. However, he, (Ju-48), saw that these committees and despite the annexation of law professors, advisers, vice cassation court and

passed by the House of Commons there is a similar course of work carried out by the House of Lords (Hammad, 2011).

assistant ministers, each of them in his field, but they are not the owners of the technical opinion freely. Otherwise, they follow the political decision makers. Therefore they are no more than a drafting committee not an advisory and study committee. From here comes the flaw that has infected the legislation. He projected on the disorder incident in the Environment Law No. 9 of 2009 reasoning the imbalance and lack of relevance to the nature of Egyptian society and especially with regard to the penalties, due to the issuance of the law for presidential desires. These desires are according to Egypt's commitment to international agreements which were not approved by the people or even did they explore the people's opinion about them (Ju-48). In this context, he said:

As example, in the amendments to the sanctions of the environment law - put by the legislative authority for showing off, as a claim that we have strong EEAA⁴, strong law of environment. Why did this happen? The State is committed to international agreements such as Johannesburg and Rio de Janeiro. The State signed these agreements due to a decision of the President without the consent of the people or even the parliament with its defects. (Ju-48)

On another complementary side and getting much closer to the body that the law of the environment is in its jurisdiction, En-G-16, Director of Legal Affairs in the EEAA⁵, denied the occurrence of any of the previous mentioned democratic steps. He shared the former experts their conclusions, referring to the latest environmental case which is the Environment law No. 9 of 2009 for amending the Environment Law No. 4 of 1994. His department did not participate in studying the law nor putting it in nor even expressing opinion about it before the approval, where he said:

This amendment is very stupid ... We did not share in it as an environmental legal department.... Do you know how this law was amended? Like any research study you have. The Dean brings anyone to make it to earn some money. If you tell the Dean the subject is concerning concrete and the person you brought is specialized in hydraulics, he answers that this person understands concrete as he had studied concrete in the second year in his faculty! This is the thought ruling here and this is what happened at the time of amending the law. (En-G-16)

From this statement it is understood that there is a committee appointed by the senior management including a number of consultants that prepared the law draft or participated in its study before being forwarded to parliaments. This might seem different to what is stated in the preceding paragraphs of the Parliament monopoly of legislation. However we see that the difference, assuming this is existing, is in the method not the outcome. This is what En-G-16

⁴ Egyptian Environmental Affairs Agency

⁵ The administration concerned with the study of the environment law and its amendments. This is supposed to be based on a study involving the opinion of experts and civil bodies in conjunction with relevant governmental bodies. The most important is to open a community dialogue about the law and reaching agreement on it before referred to the People's Council.

referred to in the former statement about the committee consultants as beneficiaries and non-professionals. Thus monopoly is an agreed result even if the authority in Egypt followed a road giving them a legal democratic form which is bare from the actual truth on the ground. This can be inferred from the above and also be confirmed by Hammad on how some countries, including Egypt, apply the shape of the mechanisms referred to at the beginning of this part and not their essence, saying:

Theoretically, many of the States say that they apply the same mechanisms. Even any one of the "remnants" [the term given to the followers of the ousted regime] can emphasize that the disbanded NDP performed similar work before submitting laws drafts to the parliament. But in the end the promulgation of laws would be for the benefit of the same corrupt governing class controlling power, wealth and now present in Torah⁶. (Hammad, 2011)

The nature of defect in legislation is diverse and multifaceted. The laws include multi-crimes for the same act and penalties vary according to different laws (Ju-67). Ju-48 also found that it is hard to find like the volume of criminal legislations in Egypt in any other State due its large size. It means that since the revolution of July 1952 until today, there is an internal sense for the Egyptian citizen that the law is not a means to adjust the society as much as it is a tool in the hands of the ruling power to reach a particular goal or interest. Thus with the nature of the current provision there is no discipline in the laws. Conflicting provisions and conflicting legislation are common because of the speed of issuing them. Then he added:

Now, legislations are being issued without knowing why. It is possible for me to judge in an issue, then I get surprised that there is legal provision valid from a month and I did not know about it. Is there in the universe a parliament issuing in one parliamentary session from 10 to 15 laws other than treaties?! ... I can judge today in a misdemeanour or a contravention, while it has an issued law to criminalize it or considering it as a felony and I do not know. This is because of the opened barrel of laws throwing laws around the time ... You can find strange things that are not important at all involved. These are not for public interest as much as they are to serve the personal interests of some people ... Therefore the size of the laws judged unconstitutional last year and the year before is quite a sum. The last of these laws was the Real Estates tax law. (Ju-48)

The implications of using expressions such as "an opened barrel throwing laws" and "personal interests" with the unconstitutionality of a sum of laws are confirming on all the haste and lack of precision and discipline in the way they are put with. Most importantly, it strengthens the logic mentioned before, that such legislation is driven by the interests of its creators.

⁶ One of the prisons of Egypt, where symbols of the ousted regime are imprisoned between some guilty spending a period of incarceration and others trapped under pending investigation.

We conclude from the foregoing that; the monopoly of legislation by the corrupt legislative authority to serve their interests and the interests of the corrupt ruling class, caused a legislative imbalance. This imbalance was represented in the chaos of a large number of legislations. These legislations are conflicting with multiple and imbalanced penalties (Ju-48). Thus, this had its impacts on weakening the legal deterrence in general, and regarding environmental issues under consideration in particular. This therefore, weakened the role of environmental agencies and their legal tools for environmental protection, especially, EIA, their only tool to ensure respect of the environment and its considerations by the planning process of the IZs⁷.

⁷ Section 7.3.1.2 covers this issue in detail.

XIII. ABSENCE OF THE PROMPT JUSTICE

In his speech on the ninth of January 2011, the day of celebration of the Egyptian judiciary, just two weeks before the revolution of the twenty-fifth of January, which brought down his regime, the ousted president Mubarak told a selected group (Abo-Bakr, 2011a) of Egyptian judges: "We seek prompt justice and convinced that slow justice inherits sense of bitterness among citizens." Then in his speech, Mubarak called on Egyptian judges to exert more efforts and accelerate the ruling in cases for everyone with a right to gain his right without long waiting for litigants or prolonged suffering (Damatsoft, 2011). This refined traditional discourse did not bring anything new for almost 30 years which is the duration of Mubarak's rule. But rather, He called for the achievement of something he and his regime were the first to stand up against it. This is the content of what a number of senior judges in Egypt believe in (Abo-Bakr, 2011a). Among them is the Chancellor Judge Zakaria Abdul-Aziz, the former head of Egypt's judges club, where he said:

Who is standing against the prompt justice? Is it the regime who seeks achieving it as the president says?! The regime is the one who is hindering the achievement of justice either with unconstitutional laws, or the State by its unstudied decisions leading the citizen to resort to justice, or through non-implementation of the provisions. There are many provisions issued and the State and its agencies refuse their implementation? Is this lead to achieve justice? If we search, we will find that the largest proportion of cases in front of the State Council Courts is caused by the State and the regime. Who caused the presence of more than 3000 appeals to the Administrative Court during the last forged elections? Is not it the Government by its flawed proceedings? (Abo-Bakr, 2011a)

The authority policies throughout the past three decades have established for the absence of justice as a value and concept in the Egyptian society. Justice means the presence of a set of agreed human values reflected all in a law that people are all equal in front of it. All the people turn to this law to achieve their usurped rights without injustice or delay in the recovery of the right. This concept no longer exists in Egypt (Al-Asswany, 2011).

In light of this introduction this appendix will address the factors causing the absence of justice, notably the lack of judiciary independence and the administrative corruption. Also, the impact of these two factors on the planning process and in particular the environmental regard. Then, it will demonstrate the impact of the absence of justice on the lack of confidence, and its relationship to disabling the application of sustainable development mechanisms.

XIII.1. Executive authority with administrative corruption hinder the independence of the judiciary

There are a number of factors behind the lack of justice in Egypt, but the most prominent of which is due to the intrusion of the executive authority over the legislative and judicial authorities with the spread of administrative corruption. When the law becomes a tool for the expression of the ruler will rather than the people's will, the imbalance leaks out to everything including the ruling regime itself. The judiciary in each state complying with the law is the safety and justice valve. Even if one of the other two authorities is corrupted, the judicial decisions and ensuring their implementation are enough for the repair (Al-Refaai, 2011). In Egypt, the executive authority intruded heavily over the legislative and judicial authorities. It reached up to the legislative authority setting at the desires of the executive authority (as previously explained). Accordingly, extravagant legislation dominated in Egypt via a badly elected authority over the past half a century. In this period, legislations were issued unnecessarily except to reflect keenness of the executive authority to impose its hegemony on the other two authorities whether in their composition or in their performance of the daily work. This is to the extent that some judicial decisions are still so far, under the Emergency Law, subject to the system of certification from the head of State (Al-Refaai, 2011)¹. The executive authority intervened in judiciary affairs with several means including the pressure on the judges through judicial inspection following the Minister of Justice, the distribution of certain cases in the courts on certain judges, assignment of judges to work in governmental bodies, and the executive authority controlling the bulk of the salaries of judges. However, these methods have not succeeded in influencing except only a small number of judges (Hassan, 2011, Ju-48). But they restricted much of the judiciary movement and ability. They were capable of stripping the judiciary of its usefulness to become a mere tool in the hands of the executive authority (Al-Refaai, 2011).

With the lack of the judiciary independence and the weak of its ability to protect the rights, forms of corruption have spread like political and administrative corruption. The sovereignty of law was not respected greatly. That, in addition to the enactment of laws that serve the favor of powerful groups at the expense of the public interest, as previously noted, the implementation of the law and judicial decisions were governed in many cases by political and financial influence. Verdicts were implemented against the weak in society, while procrastinating implementation or repealing them if they were against those with financial or

¹ This is also mentioned by a large number of the senior judiciary although the text is from (Al-Refaai, 2011) and confirmation of the same meaning from (Abo-Bakr, 2011a) and (Ju-48).

political clout. These practices led to the weak of the prestige of law in the eyes of people. They started seeing it as sword hanging over their necks rather than a means to protect them. They dealt with the law in an opposite way. They became not hesitating to break it, and circumventing it in various ways (Hassan, 2011). On top of these are the bribes that increased and deepened corruption at all State levels. As a natural result corruption has affected (reached) the implementation of provisions or editing records and irregularities.

Environmentally, Dr. Salah Arafa² agreed with the impact of corruption. He argued that despite the abundance of environmental laws but they are without effect as they are not implemented due to administrative corruption. Then he added in detail that environmental violations are being overlooked following the same pattern of bailiffs in courts who are used to say that the address was not evidenced to stop activating the case against those who paid them a bribe. He stressed that environmental laws are not binding to those with powerful political and financial influence. The MSEA cannot confront them in this regard (Arafa, 2009). In terms of the judiciary, Ju-48 confirmed that administrative corruption is one of the main reasons that force them to disrupt law by halting the execution of the punishment. He then showed how, where he said:

I was trying during the deliberation in environmental violations to stop the execution of the sentence in its two parts; that restrictive of freedom and the fine. This is because in my point of view the fine will not be paid as the contrary will happen. The mechanisms of implementation and environmental crime arrest involve corruption. This is due to that he [the environmental arrest officer] did not record the simple administrative environmental violation because there is an actual violation, but because he has not been paid the 20, 50 or 100 pounds from the assumed violator not to record the case. This is the real situation: the administrative corruption is the tragedy of the Egyptian environment. (Ju-48)³

Then Ju-48 demonstrated on the impact of corruption by the spread of pollution, appearing to the public before professionals, throughout Egypt. Also, that a large proportion of the sources of this pollution are working apparently in a legal way by the running permits they illegally obtained from the competent administrative authorities. On another hand in addition to the above, this "virtual" legal form restricts the judicial. Although it is of the powers of the prosecution to intervene to ensure the legality of the permit or request an environmental review from academic scientific bodies to ensure the compatibility of a sources of pollution, but there are a number of reasons that practically prevent them from doing so. On top of these reasons is that a prosecutor is part of the Egyptian people with his bound culture due to the

² one of the most important Egyptian environment flags who gained prominence in the international arena

³ Ju-14 agreed with this, knowing that the text is for (Ju-48).

nature of the general Egyptian case; both economically and socially that sets the environmental issue in a low level of his priorities⁴. That is especially in light of the congestion of cases - as previously noted – which does not leave room/time for the prosecutor/judge to consider other ones. Second, there is the way of dealing which the prosecutor could be subjected to in case he takes such step. He will not find support from his superiors. He might even be blamed from the judicial inspection. Ju-48 summarized this situation by saying:

He is to be asked: Why are you going to a factory? There are environmental observers and specialized staff already. You have to finish the cases you have first then consider this issue. Therefore, he would not repeat it again.... The story is: there is administrative corruption in general that the prosecution cannot respond to (stand against) due to poor environmental culture and weakness in his superiors. This is due to many criteria and circumstances surrounding him if he takes such a decision. It might be said that he went to take a bribe or fabricate a problem with this factory for one reason or another. Thus who wishes to do his work properly will find no one to support him. In addition, the follow up mechanisms of the administrative body in charge of the implementation of environmental affairs follow up mechanisms are all corrupt and unfit. (Ju-48)

This statement brings us back again to the first factor affecting the absence of justice which is the lack of judicial independence. The situation summed up by Ju-48 confirms what we have previously mentioned that the subordination of the inspection to the executive authority greatly affected the independence of the jurist in his decisions. Thus it restricts the role of the judiciary and directs it to what serves the interests of the executive authority or at least does not conflict with them. To clarify the meaning of this result and also in line with the impact of corruption fortified with executive authority control, on the breakdown of law and stopping the implementation of provisions on people in power and even worse - the words are to Ju-48 - challenging the implementation of judicial decisions in the contrary to their operative part. The reverse is also true, where what is implemented from the judicial decisions is only concerning weak people who do not have acquaintance to protect them to prevent the implementation of the sentence against them (Ju-48). The judge then gave a blatant environmental example, saying:

Supreme Administrative Court ruling issued to prevent clubs and hotels of the teachers unions, police and armed forces on the shore of Rushdi in Alexandria. An environmental NGO has learnt in one way or another that clubs will be set up on the campus of the sea and the campus of the sea will be filled for a surface area of more than 20 or 30 acres... A case was raised to the Supreme Administrative Court. The judiciary has ruled by stopping the decree, what happened then? The hotel belonging to the police was built and handed over to a

⁴ This is discussed in details in section 7.5.1.

private party called "Azur" responsible of it. It is now managing the hotel and it generates income for the ministry of interior. Also, the implementation of the armed forces hotel and club was done and of course the teachers' were not implemented! (Ju-48)

Thus it is not only the non-implementation of sentences, but also in Egypt it reaches up to the violation of judicial decisions of the top administrative judiciary in Egypt, the Supreme Administrative Court, which is equivalent to Court of Cassation in the normal judiciary. So the rule of the Supreme Administrative Court has been implemented regarding the teachers' union, while the same rule has been waived with respect to police and army clubs which are two bodies possessing influence that is not available to the first. Beside the authority given to these two sides, which qualified them for violating the provisions of the highest administrative judicial body in Egypt, it is also possible that these authorities were using their powers in the service of their members, even if it is at the expense of judicial rulings and damaging the environment. However, it was not just for this cause, but the main motive behind it was corruption in the first place. The company referred to by Ju-48 is a company owned by Zuhair Garana, Minister of Tourism in the ousted authority⁵, where the Minister Habib Al-Adli⁶ – Minister of Interior also in the ousted power – granted the company of the former one the right to use the police club hotel in Alexandria for large amounts of money (Essisy, 2011).

XIII.2. Absence of trust and hindering the application of industrial symbiosis

Environmentally and within the frame of the above, it did not only stop on the extent of disabling environmental laws and violating judicial decisions causing severe harm to natural environment, but it also extended to creating a general atmosphere of mistrust affecting the reciprocal relationships between partners of the development process. Thus, this has hindered the application of sustainable development mechanisms such as IS.

With the judiciary losing its independence and the spread of corruption in the administrative system along with this, a large part of achieving justice was lost. The Egyptian society therefore, lost the feeling of justice that releases energies and urges them to diligence. The Egyptian citizen lost confidence, whether in the authority or in the others around him/her. As the last defense wall for the citizen which is the judiciary cannot restore full rights and with

⁵ He was sentenced in cases of corruption (BBC-Arabic, 2011).

⁶ He was sentenced to 12 years in cases of corruption (Ahram, 2011).

the speed which does not detract from these rights⁷(Sedky, 2010). It is possible for any citizen to find himself going in a vicious circle of cases - despite the clarity of his right - due to the absence of prompt justice. Because some has violated one of his rights and it takes years to prove this right legally. He might be forced to waive his right or part of it to avoid engagement in these stressful procedures which are time and money consuming (Qusya.com, 2010). This situation of the lack of justice and its impact on the spread of a culture of mistrust restricted transactions within the community except only within those where confidence is available among them, on their rareness. This is because dealers do not rely mostly on contracts for the recovery of rights, but to maintain confidence among them. They know the difficulty to engage in judicial proceedings if this confidence has been weakened/shaken or if one of them infringe upon the other. En-65 tended to confirm this culture and illustrated it in detail, saying:

Among the things encouraging people to still have trust is that if this trust has been shaken, I still have another line of defense which is the contracts and the judiciary. For us, this second line of defense does not exist at all. If we have a contract, between me and you, we sign the contract to register our confidence. But the truth is that if you violated the contract I cannot think about going to the judiciary. The process does not deserve with the size of our contracts. (En-65)

Getting from general to specific, in a toppling on the planning process for IZs and specifically on the impact of the absence of prompt justice and lack of confidence on the nature of relations between partners of the industrial process, it can be said that this culture has heavily influenced the limitation of these cooperative relations between partners and each other. Lacking these relations contradicts one of the most important principles of IE in order to achieve IS (Boons et al., 2011). In a clear translation of this matter from the perspective of reality, En-65 explained one of the experiments where he failed to achieve cooperation between two companies - in the town of Ain Sokhna, where there is difficult access to water. This was in order to benefit one of them from the treated wastewater of the other instead of buying water or desalination of sea water as both techniques are high cost. En-65 explained the reason behind this, saying:

I have an industry line having a problem to get rid of the used cooling water. I have also a tourism line having a problem of getting water. I tried to compromise between the two as it is nonsense that you are here throwing water and do not know how to use it, while, the guy on the other side needs water and cannot find it. I tried to coordinate between them and found out that I am wasting my time.... The problem is that the tourism guy is not confident that the cooling water, the

⁷ According to the researcher at the American University, Safaa Youssof Sedky, in her own doctoral dissertation in the Sadat Academy for Administrative Sciences that 81% of the Egyptians affirm the slow pace of litigation and that they are marred by routine killing hope in the arrival of the proceedings to an end.

other one will give him, will be suitable for irrigation. He is not sure that it will contain something contaminated ... The problem is “when you don't have the trust” nothing can be done... The main issue is that he does not trust the other side ... He tells you: suppose we signed a contract and the monitoring system appeared to be damaged, what shall we do? To whom shall we go? There is neither judiciary nor law to protect this and quickly. Unfortunately there are numerous options in Egypt if we trust each other to sort it out. The actual case is that everyone keeps away from the other. They say the door that brings the wind, close it and keep yourself rested. (En-65)

Therefore, due to loss of confidence and because of the impact of the absence of prompt justice, this experiment failed along with many others. The relationships, that may lead to success of the implementation of the mechanisms for achieving sustainable development, represented in IS, have disappeared.

We conclude from the foregoing that with the central autocracy, the executive authority dominated over the legislative and judiciary authorities. This led to weakening the judiciary's ability to protect rights. Where, the financial and political influence intervened in the implementation of the law and provisions. They were applied on the weak and the strong was pardoned. This led to shacking the prestige of the law. The people felt that it is a sword hanging over their heads not protecting them. Thus, they antagonized the law and circumvented it. So, corruption spread. The environmental issue did not violate that rule where, despite the abundance of environmental laws, the corruption disrupted them in several ways. First, this was through disabling the implementation of the provisions on the people of influence, and their application on the weak people. Second, by the judges themselves, where they blocked the application of the law, knowing that the irregularities were edited against the weak people not because they are violators as much as they did not respond to the records editors requesting bribes not to edit these records. Thirdly, it was through the exploitation of the administrative corruption to legalize the situation of pollution sources. Thus, blocking the judiciary interference, even if individually, as it will be blamed by the judicial inspection following the executive authority. It did not stop at the limit of environmental destruction as a result of the encroachment of the executive authority, the spread of administrative corruption and the lack of implementation of verdicts, but all of this resulted in the absence of prompt justice. That was through slow litigation and its weakness in the restitution of rights to their respective owners. It led to a loss of confidence of citizens in the ruling authority first and secondly in each other. As a result, to avoid problems, the cooperative relations disappeared between dealers in money in general, and between the parties within the system of IZs in

particular. Therefore, the attempts to apply mechanisms of sustainable development such as IS disappeared, because of the lack of the necessary context for cooperation.

XIV. AC-G-03'S EXAMPLES ON CORRUPTION

According to Ac-G-03¹, corruption has the biggest influence in guiding the decision-making. He gave a number of examples, they are as follows:

Gamal Mubarak's father in law built a neighborhood called New Giza. The GOPP gave him an illegal letter just for being Gamal Mubarak's father in law. He came with the letter requesting things from 6th of October governorate. I am the governor's consultant. When the governor presented it to me, I told him that is wrong. He asked: What about it Doctor? The letter is from the GOPP. I said but this is still wrong, as the law stated so and so. He wanted to flatter him anyway. I took the letter to the Head of the GOPP and asked him how could such a letter be issued? He acted as if he is surprised. He called his deputy and asked how was such letter issued from here? He started pretending and acting. He said: can you believe I remained for two weeks not knowing what to do with this letter as I was worried of it. Then he called the one responsible of infrastructure in the GOPP, and they both continued pretending and acting. You can understand what I mean. Everything can be illegally accessed just for being someone powerful.

Ac-G-03 also mentioned a recent example in this regard. It is concerning the irregularities, the agricultural administration in the governorates deals with to protect the agricultural area from building on it. He said:

Whose law is it? The important point is that there is an existing law but who acts regarding this law? Who is to apply this law? Sorry but you are saying there is a law forbidding building on agricultural land. Well someone working in 6th of October governorate told me that Shehab Mazhar (a politically and financially influential person) is building on agricultural land. As he demolished the building as stated in the law, he was surprised by the Minister of Agriculture blaming him saying: Can't you distinguish between people you "donkey" he meant idiot!!

Therefore, it is assumed that, who puts laws, adjusts the irregularities and moves the lawsuits against them, which is the executive authority, is the first to sponsor the violation pursuant to the interests of powerful financial and political people. Thus absence of legal deterrence helps the personification of the legal and political decision and its direction to serve the interests of influential people along with neglecting scientific logic and studies ensuring efficient planning leading to randomness of the planning process and randomness of the product.

¹ An indication for an interview/ee, the code may contain some of the following abbreviations that mean: En = Environmental, In = Industrial, Ac = Academic, De = Industrial Developer or Development Officer in local administration units, Ju = Judge, G = Governmental position (it will appear if applicable), NGO = A member of environmental NGOs boards of directors, **Numbers** = Serial Number of the interview/ee

XV. THE INSTITUTIONAL SETUP LACKING TRANSPARENCY

This appendix discusses the lack of transparency as one of the most important factors that have created the appropriate atmosphere for the growth of corruption. It addresses the state of lack of transparency controlling the institutional framework of the State and the planning process of IZs as part of this framework.

Many writers and experts of different specialties have monitored the lack of transparency of the State apparatus and how it affects the spread of corruption (Elmasry, 2010, Yassin, 2010, Mansour, 2010). The economic expert, Ahmed Al-Sayed Al-Naggar, had attributed the spread of corruption to the lack of transparency and the absence of disclosure of the State information, its economic works and its financial affairs, enabling governmental and senior State officials to break the law and breach the career obligations in order to achieve graft without having to disclose the information against them (Ahram-Digital, 2011). Ac-55¹ agreed with this argument and asserted that the community can not exercise its oversight role because of the lack of information, where he said:

For the community to perform its supervisory role, it should at least have the necessary information to revise and monitor. Here there is no transparency and if you request information and data: It is not allowed. There is no law to allow circulation of information. The opposite is true. We have confidentiality of data. If you take an employee's statement to a newspaper you will be punished by imprisonment from 3 to 7 years... Thus this is opposite to the transparency; you are applying confidentiality of information. (Ac-55)

So, the State was not only just withholding information, but it has also legalized its confidentiality to protect the totalitarian regime and its interests. Thus, this state of cloudiness experienced by the State in Egypt is what has allowed and prepared for corruption to spread and to become a key feature of the institutional framework of the State. Therefore, it was natural that the characteristics of this framework were reflected to all its constituents as long as the same environments exist under the auspices of the totalitarian regime, as well as the absence of scientific method in decision-making and the spread of randomness and chaos. Lack of transparency did not only help protect the corruption, but it also prevented planning for the future leading to the disappearance of good atmosphere for investment and development. The planning process of IZs was one of the most important of these

¹ An indication for an interview/ee, the code may contain some of the following abbreviations that mean: En = Environmental, In = Industrial, Ac = Academic, De = Industrial Developer or Development Officer in local administration units, Ju = Judge, G = Governmental position (it will appear if applicable), NGO = A member of environmental NGOs boards of directors, **Numbers** = Serial Number of the interview/ee

atmospheres, which inherited the lack of transparency. It lost contact with sustainability and its mechanisms, on top of which; the IE, this is discussed in chapter 7, section (7.6.2).

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