Do organic standards have a real taste of sustainability? – A critical essay

Abstract

Organic standards are conceived of as a governance mechanism that not only aims to ensure that consumers' requirements in terms of transparency are met but also promotes sustainable food systems. Although third-party certification (TPC) and Participatory Guarantee Systems (PGS) have been predominantly employed in the governance of organic food production, a gap remains in the knowledge and research that delve into their dynamics in terms of sustainability. Against this background, we ask, Do organic standards contribute to sustainable food systems by being socially just, ecologically regenerative, economically robust, and politically inclusive? Drawing on a critical review of the governance of organic food systems, we present the potentials and pitfalls of the institutionalization of organic standards. We employ four sustainability elements to scrutinize the real taste of sustainability vis-à-vis TPC and PGS. Our critical review shows that while various pitfalls hinder the overall sustainability of organics in regard to TPC, its potentials are focused solely on ecological and economic aspects; consequently, farmers can build up their capacity for best practices regarding organic production and gain access to specialty markets, whose main promise is premium prices. Conversely, PGS foster the social, ecological, economic, and political sustainability of organic food systems, as they enable many potentials, such as bringing farmers and consumers together while developing standards and promoting

agroecological practices. However, the conventional power dynamics that arise from the prominence and legitimacy of TPC can pose challenges to participatory endeavors. In this regard, technical knowledge might constrain farmers' confidence in the sense that lay knowledge is not adequate for managing organic production. We therefore emphasize the need to critically evaluate the private market-driven trends regarding the institutionalization of organic standards, which have undermined the pioneering values of the organic movement.

Keywords: Institutionalization of standards. Organic certification. Sustainability.

1. Introduction

The organic food sector has experienced significant growth at the global level (Willer and Lernoud, 2019). This process has been largely influenced by a change in consumers' dietary patterns and their willingness to pay for sustainably produced food (Thøgersen et al., 2015). In other words, there has been a consumer reaction to a range of environmental (protection of biodiversity), ethical (labor rights and animal welfare), and health concerns (food safety) (Miškolci, 2017). Consequently, it has been necessary to meet consumer requirements to ensure that legitimacy is achieved in organic markets. Governance, usually in the form of certification schemes, is employed to ensure transparency and accountability, thus protecting consumer interests (Fouilleux and Loconto, 2017).

Certification in organic food systems started with farmers' groups developing their own standards with local or regional scopes to guarantee food provenance (Arcuri, 2015). As organic food supply chains became international, the necessity for reliable certification schemes increased due to the geographical distance between the production and consumption spheres. Currently, internationally accredited standards are the primary mechanism used by global food supply chains to gain access to specialty organic markets (Humphrey, 2017).

However, the institutionalization of organic standards has raised criticisms concerning the conventionalization of organic food systems not only in terms of specialization, scale, and structure but also in regard to stringent rules and the involvement of corporate agrifood actors (Constance et al., 2013, 2015; Niederle, 2014a). Thus, in this sense, the organic movement's pioneering values of "artisan production, local markets, and deeply held environmental, philosophical, and political values" might be jeopardized (Goldberger, 2011: 289), thereby suggesting that the usual association between organic food systems and sustainability outcomes requires careful scrutiny (DuPuis and Gillon, 2009). To assess what we refer to as *the real taste of sustainability* of organic food systems governance, we draw upon DuPuis and Gillon's (2009) idea of "good governance," which emphasizes the importance of the rules, knowledge, and structure of collaborations in the daily decision-making of these systems. Additionally, it becomes necessary to reintroduce many missing elements of sustainability into (organic) food systems (Gliessman, 2014). Following Gliessman (2014), sustainable food systems are ideally in

favor of and strive to achieve fairer treatment for all actors involved in food supply chains, respecting their sociocultural contexts (socially just); enhance biodiversity by fostering sustainable and holistic approaches, such as agroecology (ecologically regenerative); promote local development, broadening farmers' access to opportunities and financial resources (economically robust); and favor the inclusion of multiple actors, fostering the plurality of knowledge and opinions (politically inclusive).

Against this background, we ask, Do organic standards contribute to sustainable food systems by being socially just, ecologically regenerative, economically robust, and politically inclusive? To address this question, we adhere to Adorno's (1984) guidance on how to deal with the nature of the essay; we therefore enable the search for a new scientific approach and permanent interaction with its philosophical structure. We then combine our essay with a critical review of 21 papers on agrifood governance, pointing out the potentials and pitfalls of third-party certification (TPC) and Participatory Guarantee Systems (PGS) with regard to the sustainability of organic food systems.

The remainder of this essay is organized as follows. In Section 2, we depict the transition of organic agriculture from a value-driven movement to its corporatization, showing how capitalist agrifood actors have appropriated and weakened the organic movement through the implementation of standards. In Section 3, we present the results of the critical review. In Section

4, we further discuss the real taste of sustainability of TPC and PGS, presenting a novel contribution to the debate on the governance of organic food systems.

2. The organic movement: From its origins to its corporatization through standards

The emergence of organic agriculture, which can be traced back to the early twentieth century, was a reflexive response to agricultural industrialization. The organic movement emerged as the catalyst of the ecological dimension, encouraging care for biodiversity and protesting against the Green Revolution technologies (i.e., synthetic inputs, machinery, and genetic engineering) (Barton, 2001; Beus and Dunlap, 1990). A radical critique of the industrialization of agriculture was visible in the different streams of the organic movement (Guthman, 2004). In Europe, the United States, and Canada, the organic movement focused on environmentalism instead of rural social issues, as rural poverty was not an issue in the Global North, particularly due to subsidization policies (Costa et al., 2017). Advocacy for environmentalism is related to the reciprocal relationship between human activities and the natural world. Clark (2006) argues that the pioneer organic movement has advocated harmony with nature, local market relations, and the possibility for the democratic distribution of traditional knowledge related to food production. As a result, organic food is embedded with notions of sustainability, in which the socio-environmental issues inherent in the conventional

methods of food production could be mitigated by the alternative practices of organic agriculture (Obach, 2015).

Within this context, however, corporate agrifood actors have been interested in producing and marketing organic food (Maye and Kirwan, 2010; Si et al., 2015). Large-scale retailers now sell organic food, increasing their participation in global food supply chains and, consequently, their profit maximization. As Rana and Paul (2017) note, organic food not only embodies distinct characteristics but is also increasingly appreciated by consumers who emphasize health concerns. As capitalist agrifood actors legitimize their commitment to sustainability (the specialty of organic food) through standards (Kalfagianni and Fuchs, 2015), this process is translated into the idea that consumers can, for example, contribute to empowering farmers and protecting nature by buying (certified) organic food (Clarke et al., 2008). Hence, we question whether the role of organic standards is to protect the interests of a few stakeholders or to enhance the sustainability of organic food systems in a balanced way.

2.1. The institutionalization of organic standards

Organic food systems are regulated due to market requirements for transparency, which are influenced by food-related incidents and scandals (Wognum et al., 2011). The first experiences of organic regulation emerged in the early 1970s and were established by several private organizations worldwide that started to operate standard- and certification-setting

schemes (Arcuri, 2015). Today, organic regulation is often enforced by private organizations but is minimally set by public institutions (Arcuri, 2015), and private actors are recognized by the state as legitimate authors of rules and norms (Hall and Biersteker, 2002). Moreover, the contemporary governance structure within organic food systems is related to the Tripartite Standard Regime (TSR), whose establishment "is simultaneously the construction of a market for organic products and for organic TSR services, i.e., all types of activities related to standard-setting, certification, and accreditation" (Fouilleux and Loconto, 2017: 2).

Standards define the requirements with which businesses must comply to directly or indirectly achieve certain product characteristics (e.g., safety and sustainability) (Van der Meulen, 2011). In the agrifood sector, standards development organizations (SDOs) include key stakeholders in the standard-setting process (e.g., food retailers and nongovernmental organizations [NGOs]; Busch, 2011a). Examples of SDOs include the Codex Alimentarius, the Worldwide Standard for Good Agricultural Practices, the International Federation of Organic Agriculture Movements (IFOAM), and Safe Quality Food (Busch, 2011a). Furthermore, standards are embedded in schemes that ensure their development and fulfillment through a certification process (Van der Meulen, 2011). There are three forms of certification: first-party certification occurs when the producer ensures that products meet the standards in question; second-party certification involves the continuous inspection of the production system by the buyer; and TPC involves a process of conformity assessment: a neutral third party has to

determine the extent to which the seller's products conform to the agreed-upon standards (Busch, 2011a: 60–61). The third type is the most common private market-driven certification scheme in the organic sector (Fouilleux and Loconto, 2017). Finally, accreditation processes include organizations that seek to provide further credibility to certification services, such as the International Laboratory Accreditation Cooperation (Busch, 2011a).

However, in terms of social, environmental, economic, and political sustainability, the contribution of organic food systems is open to debate, as there are contradictions inherent in the privatization of regulation (Guthman, 2007). We now turn our attention to the actors who comprise the private regulation sphere. According to Büthe (2010), these actors have specific interests: *rule-demanders* are political-economic actors who either call for or value private regulation; *rule-makers* are private actors who create, maintain, and disseminate rules, standards, and norms; and *targets of rules* are the targets of private regulation (e.g., farmers and producers). Furthermore, *rule-users* are affected directly or indirectly by the rules (e.g., consumers) (Büthe, 2012). Similarly, Kalfagianni's (2015) study depicts the actors in private agrifood governance as follows: *rule-setters* (rule-makers in Büthe's definition) create or endorse private governance institutions (e.g., retail corporations and civil society organizations); *rule-takers* (targets of rules in Büthe's definition) must comply with the rules (e.g., suppliers); *rule-bearers* do not participate in private governance yet are indirectly and often negatively affected by its mechanisms (e.g., indigenous communities); and *rule-contesters* consist of social movements that strive for the

recognition of their demands for justice and sometimes pressure governments to react to private governance via the development of own local rules (Kalfagianni, 2015: 178–179). Hence, controversial interests intervene in organic food systems through governance mechanisms, which are acknowledged as crucial for delivering transparency and ensuring that the interests of various stakeholders are met. Nonetheless, corporate involvement in private regulation includes subtle forms that constrain smallholders' access to organic markets and enable control over the shared benefits of organic food.

In the United States, for instance, organic agriculture began as a social movement, incorporating an agrarian vision that contested petroleum-dependent technologies (Guthman, 2004). After the standardization of organic agriculture in 2002, the conventionalization of farmers was strongly consolidated, especially in California, where the idea arose (Constance et al., 2013). Buck et al. (1997) define conventionalization as the tendency by which organic agriculture assumes many characteristics of conventional agriculture in terms of scale, commoditization, and input substitution. Regarding this process, Niederle (2014a) also points out the proliferation of organic standards; the repositioning of political actors (including those who, now adhering to the green economy, promote what they once considered to be a mere agrarian utopia); and the increased participation of large retailers in the organic food sector, which was previously concentrated in local and regional short food supply chains.

The need to create more democratic and transparent control mechanisms has emerged in response to the challenges posed by neoliberal forms of certification schemes for organic food systems. In this regard, PGS are conceived of as an alternative mode of governance that can meet this necessity. According to IFOAM (2008: 1), PGS "are locally focused quality assurance systems. They certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange." PGS are led by the participation and support of public and private organizations, including farmers, consumers, NGOs, and universities (IFOAM, 2018). Furthermore, PGS offer a "low-cost, locally-based system of quality assurance, with a heavy emphasis on social control and knowledge building. PGS, as a complementary method to third-party certification, is essential to the continued growth of the organic movement, especially if we want to include poorer smallholder farmers who have the most to benefit from organic production" (IFOAM, 2020: 1). Thus, considering the importance of transparency and integrity for organic food systems, PGS represent an alternative to TPC, specifically for smallholders (for whom TPC can be costly and bureaucratic) (Home and Nelson, 2015).

PGS also share a common objective with TPC: to provide a credible guarantee for consumers who are seeking organic products. The difference, however, lies in the path to accomplishing this aim. TPC is based on reviews of applications, which include the operationalization of internal procedures through organic system plans and an annual inspection

of production sites that is carried out by a trained independent inspector. PGS require more intensive interaction between farmers, consumers, and a committee that uses different tools to maintain the integrity of the certification process (e.g., peer assessment and social control) (IFOAM, 2018). In PGS, farmers are responsible for carrying out inspections on each other and ensuring organic conformity at all stages: production, warehousing, transportation, and marketing (Radomsky et al., 2015). By using farm visits as an opportunity to solve practical problems, PGS allow for more integrative capacity building and enable farmers to follow standards and improve their agricultural practices. The direct relationship to the certification process and the fact that PGS are owned by farmers encourage more responsibility, transparency, and active involvement (IFOAM, 2018). Active stakeholder participation in PGS also favors the possibility of meeting context specifications that correspond to the particular challenges and conditions faced by the farmers and consumers in each region (Home and Nelson, 2015).

PGS can be traced back to the first-party organic certification systems of the 1970s. The concept was then further developed by social and agrarian entities in Latin America in 2004 (Fonseca, 2004). These organizations were represented by a wide range of international initiatives, such as IFOAM and the Agroecology Movement for Latin America and the Caribbean, which formulated an action plan to give international legitimacy to the alternative processes of guaranteeing organic production (Lernoud and Fonseca, 2004). As a result, PGS have become popularized and are predominant in the Global South (IFOAM, 2018), with the

concept being officially recognized by Brazil, Bolivia, Chile, Costa Rica, Mexico, and India. In autumn 2016, Katto-Andrighetto and Kirchner (2017) identified more than 250 PGS initiatives involving over 130,000 producers in 73 countries.

Despite the increased institutional recognition of PGS initiatives globally, it has been argued that the establishment of participatory forms of certification is not effective if they are not accompanied by clear parameters that take into account the interests of various stakeholders (Rover et al., 2016). Moreover, as Niederle and Wesz (2018) argue, the debate around what is considered mainstream (TPC) and alternative (PGS) modes of governance has blunted the potential of different certification schemes to ensure the sustainability of organic food systems. In this regard, there remains a dichotomy that deserves scholarly attention so that the benefits and unintended consequences of TPC and PGS can be unveiled, particularly in terms of ensuring the fair treatment of stakeholders, enhancing and protecting natural resources, fostering local development, and guaranteeing the inclusion of various actors in the certification process.

3. A critical review of TPC and PGS

As previously elucidated, there is a lack of comprehension regarding the social, environmental, economic, and political sustainability dynamics that stem from third-party and participatory assurance models. To address this gap in knowledge and research, we combined essay reasoning with a critical review. While the former allows the essayist to reflect on the

research object and all of its nuances (Adorno, 1984), the latter is carried out when the aim is to expand the description by including a degree of analysis and conceptual innovation (Grant and Booth, 2009).

In September 2019, we retrieved data from Web of Science (WoS) by searching the strings "organic certification," "organic food certification," "criti*" (e.g., critique), "third-party," and "participatory guarantee systems," as shown in Table 1. We chose WoS because this database provided adequate search tools, suitable navigation possibilities, and institutional access to full-text articles. Our review started with sources from 1997, as Buck et al.'s (1997) study was the first to delve into the conventionalization of organic food systems.

Table 1
Search strings and the number of articles retrieved from WoS in September 2019

Search strings applied to all fields (title, abstract, and other searchable fields)	**Number of articles**
"organic certification" AND "criti*"	14
"organic certification" AND "third-party"	11
"organic food certification"	17
"organic food certification" AND "third-party"	2
"participatory guarantee systems"	19
"participatory guarantee systems" AND "criti*"	5
"participatory guarantee systems" AND "third-party"	12
Total	80
Total (after removing duplicates and non-English language articles)	47

Eighty articles were derived from the initial search, of which 47 remained after omitting the duplicates and non-English language texts. We then checked the full-text articles, focusing on the purpose of this research. We excluded 26 articles whose focus was on aquaculture and crop management, animal and soil science, consumer behavior, and food engineering, and we

selected 21 for further analysis. Table 2 summarizes the selected articles by contrasting the governance mechanisms (i.e., TPC, PGS, or organic certification in general) and highlighting their findings. We refer the reader to Appendix A for further details of the retrieved studies: authorship, year, journal, and objective.

Table 2
Findings of the critical review

Authors	Governance Mechanism	Findings
Albersmeier et al. (2009)	TPC	Farmers perceive the costs of certification as bureaucratic. These costs are related to documentation, process modification, and organizational adaptation.
Andres and Bhullar (2016)	Organic certification	The attractiveness of organic standards follows market ratios, thereby posing questions regarding their structure and operation.
Bellante (2017)	TPC	It is costly, focused on export and international niche markets, and unsuitable for local markets. It also has onerous requirements.
	PGS	They are based on locally agreed-upon certification standards in addition to volunteers who conduct site visits and verify organic production practices. They also help to establish trust in farmer–consumer relationships. However, PGS face a lack of consumer involvement, insufficient recognition and support from authorities, poor record keeping, low participation of some farmers, and overreliance on volunteer work.
Bergleiter and Meisch (2015)	Organic certification	Strict standards often overemphasize technical criteria instead of ethical values from both sides of organic food supply chains—that is, production and consumption.
Binder and Vogl (2018)	TPC	It is the dominant model of certification scheme in the organic market, allows the exclusion of smallholders, and has bureaucratic processes.
	PGS	The concept is confusing for many actors when technical training is needed. Additionally, PGS face a lack of official recognition, support, and internal organization and communication.
Cifuentes et al. (2018)	TPC	It is the dominant model of certification scheme in the organic market, allows the exclusion of smallholders, and has bureaucratic processes.
	PGS	In PGS, the following challenges are evident: lack of consumer involvement, lack of communication among stakeholders, lack of legislative recognition, time constraints, and internal difficulties.
Clark and Martínez (2016: 301)	Organic certification	It is able "to develop 'new markets' if producers have successfully gone through the productive transition process and can then comply with the norms of a given certification system."

Cuéllar-Padilla and Ganuza-Fernandez (2018)	TPC	It is the dominant model of certification scheme in the organic market, is market driven, and allows the exclusion of smallholders. It is also based on a top-down approach and has bureaucratic processes.
	PGS	In PGS, the following challenges are evident: lack of official recognition, time, commitment, and community building, as well as disagreements among participants.
Home et al. (2017: 527)	TPC	It is "not always suitable for small-scale operators and local market channels."
	PGS	PGS are more than merely an alternative model to third-party certification; they also encourage social cohesion, collective infrastructure, and farmer opportunities.
Kaufmann and Vogl (2018)	TPC	It is the dominant model of certification scheme in the organic market, allows the exclusion of smallholders, and has strict standards.
	PGS	In PGS, the challenges of time constraints and conflicts between farmers and certification committee members are evident. Additionally, conflict avoidance affects PGS implementation.
Loconto (2017)	TPC	It is the dominant model of certification scheme in the organic market and enforces farmers' compliance with strict rules.
	PGS	PGS span multiple committee members with diverse responsibilities and use peer review rather than audits. There is also little or no payment for utilizing the PGS label.
Loconto and Hatanaka (2018)	TPC	It has been criticized by practitioners and academics, especially for its inconsistencies in terms of sustainability.
	PGS	PGS are a tool that can enhance sustainability governance by incorporating different stakeholders into decision-making.
Montefrio and Johnson (2019)	TPC	It is exclusive (barriers to farmers due to costs, and benefits to farmers who have economic, social, and cultural capital), has a top-down approach, and is more outward looking (focused on export markets and labels).
	PGS	Although the PGS are inclusive, are based on a bottom-up approach, and are more inward looking (e.g., building closer connections between farmers and consumers through community building), the politics of such a model can cause tensions and contradictions. For instance, one can observe ongoing market competition and different opinions among PGS members.
Nelson et al. (2010)	TPC	It alludes to a narrow definition of organic agriculture, placing great emphasis on input substitution. It also decreases the decision-making abilities of actors at the local, regional, and national levels.
	PGS	Although PGS encourage the reconstruction of the local as a site of power, action, and importance, as well as the fostering of social justice toward a sustainable agrifood system, one can observe social conflicts, insufficient public recognition within policy frameworks, and dependence on donated resources.
Nelson et al. (2016)	PGS	PGS are acknowledged as an innovative mechanism for agrifood system governance; however, some challenges (e.g., time constraints and insufficient training) exist.

Petrescu-Mag et al. (2016: 1119)	Labels	Although labels provide transparency, they "become substitutes for our senses and our first-hand knowledge."
Sacchi (2019)	TPC	It is costly, has strict standards, and places great emphasis on technical processes and audits.
	PGS	PGS simplify bureaucratic procedures for small-scale farmers; reduce the costs associated with assurance processes; and enable social inclusion, farmer empowerment, and mutual support between smallholders and consumers.
Sacchi et al. (2015)	TPC	It is the dominant model of certification scheme in the organic market, allows the exclusion of smallholders, and has bureaucratic processes and strict standards.
	PGS	In some contexts, PGS are not an antithetical alternative to third-party certification. Indeed, PGS improve food labeling, thus establishing dynamics in which consumers benefit from information and knowledge sharing.
Schewe (2011)	Organic certification	The lack of accountability, transparency, and democracy has implications for the legitimacy and proliferation of organic products.
Tonkin et al. (2015)	Organic labels	The increasing proliferation of labels tends to replace trust, thereby muddying its role in the production–consumption relationship.
Zanasi et al. (2009)	TPC	It allows the exclusion of smallholders, especially in marginal rural communities in developing countries.
	PGS	PGS are based on the engagement of different stakeholders and are derived from collaborative management. They bolster social cohesion and mutual trust by influencing the effectiveness of social control, thereby ensuring the enforcement of certification rules.

To critically review TPC and PGS, we draw upon the idea of "good governance" because it sheds light on the rules, knowledge, and structure of collaborations in the governance of organic food systems (DuPuis and Gillon, 2009). Although alternative modes of governance might face challenges in terms of legitimacy, they can foster active civic engagement in food systems, seeking to share all the benefits and risks among the participants (DeLind, 2002; Gliessman, 2014; Goodman et al., 2012). We also derive four sustainability elements from Gliessman's (2014) highlights of sustainable food systems to scrutinize the real taste of sustainability of organic standards; these elements are key to transforming our current food

system into one that is more sustainable and equitable. This combined approach allows us to evaluate how organic food systems are governed and to examine the goals of organic certification standards vis-à-vis the attainment of a sustainable food system. In keeping with Gliessman (2014), in a *socially just* food system, all involved actors should receive fairer treatment, which implies that their sociocultural contexts are relevant; to achieve the prerequisites for an *ecologically regenerative* food system, the enhancement of natural biodiversity is encouraged by fostering holistic approaches to food production and marketing, such as agroecology; an *economically robust* food system ideally promotes local development by broadening access to financial resources and opportunities; and sustainable food systems should be *politically inclusive* by recognizing the actors' plurality of voices, knowledge, and opinions. It should be noted that although these elements are closely interrelated (Gliessman, 2014), they are discussed separately in this first part of our analysis. In Section 4, we consider their interrelatedness.

Socially Just

TPC is often perceived as a legitimate governance mechanism; however, the excessive number of audits and labels has implications for the social sustainability of organic food systems (Fuchs and Kalfagianni, 2010; Niederle, 2014b; Niederle and Radomsky, 2017). Our critical review shows that TPC does not pay attention to the farmers' role in developing organic markets

nor to their sociocultural contexts (Cifuentes et al., 2018; Cuéllar-Padilla and Ganuza-Fernandez, 2018; Sacchi, 2019; Sacchi et al., 2015). Some authors claim that TPC favors privileged and specialized farmers due to their financial capacity to cope with certification costs and procedures, while neglecting small-scale farmers (Montefrio and Johnson, 2019; Nelson et al., 2016; Schewe, 2011). Nelson et al. (2010: 235) allege that TPC "diminishes the decision-making capacity of actors at the local, regional, and even national scale." Bergleiter and Meisch (2015) suggest that farmers' values and personal experiences with organic production, along with consumer participation, should be taken into consideration in the certification process. Conversely, TPC can contribute to building farmers' capacities in terms of food production techniques (Clark and Martínez, 2016).

We also found pitfalls that can challenge the social sustainability of PGS. According to Binder and Vogl (2018), farmers' empowerment should be critically evaluated because the term empowerment can be deployed as an enticing label with no meaningful benefits and is difficult to measure; one can observe it as an outcome or a process. In this regard, Binder and Vogl (2018) point out that in Peru, an outcome would be related to the national recognition of PGS by the Servicio Nacional de Sanidad Agraria[1], but this was not the case at the time that their research was carried out. It was nevertheless found that some factors and processes—namely, capacity building and knowledge exchange among farmers—might foster empowerment (Binder

[1] In English, National Service for Agricultural Food Safety (Binder and Vogl, 2018).

and Vogl, 2018). These aspects are closely interrelated with cooperation development, as PGS stimulate farmers to act in an organized and collective way, thereby creating opportunities to exchange knowledge and resources (Sacchi, 2019). Moreover, there is evidence that PGS initiatives promote innovative solidarity practices. Bellante (2017) reveals that organic vendors organize group savings and direct product exchanges to help farmers save money and achieve larger-scale investments that are often used to improve production. Additionally, consumers are attracted by the desire to support smallholder farmers and, therefore, local development (Bellante, 2017; Binder and Vogl, 2018; Cifuentes et al., 2018; Kaufmann and Vogl, 2018; Montefrio and Johnson, 2019; Nelson et al., 2010; Nelson et al., 2016; Zanasi et al., 2009). This is due to the ability of PGS to engage local farmers and consumers in the design of organic standards, which are tailored to the local sociocultural landscape (Cuéllar-Padilla and Ganuza-Fernandez, 2018). Loconto and Hatanaka (2018) go further, arguing that consumers can learn about farmers' needs and productive processes. While examining PGS in Italy, Sacchi (2019) shows that farmers' associations that adhere to PGS schemes emphasize the guarantee of a fair wage for farmers and the protection of workers' rights.

Ecologically Regenerative

Although TPC has widespread acceptance, it has been criticized for promoting an input-substitution vision of organic agriculture, thereby failing to capture the essence of the organic

philosophy (Nelson et al., 2010, 2016). From the perspective of TPC, organic agriculture is often seen as an agrifood system that aims to sustain agricultural productivity by avoiding or largely excluding the use of synthetic fertilizers, pesticides, and genetically modified organisms (Adams and Salois, 2010; Altieri and Nicholls, 2005). Such a narrow understanding has also influenced international regulatory bodies to define organics in terms of the absence of synthetic substances, as "the conceptualization of organic agriculture in today's regulations differs in substantial ways from some of the key principles of organic agriculture as advocated by organic pioneers" (Seufert et al., 2017: 15–16). Nelson et al. (2010) view TPC as doing little or nothing to foster ideals such as limiting the extent of monocrop organic production and incorporating clean technologies that are adapted to farmers' local contexts. First, farm specialization is favored because it is easier to audit monocultures than diversified food production (Cuéllar-Padilla and Ganuza-Fernandez, 2018). Second, TPC overemphasizes technical aspects of organic food production, which can have little local environmental significance for primarily small-scale farmers in developing countries, who require further technical training and a specialized agronomic background (Nelson et al., 2010). Finally, once the farmer is certified, further improvements are not encouraged, thus hindering the enhancement of ecological sustainability in the organic sector (Cuéllar-Padilla and Ganuza-Fernandez, 2018).

As PGS are associated with the promotion of agroecological practices to support organic production, they can foster a more localized and regenerative production system (Bellante, 2017;

Cifuentes et al., 2018; Home et al., 2017; Loconto, 2017; Montefrio and Johnson, 2019; Zanasi et al., 2009). Comparing agroecological-based and organic agriculture, Andres and Bhullar (2016: 3) argue that "agroecology has a stronger focus on system-internal self-regulation and social institutions, while the main strengths of (certified) organic agriculture are channelized market access and regulatory frameworks." Notwithstanding the role of consumers in verifying organic production sites (Bellante, 2017; Loconto, 2017; Zanasi et al., 2009), Nelson et al. (2016) argue that the free riding and noncompliance of some PGS-certified farmers might threaten the assurance and legitimacy of the system.

Economically Robust

One of the main criticisms of TPC relates to the high costs of documentation, process modification, and organizational adaptation, which can be a burden for small-scale farmers (Albersmeier et al., 2009; Bellante, 2017; Binder and Vogl, 2018; Cifuentes et al., 2018; Clark and Martínez, 2016; Cuéllar-Padilla and Ganuza-Fernandez, 2018; Home et al., 2017; Nelson et al., 2010; Nelson et al., 2016; Sacchi et al., 2015). Altieri and Nicholls (2005) remind us that the standardization of organic agriculture proved economically and culturally unsuitable for small-scale farmers in developing countries, whose farming rationale is rooted in biodiversity and traditional knowledge. The private governance of the organic food sector marginalizes smallholders through its high costs and countless requirements (Fuchs et al., 2009). Farmers

often form associations or cooperatives to cope with the costs of certification (Andres and Bhullar, 2016), which are then transferred to the consumer (Cifuentes et al., 2018; Cuéllar-Padilla and Ganuza-Fernandez, 2018). From the farmers' perspective, this can be beneficial; however, when considering access to organic products, premium prices might be a hurdle for lower-income consumers (Sacchi et al., 2015). When farmers can supply organics to niche markets, the economic benefit of certified organic agriculture is considerably higher than for conventional agriculture (Albersmeier et al., 2009; Andres and Bhullar, 2016). Within this context, it is important to note that consumers welcome procedures that ensure compliance with sustainability concerns and may find the high prices of organic products justified (Bergleiter and Meisch, 2015; Petrescu-Mag et al., 2016). However, Clark and Martínez (2016) contend that for small-scale farmers, the benefits of certification dissipate over time if they are unable to sell all of their certified produce to buyers who are paying premium prices for certified organic food. As Montefrio and Johnson (2019) show, TPC is still seen as an opportunity for small-scale farmers to take advantage of premium prices and improve their economic condition.

Regarding the economic returns of PGS, Bellante's (2017) assessment of the Tianguis de Comida Sana y Cercana[2] (TCSC) in Mexico pinpoints some challenges. The author emphasizes that although economic justice is at the core of TCSC, some farmers still face poverty, as they are unable to support themselves solely through TCSC sales (Bellante, 2017). Similarly, Binder

[2] In English, The Marketplace of Healthy and Local Food (Bellante, 2017).

and Vogl (2018) argue that PGS face serious issues regarding economic outcomes, varying from limited government support for PGS initiatives to farmers' financial bottlenecks, which lead to low economic returns for farmers. Regarding premium prices and specialty markets, PGS might allow farmers to charge a modest premium for their produce, yet vendors cannot stray too far from the prices in other markets without losing price-sensitive clientele; the establishment of prices within PGS should therefore reflect the local context (Bellante, 2017). Regarding access to credit, being part of PGS is not necessarily advantageous, especially in countries whose governments do not recognize PGS (Home et al., 2017). Montefrio and Johnson (2019) point out that some farmers adopted a double-certification strategy, seeking TPC in addition to PGS, to enable them to access markets that are farther afield. These farmers took advantage of government subsidies and support to become third-party certified. On the one hand, without government support, they would be unable to be third-party certified; this illustrates the state's role in supporting the development of certification schemes (and, consequently, a particular view of agrifood governance). On the other hand, even when farmers have double certification, they remain faithful to PGS due to the latter's political commitment to the community in which the farmers are embedded (Montefrio and Johnson, 2019). Farmers who adopt only PGS might not be allowed to sell their products as organics, primarily when there is no institutional recognition of participatory certification. Cifuentes et al. (2018) show that the farmers in the examined PGS initiatives in Spain were not motivated by economic nor market access advantages but, rather, by

community building and the extra value added to their products, among other factors. In this regard, farmers have sought to differentiate themselves from other organic farmers who do not share the value of sustainable agriculture that extends beyond an input-substitution model (Cifuentes et al., 2018). Notwithstanding the skepticism regarding the economic robustness of PGS, there seems to be a consensus that PGS are a tool that is shaped by farmers' needs and that makes organic premiums available without costly certifications (Bellante, 2017; Binder and Vogl, 2018; Cifuentes et al., 2018; Loconto, 2017; Montefrio and Johnson, 2019; Nelson et al., 2010; Nelson et al., 2016; Sacchi, 2019; Schewe, 2011; Zanasi et al., 2009). The main reason for this is PGS's main characteristic: as Sacchi et al. (2015) point out, PGS simplify bureaucratic procedures and reduce costs for smallholders, who are often overwhelmed by the extensive documentation required by third-party certifiers. Therefore, transaction costs are reduced, and farmers can capture a higher share of added value for their produce (Sacchi et al., 2015; Zanasi et al., 2009).

Politically Inclusive

In the domain of political inclusiveness, TPC prioritizes technical over lay knowledge (Loconto and Hatanaka, 2018). This aspect can be explained by the fact that corporate agrifood actors have sought to weaken standards by excluding underprivileged groups (e.g., smallholders) (Busch, 2017; Guthman, 1998, 2018). Jaffee and Howard (2010: 389) argue that neoliberal

agrifood actors have indeed favored industrial agricultural practices, large-scale distribution, and global suppliers that seek the lowest labor and material costs. Consequently, TPC is often strategically advantageous for those with access to large-scale capital and ownership concentration. Jaffee and Howard (2010) also argue that such a system can erode premium prices in a way that ensures that only the big players can remain in business. TPC is thus hierarchical, leaving farmers—especially smallholders—and consumers without a voice and giving more attention to government bodies or private institutions with regard to decision-making (Cuéllar-Padilla and Ganuza-Fernandez, 2018). As Busch (2011b: 345) suggests, the private governance of organic food systems promises to bolster "equitable exchanges" but instead creates a "bizarre bazaar." This is because, first, it transforms food safety into a market-related matter. Second, in the face of the price pressures imposed by retailers on farmers, either through competition among farmers or through contracts, farmers tend to either impose low wages on rural workers or replace them with machines (Busch, 2011b). Third, labels have replaced trustworthiness and fairness because they transmit a symbolic value to the consumer, which is not expected in a conventional exchange (Tonkin et al., 2015). For example, retailers have displayed organic food to color the consumer's perspectives on their shopping (Reed, 2009: 282). Consequently, consumers often associate organics with harmlessness and healthiness; as Prothero (2017: 6) states, "Organic eggs would be the holy grail—hens that are allowed to roam freely, fed organic

produce, and not given antibiotics either. Good for the hen. Good for the planet. Good for you. At a price premium, of course."

Regarding PGS, although consumers are acknowledged as key stakeholders, Home et al. (2017) argue that it is sometimes difficult to convince them to participate in farm visits. To overcome this challenge, it is necessary to consider the role of direct marketing strategies, thereby exposing consumers to PGS ideals (Sacchi et al., 2015). Collaboration among PGS members is also crucial to increase the reliability and legitimacy of the participatory process (Kaufmann and Vogl, 2018) and to encourage members to discuss their challenges through events, get-togethers, and training sessions (Loconto and Hatanaka, 2018). Moreover, the inclusiveness vision of PGS can be jeopardized if there is a lack of participant involvement (Bellante, 2017; Binder and Vogl, 2018; Loconto, 2017). Home et al. (2017: 529) note that "PGS are often run and administered by NGOs or farmer's associations, with limited smallholder involvement." Therefore, PGS members play a fundamental role in building bridges between civil society and the agrarian sector to increase stakeholders' participation and sense of community (Cifuentes et al., 2018). We also observe that PGS are democratic in terms of the types of knowledge they prioritize, producing forms of sustainability that incorporate PGS members' lived experiences (Loconto and Hatanaka, 2018). However, as Nelson et al. (2016) argue, farmers can be recognized by their agroecological practices but might not feel competent to participate in their market's PGS committee due to a lack of formal training. This stance

reflects the conventional power dynamics, which value expert knowledge when it comes to carrying out inspections and managing organic production (Nelson et al., 2016).

4. Do organic standards have a real taste of sustainability?

By combining essay reasoning with a critical review, we delved into the implications of TPC and PGS for the sustainability of organic food systems, unveiling their real taste of sustainability. To accomplish this aim, we drew upon the principle of "good governance" (DuPuis and Gillon, 2009) and Gliessman's (2014) framework for sustainable food systems and derived four sustainability dimensions to critically review the evidence based on TPC and PGS. Our analysis showed potentials and pitfalls in this regard. Table 3 shows the results vis-à-vis the derived sustainability dimensions.

Table 3

Do organic standards have a real taste of sustainability? Potentials and pitfalls of TPC and PGS in regard to social, ecological, economic, and political sustainability dimensions

Governance mechanism	Potentials and pitfalls	Socially just	Ecologically regenerative	Economically robust	Politically inclusive
TPC	Farmers' sociocultural contexts are not taken into consideration in the certification process.	×			×
	TPC can build farmers' capacities for food production techniques.		✓		
	Monocrop organic production is fostered because it is easy to audit. This practice narrows organic agriculture to an input-substitution model yet enables more efficient production and economies of scale.		×	✓	
	Technical aspects of organic production are overemphasized, which can have little local environmental significance for primarily small-scale farmers in developing countries, who require further technical training and a specialized agronomic background.		×		
	Further environmental improvements are not encouraged once the farmer is certified.		×		
	The costs of certification are high, which can be a barrier for small-scale farmers with limited access to capital.			×	
	Certified organic food can be sold in specialty and international markets at premium prices.			✓	
	The benefits of certification dissipate over time if (small-scale) farmers are unable to sell all of their produce to buyers who are paying premium prices. Besides, lower-income consumers might be unable to pay premium prices for organics.			×	
	While technical knowledge is prioritized, farmers' lay knowledge and alternative approaches to food production are marginalized.				×
	Key stakeholders, such as farmers and consumers, have no voice in the development of standards.				×
PGS	Farmers' empowerment should be critically evaluated because the term empowerment is often used as an enticing label and due to measurement difficulties.	×			
	Solidarity practices are often promoted, social sustainability aspects (e.g., the guarantee of a fair wage for farmers and the	✓			✓

	protection of workers' rights) are considered as key, and farmers and consumers have an active role in developing standards.		
	Lay knowledge and alternative approaches to food production (e.g., agroecology) are encouraged.	✓	✓
	Consumers and other PGS members are encouraged to perform peer reviews of organic production sites. Thus, if stakeholders actively participate in the certification process, the risk of free riding and noncompliance can be reduced.	✓	✓
	Economic outcomes may not always be granted, especially for farmers who cannot depend solely on local sales and whose governments do not invest in PGS.	✗	
	Transaction costs are reduced, implying that small-scale farmers can benefit from the reduced cost of the certification process.	✓	
	PGS might suffer from limited consumer and smallholder involvement.		✗
	PGS are democratic in terms of the types of knowledge they prioritize and incorporate into decision-making.		✓
	In contexts in which PGS are not officially recognized, the conventional power dynamics might be a threat in the sense that technical knowledge (mainstream standards) is preferred over agroecological practices.		✗

Notes. ✓ It enhances the selected dimension of sustainability. ✗ It does not fully enhance the selected dimension of sustainability.

Based on Table 3, we now discuss the potentials and pitfalls of TPC in regard to the four derived sustainability dimensions and their interrelatedness. In the *socially just* dimension, TPC is associated with high levels of legitimacy, primarily in the context of international food supply chains (Tonkin et al., 2015), but farmers' values and personal experiences are not relevant in the certification process. This observation aligns with the fact that TPC does not include farmers' sociocultural landscape in the standard-setting process; consequently, the politically inclusive dimension is not being attended to either.

Regarding the *ecologically regenerative* dimension, it is noteworthy that farmers can gain further knowledge of cleaner production techniques (Albersmeier et al., 2009; Andres and Bhullar, 2016). However, these agricultural techniques often narrow organic production to an input-substitution model, which is the case for conventionalized organic agriculture (Buck et al., 1997; Constance et al., 2013, 2015; Niederle, 2014a). For example, despite intensified organic production systems allowing for increased efficiency and economies of scale and thereby enhancing the economically robust dimension, a holistic vision of organics is necessary to promote environmental stewardship and broaden the scope of agricultural practices into one that is ecologically regenerative (Gliessman, 2014). Another pitfall of TPC is its emphasis on the technical aspects of organic production that have few local ecological benefits for smallholders in developing countries, who need additional technical training (Nelson et al., 2010). The ecologically regenerative aspect of TPC is also hindered because farmers do not employ further

environmental improvements once they conclude the certification process (Cuéllar-Padilla and Ganuza-Fernandez, 2018).

In the *economically robust* dimension, TPC can offer farmers the advantage of supplying specialty and international markets, but the costs of certification can be a hurdle for smallholders, who also need to cope with bureaucratic paperwork (e.g., Binder and Vogl, 2018). Additionally, the economic benefits of TPC can dissipate over time if farmers are unable to sell all of their certified produce (Clark and Martínez, 2016). Another pitfall that hinders the economically robust feature of TPC is the fact that lower-income consumers might be unable to pay premium prices for organics (Sacchi et al., 2015).

Regarding the *politically inclusion* dimension of TPC, we observe that technical knowledge is preferred over farmers' lay knowledge, as well as alternative approaches to food production (Loconto and Hatanaka, 2018). Another pitfall is that farmers have no say in the elaboration of standards or in the certification process (Cuéllar-Padilla and Ganuza-Fernandez, 2018); rather, they have to comply with industrial agricultural practices that result in sanctions if they are not followed.

Regarding PGS, the *socially just* dimension is enhanced by the adoption of a different administrative model that brings farmers and consumers together while developing standards, fosters solidarity practices, and gives increased importance to aspects linked to social sustainability—namely, the guarantee of a fair wage for producers and the protection of workers'

rights (Sacchi, 2019). In this vein, PGS also have potential in terms of political inclusiveness, as they pay attention to farmers' and consumers' experiences and needs in the elaboration of standards (Cuéllar-Padilla and Ganuza-Fernandez, 2018). However, significant effort should be geared toward understanding farmers' empowerment in the context of PGS. In this process, capacity building and knowledge exchange are acknowledged as important mechanisms, but the term empowerment, which is often used as an enticing label, has lost its real meaning and can be complex (Binder and Vogl, 2018).

For the *ecologically regenerative* perspective, it is noteworthy that PGS favor lay knowledge and holistic approaches to food production (e.g., Cifuentes et al., 2018); this also enhances the political inclusiveness of PGS because different forms of knowledge are taken into account. Further, consumers and other PGS members play an essential role by carrying out peer reviews (Loconto and Hatanaka, 2018), thus reducing the risk of noncompliance and increasing the legitimacy of the system. The active participation of various actors also enhances the political inclusiveness capacity of PGS.

In terms of *economic robustness*, farmers might face difficulties in selling PGS products at premium prices in specialty and international markets, especially when there is little government recognition and support for PGS (Binder and Vogl, 2018). However, farmers can attract a wider clientele by differentiating themselves from other farmers who do not share the value of sustainable agriculture that extends beyond an input-substitution model (Cifuentes et al.,

2018). We also note that PGS's strongest claim is their low implementation costs, which can enable farmers to access certification without being subjected to costly and bureaucratic procedures.

Considering the *politically inclusive* dimension of PGS, we observe limited consumer and smallholder involvement. If PGS are to succeed, they are required to strengthen bonds, relationships, and trust among consumers and farmers (Kaufmann and Vogl, 2018). Another pitfall relates to the conventional power dynamics, which threaten the confidence of farmers participating in their PGS committees owing to their lack of technical training (Nelson et al., 2016). As a potential, PGS initiatives have democratic structures that are sensitive to the inclusion of different perspectives and values (Montefrio and Johnson, 2019).

Overall, TPC begets various pitfalls that point to a weak taste of sustainability, with potentials that are focused solely on ecological and economic aspects; consequently, farmers can build up their capacities regarding organic production practices and gain access to specialty markets, whose main promise is premium prices. Conversely, PGS have a strong taste of sustainability because they can enable potentials that enhance the social, ecological, economic, and political sustainability dimensions. However, it should be emphasized that some pitfalls can threaten participatory efforts, as conventional market dynamics have sought to legitimize strict standards that are aligned with the demands of powerful and global food supply chain actors. We also observe that two dimensions of sustainability might or might not be enhanced

simultaneously in TPC and PGS, whereby their taste of sustainability is revealed to be multidimensional. For example, TPC favors farm specialization, which can make only a small contribution to the regeneration of the local environmental but can be more efficient and thus profitable, whereas PGS recognize farmers' own knowledge in decision-making and encourage the inclusion of alternative agricultural practices, implying that participatory schemes can be both socially just and politically inclusive.

Our critical review confirms that TPC is usually denounced as too costly for smallholders and not applicable to local agroecological and socio-technical conditions and that PGS face organizational challenges and a lack of institutional recognition in some contexts (Fouilleux and Loconto, 2017). Two important points emerge from these observations. First, we argue that although TPC is acknowledged as legitimate, it begets pitfalls that challenge the sustainability of organics. It is fair to argue that TPC has received and continues to receive support from capitalist agrifood actors in the form of subsidies or incentives for farmers to become certified because TPC is believed to provide farmers with economic benefits and special access to global markets. Second, attention should be given to PGS in terms of research and policy making because they present innumerable potentials that can enhance the sustainability of organic food systems while transparency, participation, and accountability are considered.

As a final remark, we want to make reference to Campbell and Liepins (2001), who allege that the promise of organic agriculture as a concrete manifestation of sustainability is at

risk because of its corporatization and standardization. Large retailers are increasingly involved in the management of organic agriculture, causing concern and triggering protests by practitioners of the pioneer organic movement, who believe that organic agriculture is opposed to mere capitalist agriculture (Clark, 2006). We therefore stress the need to critically evaluate private market-driven trends regarding the institutionalization of organic standards, which have shown contradictions that undermine the pioneering values of the organic movement. If such trends are not managed responsibly and collectively, our critique of the capitalist governance of organic food systems will be in vain.

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