Food governance and healthy diet. An analysis of the conflicting relationships among the actors of the agri-food system

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Abstract

Background: Promoting healthy, sustainable diets has become an important social goal. Governments and businesses are increasing measures aimed at promoting a healthy diet. However, a variety of data indicates that a healthy diet is far from being attained.

Scope and approach: Our principal thesis is that 'conflictive' relationships among actors in the agri-food system form one of the main barriers to achieving a healthy diet. We analyzed changes that have taken place in the agri-food system and how these affected the foundations of conventional models for food governance, enabling and giving rise to innovative forms of food governance. Then, we examined some of the initiatives developed by traditional actors in the agri-food system to address the demands of "more aware" consumers and explored the contradictory results obtained so far.

Key findings and conclusions: Development of healthy, sustainable diets for all requires consensus among the different actors in the agri-food system. However, such a goal is not easy to attain within a framework of governance characterized by complexity, asymmetry, and conflicts among these actors. The conflicts are rooted in a disconnection between the needs and demands of consumers and the ways in which public and private actors deal with the requirements of "more aware" consumers. Promoting a healthy diet depends, to a great extent, on the creation of a framework of relationships in the agri-food system and different connections among the actors to replace the current conflicting ones.

Keywords: Food Governance; Healthy Diet; Social Actors; Conflicts; Agri-food System

1. Introduction

Promoting a healthy and sustainable diet has become a challenge. International institutions and governments are increasing measures aimed at promoting a healthy diet, trying to find solutions to the negative effects of unbalanced diets—energy-dense and rich in fats, sugar, and salt—on the health of people and the planet (Pérez-Escamilla et al*.,* 2017; González-Fischer & Garnett, 2016). For instance, FAO (2018a) calls for changes to the model of food production and consumption in order to achieve the Sustainable Development Goals by 2030.

Evidence suggests, however, that a healthy diet is still far from being attained. More than 821 million people (10.9% of world population) are undernourished and one third of the world's population are malnourished (FAO, 2018b). The continuing rise in obesity and diet-related diseases, such as diabetes, stroke, and coronary heart diseases, demonstrates clearly that these measures are not successful (Cornelsen et al., 2014, Garnett et al., 2015; Vallgårda, 2018). In 2015, in OECD countries, one in two adults and nearly one in six children were overweight or obese (OECD, 2017). Figures for 2003 showed 20% of the British population and 14% of the Spanish population were obese; by 2015, the numbers had risen to 26.9% in the United Kingdom and 16% in Spain. Low-income countries have

lower rates of obesity, but the trend is upward, side-by-side with undernourishment (FAO & WHO, 2014).

What are the factors that enable or impede achieving a healthy diet? The question is complex and, as Adriaanse et al. (2011) and Matheson (2016) remark, can be considered from many angles: lifestyle behaviors, genetics, food environments, social networks and capital, food politics, etc. However, little attention has been paid to food governance defined as *"the formal and informal interactions across scales between public and/or private entities ultimately aiming at the realization of food availability, food access, and food utilization, and their stability over time"* (Candel, 2014: 598). Changes in the global agri-food system have resulted in new arrangements in food governance (Marsden et al., 2010). Negotiations about these new arrangements have involved a wide range of actors (consumers, producers, retailers, politicians, scientists, citizen movements, NGOs, etc.) with diverse interests, responsibilities, and decision-making abilities with respect to food. The agri-food system is a network of complex relationships characterized by disconnection among actors, unequal power relationships, and non-linear feedback (Thompson & Scoones, 2009; Marsden, 2013; Pereira & Drimie, 2016). These characteristics make it difficult to reach a consensus about the best courses of action for achieving sustainable food and healthy diets.

Our principal thesis is that 'conflictive' relationships among actors in the agri-food system are one of the main barriers in achieving a healthy and sustainable diet. We suggest the origin of these conflicts came about in the shift from a conventional system of governance to a new system of relationships among actors in the agri-food system. Here, we focus on analyzing these conflicts, as a way of understanding how the food governance system works (Candel, 2014) and finding areas of consensus. Such consensus is the basis for achieving healthy and sustainable diets (FAO, 2018a; González-Fischer & Garnett, 2016; Willett et al., 2019) and, following the EAT-Lancet Commission, it *"requires a focus on complex systems, incentives, and regulations, with communities and governments at multiple levels having a role in redefining how we eat. For policy makers, the changes are not limited to agricultural policy: there needs to be integration, teamwork, and cooperation between bodies responsible for health, transport, agriculture and environment, trade, and education, with the knowledge that climate change driven by food production adds urgency to the task ahead"* (Lucas & Horton, 2019: 387).

In this article, we first describe changes that have taken place in the agri-food system and their repercussions on global food governance. We analyzed how the system moved from a framework of conventional food governance to innovative forms of global food governance and the consequences of these changes on traditional power relations within the food system of high-income countries with a specific focus on Spain. Then, we examined how the appearance of "more aware" consumers have changed the basis for relationships among the different actors in the agri-food chain. The need to acknowledge these consumers and respond to their demands has obliged most of the actors in the agri-food system to shift their focus and modify strategies and practices, generating conflicts in many cases. Our analysis is not an exhaustive treatment of the manifold relationships involved in the agri-food system, nor does it include all the social actors (Díaz-Méndez & Gómez-Benito, 2008), but it does demonstrate these conflicts inhibit a consensus favoring healthy and sustainable diets (Gormley 2018).

2. Changes in the Food Governance Model

As Oosterver (2007) highlights, global food governance has been transformed in recent years, moving from a model where conventional features dominate to one where innovative forms of global food governance take on importance.

The conventional model of food governance has been in effect for decades. Its aim was to guarantee food security and food safety through mechanisms created by the State to regulate markets and support agricultural prices (Renting, Schermer, & Rossi, 2012). An example of this is the European Union's Common Agricultural Policy, CAP. This State-driven model envisaged a strict division of responsibilities between public and private bodies. The public sphere, in which principal

actors were Member States, was charged with protecting citizens from famine and shortage as well as food fraud and other risks. The private sector, represented mainly by the food industry, was expected to focus on the quality and price of foods (Oosterveer, 2007). The role of scientists was to mediate knowledge and give confidence, since the majority of recommendations on food security and healthy diet are based on scientific knowledge. Scientists are also required to evaluate and advise on risks (Busch, 2014; Charlebois & Summan, 2015).

These conventional governance arrangements have changed as the context has transformed. On the one hand, changes in the agri-food system have modified traditional power relationships. The final decades of the 20th century saw the coming together of trends in concentration, specialization, and internationalization that began in the 1970s (McMichael, 2013), affecting not only production, but also impacting significantly the distribution sector. Slowly, but steadily, power has shifted within the agri-food chain from producers to processors and then retailers. Now, big corporations have control over food production (seed, pesticides, fertilizers, or machinery), collection, processing of food products, and commercial distribution that has become largely homogeneous and global (Goodman, Sorj, & Wilkinson, 1987). The modern agri-food system has also become immensely complex. Stakeholders have increased in number and variety, as have the phases and processes that food undergoes before reaching the consumer. This has caused a disconnection between agricultural product and food product and increased the distances, both physical and cognitive, that separate the various actors across the agri-food system (Thompson & Scoones, 2009; Lozano-Cabedo & Gómez-Benito, 2017).

On the other hand, food crises have put traditional mechanisms for guaranteeing food security and food safety into question and led to growing distrust of the State and even scientific institutions (Eden, Bear, & Walker, 2008). In 2010, the Special Eurobarometer 354 about "Food-related Risk" (European Commission, 2010) reported that 41% of European citizens considered scientific advice on food-related risks was not independent of commercial or political interests and 42% thought that public bodies in the EU viewed profits (of producers) as more important than the health of consumers.

Furthermore, new dimensions, objectives, and actors have emerged. In addition to the traditional actors, new actors (NGOs, consumers) and social movements (Community Supported Agriculture, La Vía Campesina, AgroEco Cities European Network, etc.) have appeared in recent decades. These actors have put new objectives on to the agenda: environmental, social, and ethical issues, including animal welfare, the right to food, food sovereignty (Fonte, 2013; De Azevedo, 2015), all on top of the traditional ones of food security, safety, and risks. These actors are pushing for innovative regulatory tools, and demanding food governance mechanisms that are more transparent, horizontal, and democratic as well as a more active role in decision-making about food consumption and food production (Freudenberg, McDonough, & Tsui, 2011).

In this new framework of multi-sector and multi-level governance (Termeer, Dewulf, & Van Lieshout, 2010), not only has the number and diversity of actors increased, but also the complexity of their relationships. These changes have affected the foundations of the conventional model, enabling and giving rise to innovative forms of food governance (Oosterveer, 2006). In the new context, some traditional actors are unable to engage in the new power relationships established across the agri-food system and have been forced to adapt their role (Lamine et al., 2012; Marsden, 2013). For instance, States are no longer in a position to make unilateral decisions in an increasingly globalized agri-food system, where the World Trade Organization and food corporations are the chief decision-makers. The emergence of new social demands and new actors in the field of food have also made States change their roles. For example, in Spain in the 1960s and 1970s, food recommendations lay exclusively in the hands of the State through agricultural institutions. They transmitted the idea of a healthy diet to an underfed population that was instructed on how to reduce the monotony of their diet by adding new products to their menus. Gradually, the weight shifted in favor of specialized institutions in health and later consumption. Food recommendations from the 1990s focused on the relationship between health and food, and on the role of educating individual consumers about nutrition and healthy habits (Díaz-Méndez & Gómez-Benito, 2010).

The food industry and, more recently, large-scale distribution networks are actors that have played a fundamental role in the conventional food governance model. And, as the agri-food system has

become more globalized and complex, they have gained power. These actors have also modified their roles, shifting from being rule-followers and becoming rule-makers (Fuchs, Kalfagianni, & Havinga, 2011), taking a more active role in the development of multiple rules and regulations, examined below.

Osterveer (2007) emphasizes how scientists' roles in the innovative food governance model have become ambiguous. The public considers scientific knowledge fundamental for information about the characteristics and quality of food, and a basic requirement for ensuring food safety (Díaz-Méndez et al., 2013). However, citizens also think that science has had an active role in the processes of industrialization and standardization of foods, so have some responsibility for the spread of food risks (Eden, Bear, & Walker, 2008; Marsden, 2013; Lozano-Cabedo & Gómez-Benito, 2017).

The shift from one governance model to the other is creating friction among the various actors in the agri-food system. Actors' rights and responsibilities have altered, as have their roles and the processes of negotiation. The exchanges that are necessary in order to reach agreement have become increasingly complex because different actors are fighting, from different positions, to impose their views on food policy and mark out routes that each considers best to achieve healthy food.

3. The Arrival of "More Aware" Consumers and the Reconfiguration of Food Governance

One of the actors that has taken on most importance in innovative food governance has been the consumer. The appearance (mostly in high-income countries) of consumer profiles, with new and more active values with respect to food production and consumption (Stolle, Hooghe, & Micheletti, 2005; García Espejo & Novo Vázquez, 2017), has changed the basis of relationships among the different actors in the agri-food system, and generated conflicts in many cases.

Repeated food crises have reinforced this new role for consumers, making them more demanding. "More aware" consumers have gone from being buyers or passive end-users to being conscious and proactive actors (Renting, Schermer, & Rossi, 2012), calling for increased regulation in the food chain, appropriate risk management, and greater control over the food industry and food advertising (Tanermura, Hamadate, & Urushihara, 2017). Pressure from consumers has forced governments to take their demands on board, as in the case of mobilizations against GMOs (Motta, 2014), and led to the adoption of national and European regulations, e.g. Regulation (EC) 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms Another example of this activism is the campaign against the soil fumigant methyl iodide promoted by a citizen movement; this product was withdrawn from the US market in 2012 (Guthman & Brown, 2016).

Now, both public and private actors have to deal with these more concerned consumers. The need to acknowledge them and respond to their demands has obliged most of these actors to shift their focus and modify strategies and practices, contributing to the new governance framework.

3.1. Consumers and government/public administration

To adapt to this new paradigm, governments have developed regulatory processes and institutions to deal with risk and ensure the quality and safety of products in a global food market. Examples include the European Food Safety Authority (EFSA), the General Food Law Regulation (EC) No 178/2002, and the Spanish National Plan for Official Control of the Food Chain (PNCOCA). This increase in regulation has created huge debate between political groups that favor strict regulation and those that criticize regulation as excessive ("nanny state") and champion a "free market" (Martínez et al., 2007).

Public administration has responded to consumer demands by providing more information about a healthy diet through campaigns and education programs. This strategy rests on a series of premises: a) information about food is accessible and clear; b) the consumer has the necessary information (and is able to understand it) to take rational decisions that enable the development of healthy habits; and c)

the consumer has the necessary resources to obtain healthy food (Lozano-Cabedo & Gómez-Benito, 2017).

From this perspective, eating is a discrete and private activity, so what to buy and eat is up to the individual (Díaz-Méndez & Gómez-Benito, 2010). In contrast to this viewpoint, which places all the responsibility on the individual, there is another perspective that considers food choices are affected by structural determinants. People are not free in their food choices, because their context places pressures on their decisions. For example, various studies have shown how the prevalence of obesity is promoted by certain environments, involving urban management policies and specific town-planning decisions (Morland & Evenson, 2009; Van Hulst et al., 2013). Public policy is responsible for these environments and plays a fundamental role in helping or hindering the adoption of a healthy diet, but has received little attention from States.

3.2. Consumers and agri-food businesses

Agri-food businesses—both the food-processing industry and the modern distribution sector—have had to react to a new type of consumer with different values, perceptions, and attitudes to food, and about how food is produced, transformed, and consumed. This consumer is more concerned about health and measures to ensure transparency and traceability. Actions such as "boycotting" (punishing businesses for unfavorable behavior) and "buycotting" (rewarding businesses for favorable behavior) are good indicators of this new role (Baek, 2010; Yates, 2011).

Some businesses, in response to changing consumers' demands, have taken product-focused initiatives, incorporating lines of organic products into own brands or offering "low fat" or "reduced sugar" products (Belz & Schmidt-Riediger, 2010). Others have adopted ethical codes of conduct or have collaborated in developing self-regulation in areas, such as advertising standards or corporate social responsibility initiatives (CSR), with the aim of creating governance mechanisms that are horizontal and inclusive (Sharma, Teret, & Brownell 2010). Food certification mechanisms have also been created, some as private initiatives, while others have been developed by governments, seeking quality assurance to allow producers as well as consumers to create new frameworks that are credible and trustworthy (Henson & Reardon, 2005).

Nonetheless, some of these initiatives are not having the success hoped for in establishing better relationships among the actors in the agri-food system. For example, confrontations concerning measures to control sugar content ("sugar taxes") show that not all companies are ready to adopt such changes (Andreyeva, Chaloupka, & Brownell, 2011). The increase in regulations—and sanctions—aimed at guaranteeing accurate labeling also reflects breakdown in some of these approaches. For instance, private certification models of organic agriculture have been questioned for lack of transparency, being undemocratic, failure to incorporate environmental factors, and creating profound inequalities, as small producers cannot absorb the high costs of implementation (Tallontire et al., 2011; Cuéllar-Padilla & Ganuza-Fernández, 2018).

3.3. Consumers and citizen movements

Some consumers, as well as some producers and retailers, are looking for new ways to shape an environment that is favorable to healthy and sustainable eating and address concerns about the agri-food system. Examples, such as the Gruppi di Acquisto Solidale in Italy, Community Gardens in Canada, or the international Community Food Security movement, suggest that civil society is organizing to create new ways of providing healthy and safe food. These experiences aim to reconnect producers and consumers and enable them to have greater control over food supplies (Fonte, 2013).

These initiatives affect production as much as distribution and consumption and seek to create more equal and trustworthy relationship environments for actors who have had little opportunity to make decisions in a globalized food system, much less any control. An example would be the certification initiative organized by the Rede Ecovida in Brazil, where not only food producers and technicians, but also distributors and consumers, have active and decisive roles when it comes to certifying a product as organic (Velleda-Caldas, Sacco dos Anjos, & Lozano-Cabedo, 2014; Cuéllar-Padilla & Ganuza-Fernández, 2018).

One of the aspects that defines these new actors is their insistence on having a greater role in decision-making on matters such as food production, food access, or food distribution (De Azevedo, 2015; Sanz-Cañada, Belletti & Lagoma, 2018). To describe these forms of political participation in food issues, new concepts have emerged such as "food sovereignty," "food democracy," or even "food citizenship" (Patel, 2009; Renting, Schermer, & Rossi, 2012; Lozano-Cabedo & Gómez-Benito, 2017). However, neither businesses nor governments have considered these movements as a critical response to the global food system, much less as a tool to promote a healthy and sustainable diet adapted to socio-economic and cultural characteristics of different regions or local areas. Instead, they continue to see them as ideological and elitist routes that cannot compete with the dominant system, without appreciating what these citizen movements bring when it comes to promoting a healthy and sustainable diet (Sonnino & Marsden, 2005; Guthman & Brown, 2016).

4. Conclusions

Promoting a healthy and sustainable diet for all is not an easy goal within a model of governance characterized by complexity, inequality, and conflict among actors in the food system. Traditional relationships between consumers and the other actors were relatively successful but are no longer functional. Neither governments, with recommendations, regulations, or action plans, nor private businesses, with marketing strategies and new codes of conduct, are proving effective in creating trust among consumers. Consumers have lost confidence in the global food system, but other actors across the sector are unwilling or unable to recognize or respond to this. This has led to implementation of measures to achieve a healthy diet that are partial and largely ineffectual, trying to address the crisis independently and through actions that do not create genuine opportunities for the participation of citizens.

Most consumers are increasingly aware of the problems associated with an unhealthy diet and try to take action in this respect. However, they find multiple obstacles to achieving this in their daily lives. The food industry should take responsibility for this issue and facilitate access to sustainable and healthy food.

The initiatives put into motion by citizen movements put into doubt not only how power and decision-making are shared among the different actors, but also the mechanisms underlying this governance. These groups are working to create networks and spaces for consensus in favor of a sustainable and healthy diet, although it is difficult to make their local initiatives work on a more general and wider scale.

The role of scientists in the agri-food system is fundamental. In the matter of sustainable and healthy diets many dimensions converge, which means that it would be enormously useful to establish multidisciplinary working groups to deal with the challenge holistically. Furthermore, these actors can have a decisive role in mediating building of bridges among other actors across the agri-food system and establishing consensual courses of action with respect to a sustainable and healthy diet.

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