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Food safety governance and social learning: The Spanish experience

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Abstract

This paper analyses the significance of regulatory governance in the food safety system in the context of a European Union member state with little track record of public participation in administrative decision making. The recent introduction in Spain of regulatory governance in the food system (characterized by actor participation, increased transparency and partial independence from government) was induced by European legislative mandate, rather than being the result of a clear local social demand. Social actors are not necessarily prepared to assume the roles the legislation expects of them. However, regulatory governance, instead of being the result of a process of social learning, may in turn start social learning, with the concomitant changes in actors' values and demands. © 2006 Elsevier Ltd. All rights reserved.

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1. Introduction: regulatory governance

Profound changes have taken place in recent years in regulatory systems related to technology, environment and consumer safety. In many cases, decision making, which for decades had been based on government-mandated topdown policy making and scientific expertise closely focused on policy making needs (regulatory science), can now be described by the term *regulatory governance*. Regulation has begun to open up to a wide variety of social actors. Decision making is becoming more participatory and transparent, with increased public access to relevant information. The social actors involved with such regulatory processes tend to act in pluri-centric self-organizing networks that combine public and private organizations and can act with more or less independence from government and public administrations.

Regulatory governance can be characterized by the predominance of negotiation, manipulation of information or alliance formation in actor communication and interaction

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(as opposed to the reliance on structures of command and control). In other words, the emphasis is more on *processes* of governing than on structures or hierarchies of government (van Kersbergen & van Waarden, 2004). In fact, structure – instead of being given – is seen to emerge from such regulatory processes, through the interaction of the different actors. In that way, networks of social actors characterized by governance may be likened to ecosystems (where the flow of financial and other resources would be equivalent to the ecosystem's energy flows, socio-political factors to physical factors and social actors to living organisms whose activities are mediated or shaped by those factors: Muñoz, Espinosa de los Monteros, & Díaz, 2000). In such systems, organization (hierarchy) emerges from the interaction of the diversity of organisms. In fact, since in regulatory governance the decisions are a result of the interaction among all the actors, it is generally unlikely that any one actor be able to impose their view. The outcome is more likely to depend on the state of the network of actors at a specific moment.

These changes in decision making, which environmental and technology-related legislation and regulation are gradually adopting, can be traced back to factors like the

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growing complexity of technological systems or the ongoing reorganization of public administrations in terms of efficiency. However, for the most part they are the result of profound transformations in the social structure and of individual values in highly industrialized society. Citizens' demands for participation and public information have grown constantly, along with the importance of civil society. At the same time, citizens' trust in regulatory decision making and scientific expertise as a privileged basis for policy has decreased. In this, the publicly perceived lack of experts' independence from policy makers and their questioned ability to take account of uncertainty in regulation (Funtowicz & Ravetz, 1993) played an important role, particularly in the European Union (EU) (EC, 2001b, 2003).

One of the main drivers behind these changes has been the accelerated politicization of many aspects of daily life ("life politics": Giddens, 1990), as well as a process of detraditionalization and individualization (Beck & Beck-Gernsheim, 2002; Pérez Sedeño, 2001). Both are part of the "reflexive modernization" of industrial society (Beck, 1997). Increasingly, individuals are forced to negotiate and decide on fundamental aspects of their lives (and biographies) without being able to recur to tradition or local culture. Today, in fact, people have to take decisions (and justify those before themselves and others) on very basic aspects of their day-to-day lives. For instance, characteristics of food, like its origin, composition or production, cease to be "natural" (i.e., given by customs or culture) and become subject to questioning and election, even without the occurrence of any food crisis (Marsden, 2000).

In addition, in today's industrialized societies many of the citizens' preoccupations (and occupations) become related to industrialization's "side-effects", like technological accidents, profound environmental and social changes, or the growing perception of risk (see, for instance, EC, 2005a). The virtual impossibility of eradicating such effects, given that they originate in the institutional structure of highly industrialized society itself (Ravetz, 2003), contributes to the loss of citizens' trust in regulatory systems. At the same time it defines and mediates the new spaces for public action which reflexive modernization is opening up for individuals in these societies.

Beck and Beck-Gernsheim (2002), in fact, argue that it is precisely the new space for self-organization, as well as the culture of the self opened up by individualization (and not just the perception of ecological crises or technology's intractable "side-effects") which is driving the new political dynamics related to technology and the environment. The citizens' political action is moving from more traditional mechanisms of democratic participation, like voting or party membership, to new expressions and places of participation: issue-specific civil action, non-governmental organizations (NGOs), etc.

Facilitating the participation of a diversity of actors in decision making, improving public access to regulatory information or making regulatory bodies more independent of government can be seen as the regulators' direct answer to such social demands. Regulatory governance may facilitate the expression of these new collective and individual values in and by regulation itself, as well as ease the growing questioning of society's ability to deal with the effects of industrialization (Echeverría, 2003). At the same time, regulatory governance constitutes an effort of regaining public trust in regulatory decisions and scientific expertise, as well as channel public resistance to new technologies (like genetically modified food).

Decision-making processes, which in one way or the other show characteristics of regulatory governance, have recently been introduced in fields as diverse as environmental management (Lane, 2003), drug policy (Wälti, Kübler, & Papadoulos, 2004) or research and development policy (Edler, Kuhlmann, & Behrens, 2004). One of the areas in which such decision-making processes have been applied on a wide scale is the regulation of the European food safety system (Berg, 2004; Macfarlane, 2002; Phillips & Wolfe, 2001).

As these examples show, regulatory governance is being used mostly in countries which show a history of social protests in relation to issues of science, technology and the environment and have a strong and organized civil society (as well as some experience with participatory decision making). However, so far it has found little application in countries like Spain (an EU member state) in which citizen participation in regulatory decision making is uncommon, civil society weak and protests related to science and technology limited to very specific issues and cases (López Cerezo, Méndez, & Todt, 1998).

The aim of this paper is to elucidate, in the case of food safety, what regulatory governance means in a context like the Spanish one. The recent introduction in Spain of organized and encompassing regulatory governance processes (characterized by public participation, increased transparency and partial independence from government) was induced by EU legislative mandate, rather than being the result of a clear local social demand. Especially important here is the question as to the role of the social actors, particularly from civil society, given that they do not possess much practical experience with participation in regulatory decision making nor show a strong demand for it.

The analysis was based on research interviews (conducted between June and November of 2004) as well as relevant documents, including legislation. The interviewees were selected because of their profound knowledge of the food safety system in Spain, before and after the regulatory changes took place. They included representatives from consumer organizations, trade unions, industry organizations as well as scientific experts and public managers. While most of the interviewees are directly participating with the current food safety system, some were chosen because they are not represented in the Spanish Food Safety Agency.

2. Food safety

Food safety is one of the first examples of a complete regulatory overhaul based on the systematic application of regulatory governance processes. It creates a Europe-wide regulatory system that includes participation of all affected social actors and at the same time aims at putting into practice codes of transparency and independence.

The scattered food safety regulation in the EU was unified in 2002, giving rise to an EU food law (European Parliament & Council, 2002). Regulation was passed on to a newly created independent agency, the European Food Safety Authority (EFSA). This effort can be seen as a clear response to several European food crises (BSE, mad cow disease, being the most notorious among them), which resulted in a pronounced loss of public trust in food regulation all over the EU, including Spain.

The opening-up of European regulatory decision making has to be seen as part of a world-wide drive to design participatory strategies in the food system, illustrated by the efforts to increase collaboration between consumer organizations and international bodies like the World Health Organization (WHO) or the Food and Agriculture Organization (FAO), by way of Food Safety International.

However, in Spain there do not exist strong internal pressures to change regulatory decision making, not only because of a weak civil society. Another important reason is the relatively high level of public trust in scientific experts and science-based decision making (if compared to other EU countries), despite a widespread lack of trust in official regulatory bodies (FECYT, 2005).

In spite of this situation, regulatory governance has recently been introduced into the completely re-founded Spanish food safety system, induced by the new European food law. That the main drivers for this change are in fact the European food legislation's requirements can be seen by the almost complete absence in Spain of public participation or clear-cut independence of regulators from government. In fact, apart from a few (failed) attempts in the area of environmental management (López Cerezo & González, 2002), the new food safety system can be considered one of the first Spanish regulatory systems which from the outset facilitates comprehensive participation of all relevant social actors, including civil society.

3. The Food law and the Spanish Food Safety Agency

The new European Food Law sets forth the general objectives of guaranteeing the safety of the food supply, with the overarching aim of regaining public trust in the European food system (EC, 1999). In order to achieve these objectives, the operation of the new regulatory body, the European Food Safety Authority, is to be based on transparency, independence, scientific excellence and participation of all the affected social actors. This implies, for instance, that all of EFSA's meetings are to be open to the public.

The new Spanish Food Law (Kingdom of Spain, 2001, 2002), in large parts a literal transposition of the European one, echoes these principles. It creates a Spanish Food Safety Agency (*Agencia Española de Seguridad Alimentaria*,

AESA) to which it assigns responsibilities similar to the ones EFSA has. The principal difference is that while EFSA is responsible only for risk assessment and communication (risk management remaining in the hands of the European Commission), AESA assumes all three of those functions.

The Spanish AESA began to assume most of the food safety related responsibilities from different Spanish ministries and committees in 2001. It is charged with controlling the food supply along the entire chain of production, distribution and consumption as well as coordinating this task with the Spanish regions.

AESA's president chairs the 15-member Board, which among other - is charged with electing the Agency's Executive Director. Six Board members represent different Ministries, another six members are from the regional and local governments. In addition, there is one representative from the food industry and one from the consumer organizations (chosen by the Spanish Consumer Council, which coordinates all the different consumer organizations). AESA also has an Advisory Council, charged with advising the Board and Executive Director. Its members include three consumer organization and three trade union representatives, as well as another eight representatives from the various food industry organizations and six from collegial organizations such as physicians or chemists. AESA's Scientific Committee is charged with generating scientific reports on food safety issues.

4. The Spanish food safety system in practice

The operation of the current Spanish food safety system will be analysed through a study of the AESA Food Agency, with respect to each of the key operational objectives (independence, transparency, scientific excellence, participation, public trust) stated explicitly or implicitly in the food law.

4.1. Independence

The AESA is a public "autonomous organization" of the Spanish central administration (assigned to the Ministry of Health). This status gives the Agency a certain level of independence from government, even though the Ministry can issue general guidelines. The actual level of independence is established through regulatory practice (Muñoz, Todt, & Ponce, 2004). AESA's president acts as interface between the Agency and the Ministry, as well as AESA's spokesperson in case of a crisis.

All of the interviewed social actors consider it necessary for the food agency to be independent, and agree that overall the current setup ensures AESA's autonomy. A few expressed concerns that having been assigned to only one Ministry (Health) may limit the functioning of the Agency, while others interpreted AESA's depending indirectly on a Ministry as an insurance policy against the influence of strong private interests.

The Agency itself recognizes that there is a fundamental doubt with respect to its independence: in case of a crisis,

the Spanish government would want a rapid public statement from AESA while the Agency, being bound to scientific rigor in its analysis, might need time to study the problem. AESA tries to pre-empt this conflict between the political need for fast response and the scientific need for time in order to produce a valid answer, by preventive study: it finances scientific studies of possible problems within the food supply, in order to be able to offer fast responses in case of a crisis.

Despite AESA being in charge of risk communication, it is not clear who (the minister of health, AESA's president, or both) in case of a crisis would transmit AESA's message to the public. In several recent minor food-related incidents, for instance, it was the minister who addressed the media even though – according to some of the interviewees – this should have been the responsibility of AESA's president. Thus, these social actors raise the question as to what might happen in a major crisis situation.

4.2. Transparency

For both the European and Spanish food laws, transparency throughout the food system is one of the most important stated objectives, given that the publicly perceived lack of transparency in the European and national regulatory systems contributed largely to the loss of public trust during the food crises of the 1980s and 90s.

According to AESA, its overall operational strategy is "first, apply science whenever possible, second, harmonize the message, third, be transparent" (AESA representative, 20/9/2004). In fact, unifying the official messages is seen as a key point for gaining public trust: the Agency wants to make sure that all the actors involved in the food system (industry, public administrations, consumer organizations, etc.) transmit the same information to society, so that citizens receive a coherent message and are not exposed to contradictory information. This is a basic building block in AESA's strategy of trust building (see below).

In general, all the social actors represented in the AESA are, up to now, satisfied with the functioning of the new system which they qualify as proactive and efficient. Many of them consider the possibility of asking information from the Agency on anything related to food safety and receiving rapid feedback one of the most important changes in the food system (a possibility that practically did not exist in the previous system).

However, among the consumer organizations represented on AESA's committees, there is some doubt with respect to the Agency's policy of transparency. AESA is obliged by law to make public the minutes of the Board and Advisory Council meetings and the Scientific Committee's final reports (which usually present a unified scientific position and do not include information on the preceding deliberations). Despite the consumer organizations' insistence that AESA go beyond its legal obligations and give them access to the complete scientific reports which detail the reasoning behind the decisions and may show divergent scientific opinions, AESA makes public only the final decisions. It is backed up in this by some of the interviewed scientific experts. They argue that scientific uncertainty should not be communicated to a larger public because Spanish citizens are not prepared to deal with it, as a result of a general educational deficit in science: "People want to be told if it is black or white, they do not want to hear about probabilities" (research interview with a scientist, 24/11/2004).

4.3. Scientific excellence

The interviewed social actors consider that one of the most fundamental changes in the Spanish food safety system is the shift towards preventive study. Before, studies were done only in case of a problem. AESA, in turn, aims at maintaining a programme of scientific analysis of possible hazards or specific aspects of the food system. Other changes judged to be fundamental are the unification of scientific expertise and putting all analysis on a scientific basis.

Among the interviewed social actors, there is no direct criticism of the level of excellence of the Food Agency's Scientific Committee. However, among some of the scientists who do not form part of AESA's Scientific Committee, as well as among other social actors represented in AESA, there is some doubt with respect to the effectiveness of the Scientific Committee and the use of scientific resources. The criticism pertains mainly to the lack of funds (impeding AESA's financing complex risk studies), the Scientific Committee being too generalist, as well as the perceived lack of efforts to include, directly or indirectly, already existing networks of experts in AESA's risk assessments (which may result in lack of specialist knowledge).

4.4. Participation

All the interviewed actors coincide in that the introduction of participation (previously practically non-existent) of a wide range of social actors in the Spanish food safety system has been very positive and represents a "qualitative change" (food industry representative, 5/11/2004).

However, the practical meaning of participation is established through the dynamics of AESA's councils. In the meetings of the Agency's Board and Advisory Council, AESA officials inform the represented social actors of AESA's work, decisions and emerging food safety issues. But so far those actors do not participate in defining, for instance, the agenda of the Agency's short or long-term activities, nor take part in actual decision making. To the contrary, the representatives of the consumer organizations understand their own role as helping to make the messages more "educational" and comprehensible to the larger public, because they judge the meetings' profile and language "too scientific" (consumer organization representative, 5/11/2004).

Of all the interviewed individuals, the ones most critical with the new system and with the Spanish Food Agency's work are the scientific food safety experts and the public administrators. In turn, the consumer organizations and trade unions are, in general terms, satisfied with the new system. Surprisingly, their overall satisfaction also extends to the current meaning of participation. The Agency's perceived openness to dialogue and proactive communication is considered a fundamental and very positive change (even more so given that citizen or actor participation in public administrations in Spain is not common, as argued before).

This may explain the represented organizations' satisfaction, given that this is the first time in Spain that those organizations are being invited to participate in the food safety system: "From not having anything to having something, the growth factor is infinite" (consumer organization representative, 2/11/2004). Another important point is that for the first time these organizations feel they are being adequately informed by a public administration. In fact, both consumer organization and industry give much importance to being well informed through their participation in AESA's committees.

Only in a few cases have the represented actors formulated petitions to the Agency (which, according to them, so far has been receptive to their suggestions). One exemplary (however exceptional) case of this situation is a study done by one of the consumer organizations about the possible health risks of a food preservative, with the aim of prompting AESA to open its own inquiry. In fact, it is the interviewed AESA officials themselves who recognizes the role of the consumer organizations as watchdogs (a role which some of the consumer organizations represented in the AESA do not explicitly recognize as their own).

4.5. Public trust

Public trust in the food safety system remains relatively low in Spain (Muñoz, Plaza, Ponce, Santos, & Todt, 2005), as in other parts of the EU (Henson, 2001), despite the absence of serious food crises in the last few years. The redesign of the European and Spanish food safety systems so far does not seem to have influenced public perception. About 75% of Spaniards do not know of the existence of the Spanish and European food safety agencies (operational since 2001 and 2002, respectively). All of the interviewed actors concur in that the Spanish public's lack of information about the Agency could turn into a problem, especially in case of a food crisis.

The Agency's strategy to gain public trust is based, on the one hand, on preventive study, with the aim of detecting and eliminating any risks before they turn into a serious problem. AESA hopes that, as more and more people become aware of the Spanish food agency and its work, it will turn into a point of reference for the general public. On the other hand, as already mentioned, the strategy is based on harmonizing the messages: "If all of us [the different social actors involved] have a common position... with respect to a specific topic,..., it becomes unlikely that the citizens will not trust [in the food safety system]" (AESA representative, 20/9/2004). The role of the Spanish consumer organizations in establishing public trust is unclear. They have few members and only a limited representativeness (as they themselves acknowledge). In addition, the different organizations have not been able to agree on common positions with respect to food safety issues. And they recognize not to know if the new food safety system will be able to gain the trust of the Spanish citizens.

5. Food safety governance and trust building

As the preceding analysis demonstrates, the Spanish food governance system shows several ambivalences. Even more, so far it is unclear if it will be able to fulfill the general objectives defined by the European food law (and assumed by the Spanish regulation), like transparency, independence or trust building.

On the one hand, a profound change in food safety regulation can be observed. For the first time in Spain, a regulatory system with comprehensive participation of all affected parties is in place, by mandate of EU legislation. In fact, given the virtual absence of participatory decision making in Spain, it is unlikely that Spanish national initiatives in this sense would have been developed in the near future. The assessment offered by the different social actors is positive. They consider the new system a qualitative change over the previous one, especially because of the participation of actors who were completely excluded before, the openness of the Spanish Food Agency to collaboration and suggestions, as well as the information flow from the Agency to the actors. Most of the interviewed actors are satisfied with the system, especially the consumer organizations. Such satisfaction is not common in Spain. In fact, this case contrasts with widespread reticence across Spanish civil society with respect to participatory decision making, for fear of being "manipulated" by the public administration (Todt, 1999).

On the other hand, it is not clear if the Food Safety Agency will correspond to all of its stated objectives, at least in the view of some of the social actors. The level of independence of the Agency is established more through regulatory practice than legislative mandate. In fact, only a crisis situation would show the real significance of the Agency's independence from the government. The consumer organizations express doubts about the Agency's policy of transparency because of the restricted access to its scientific reports (even though AESA is not obliged to make public this information). The Food Agency informs the represented social actors about its work but does not proactively offer participation in decision making (on the other hand, none of the represented actors has specifically asked for it yet). Several actors consider that a lack of resources may question the Agency's scientific excellence, and perceive difficulties in integrating the entire Spanish scientific community. And, so far, the new system has proven unable to raise the level of public trust in the food system. AESA does little to "reach out to society" in order to build trust. Rather, it aims at creating trust among

citizens by unifying the messages transmitted to the public by all the different actors.

In fact, there is some doubt among the interviewees as to the capacity of the new system to gain public trust. On the one hand, the move towards preventive scientific analysis and putting all decisions on a scientific basis, is a step towards trust building, given the comparatively high level of public trust in Spain in science-based decision making (as opposed to administrative decision making which is distrusted, as the already cited perception studies show). It may also facilitate rapid, science-based answers in case of a crisis (as long as the perceived lack of funds and exclusiveness of the system does not affect scientific excellence). This would minimize one of the reasons for which the previous system lost public trust, namely denying real food safety problems even without having analysed them in detail.

But there are other aspects of the system that may hinder trust building. The disagreement between consumer organizations and the Spanish Food Safety Agency with respect to making public the risk assessments echoes a long-standing history of complaints by civil society over the generalized lack of transparency in Spanish regulatory systems (López Cerezo & González, 1997). This conflict will show if the food governance system will be able to satisfy civil society because the question of scientific expertise and transparency in scientific information was at the heart of earlier conflicts over the management of food safety, as in the case of BSE.

In fact, the refusal of AESA management to give the consumer organizations full access to the scientific reports (including possible uncertainty statements and diverging scientific opinions) may jeopardize the Agency's trustbuilding effort among consumer organizations and the public. AESA's objective of harmonizing public messages may facilitate unified press statements and less controversial media uptake. But in order to increase public trust in its decisions, the Agency itself must be considered trustworthy by the consumers. Various authors (see, for instance: Slovic, 1997; Wynne, 1992) argue that public trust in a specific actor's decisions and messages depends to a large degree on the general trust the citizens place in that particular social actor. However, the proposed mechanism of harmonizing messages may raise questions among some social actors, which could counter such efforts of gaining trust.

The self-image of the consumer organizations, which the research interviews bring to light, shows that they themselves have an ambiguous perception of their own role in the process. Before the new food law was enacted, the consumer organizations did not demand nor expect to participate in food safety decision making. Most of them do not appear to be prepared for formulating specific policy demands in representation of the consumers nor for collaborating in the control of the food system (a role which even the AESA expects of them). They seem even less prepared to control AESA's work itself, as long as they define their role mainly in terms of educating the public.

Even more, the consumer organizations are content with having been invited at all into the process and with being informed about the Agency's operation. But they are not defending any specific positions or initiatives. This is also shown by the fact that their sole criticism so far centers on the lack of full access to information.

However, there are indications that many consumer organizations may be out of step with Spanish consumers. Recent studies (Luján & Todt, in press; Muñoz et al., 2004) show that the majority of consumers in Spain have adopted a self-image of "reflexively modern" consumers (in the sense of Beck, see above): they are conscious of their role in the food market and willing to exert influence through their purchasing decisions, demand full information (like food labels) in order to be able to take informed decisions and distrust official regulatory bodies. This data shows that the consumer organizations, despite being trusted more than the regulators or industry, tend not to represent the current majority values or demands of Spanish consumers. This raises doubts as to the consumer organizations' ability to adequately represent consumers' preoccupations (and being accepted by them as their legitimate representatives in the food regulation system).

6. Conclusions: trust building and social learning

One of the key characteristics of food governance in Spain is that it is being introduced not so much as an answer to social change, like in many other industrialized countries. Rather, *governance is being introduced by EU legislatory requirements*, in a context of little explicit local demand for public participation (and even reticence among civil society).

EU food governance was designed under a series of presuppositions. The most important among them was the presence of an organized, prepared and strong civil society, with consumer organizations able to articulate specific demands and representing "the consumers" at large, as well as acting as watchdogs. One of the system's main objectives, rebuilding public trust, is based on the idea that involving representative consumer organizations in a satisfactory way in regulatory decision making would foster trust among consumers (who across the EU consistently show much higher levels of trust in civil society than in governments, regulatory bodies or industry: EC, 2001b, 2003, 2005b).

But in Spain this fundamental presupposition of EU food governance does not hold. There does not exist a strong consumer movement with clearly defined policy demands and, as already argued, it is unclear up to which point the Spanish consumer organizations are representative of the consumers at large. Their role in AESA's committees, as well as their professed self-image, indicate that they are not necessarily prepared for the functions the European food law expects of them.

The EU food law makes (implicit) assumptions about other actors, too. It expects the regulators to integrate the building of consumer confidence into their mission. But, again, it is unclear if – despite the radical regulatory overhaul – the changes are more superficial (albeit important) adaptations in procedure, including better information flow and direct contact with civil society, rather than transformations in substance. The research interviews show that the regulatory change did not affect the underlying values of many scientific experts or food safety executives (Todt, 2004).

In fact, the AESA executives' ideas about increasing consumer confidence by harmonizing the messages to the public raises questions about their being prepared to deal with the complexities of public trust (even more so as the data presented here suggests that if the consumer organizations acceded to assuming those "unified messages" as their own, they themselves might risk losing public trust: Todt, 2003). And the regulators' views about managing uncertainty reveal that their ideas regarding public perception can be characterized by the "deficit model" (Irwin, 1995). But it was precisely the public's perception of lack of transparency and of not taking sufficiently into account civil society's questions on scientific uncertainty that lead to loss of consumer confidence in the first place.

Industry cooperation is vital for the food safety system's operation. In fact, the new regulatory setup assigns to industry the role of carrying out the actual safety controls and places much emphasis on direct cooperation between industry, regulators and other social actors. The idea of auto-control on the part of industry throughout the chain of food production and distribution is new to the Spanish food system. Previous safety systems were based almost exclusively on government inspections of industry operations. Now, industry participates in the Food Agency's decision making, alongside the other actors already mentioned. This, of course, implies increased communication. This kind of direct interchange, especially between industry and civil society, was almost completely absent in Spain before AESA's creation, and is reflected by the predominant perception of industry representatives about the lack of importance of civil society in managing food crises (Muñoz et al., 2004).

All this raises questions regarding the effectiveness of the EU food safety framework in Spain, while pointing to the *need of adapting regulatory governance to specific local situations.* In the current Spanish context, which differs from the EU legislation's assumptions, *governance (and trust building) may not function as envisaged*, because many of the social actors do not necessarily assume the roles the European food governance system implicitly assigns to them.

While in most industrialized countries, regulatory governance can be interpreted as the *result* of a process of social learning, *in Spain, it is precisely the induction of governance through EU legislation which may start social learning.* In other words, in an environment characterised by the lack of social actors' experience in interacting among each other, social learning could be the *outcome* of the dynamics concomitant of governance. Even more so since it obliges actors to communicate directly who previously did not exchange views. Hence, the actors may gradually assume the functions the European law envisages, as they start interacting.

From the 1970s, regulation of technology and its environmental effects began to increase in the industrialized countries, following a surge of conflicts related to those issues. Policy makers undertook to manage social conflict mostly through regulatory science, but - particularly in Europe - failed to maintain public trust (especially after industrial accidents, like Three Mile Island and Chernobyl, or conflicts like the ones related to genetically modified food). As a result, in recent years European regulators set out to better integrate the consequences of the already referred-to social transformations, as well as citizens' changing values and demands, into the regulatory process. EU policy (EC, 2001a) now tries to accommodate longstanding civil society demands for better access to information and increased participation in policy decisions, with the aim of improving social acceptance of new technologies and their regulation.

In this sense, the introduction of regulatory governance in the food safety system can be seen not only as a reaction to crisis and loss of public trust but also as a process of *mutual social learning*. Policy-making is starting to take full account of the transformation in social structure (obviously to specific ends, like restoring consumers' trust in the European food system, as explicitly stated in the EU food law). But, in turn, regulators are now *asking for* citizen and civil society participation, pushing them to assume those new responsibilities in practice, with all the concomitant consequences.

As Draper and Green (2002) observe, food governance implies new rights and obligations for *all* the concerned actors. The citizens are now obliged to form an opinion and defend it in participatory councils. As the Spanish case shows, this also applies to civil society. Actors – be they from public administrations or civil society – may not necessarily be prepared for this. However, giving previously unrepresented actors access to regulatory decision making (even though in a rather passive role) may create incentives for them to organise and adapt in order to gain representativeness.

Consumer organizations have already started to demand from the regulators more information on scientific uncertainty. They also may ask for more active participation in decision making in the future. The citizens themselves, as the data suggests, may oblige the consumer organizations to assume a more proactive and demanding stance. For the regulators and scientific experts, on the other hand, the opening-up of decision making creates opportunities to question their views with respect to the role of civil society or scientific uncertainty. The Spanish Food Safety Agency, for instance, in response to rising actor demands, may be forced to make public data beyond its legal obligations and openly manage consumers' questions about the limits of scientific analysis.

In fact, it is unlikely that without fully transposing into regulatory practice the objectives of independence, transparency, excellence and participation there will be any possibility of regaining the consumers' lost confidence.

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