Reflexive governance, incorporating ethics and changing understandings of food chain performance

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Abstract

This paper argues that ethics is a key driver of change in food chain performance. Critically, multiple stakeholder perspectives need to be understood as being legitimate when developing shared norms of what is understood by food supply chain (FSC) performance. To develop this perspective, the paper examines the discourses surrounding the performance of FSCs in 12 different national contexts. It develops a multi-criteria performance matrix (MCPM) composed of 24 attributes that reflect national FSC sustainability discourses. Specifically, it considers the potential role of reflexive governance in encouraging change to the frames by which actors and institutions judge the performance of FSCs. In assessing the links between ethics and reflexive governance, two types of ethical attribute are identified: 'commonly identified' attributes, which signify ethical dilemmas routinely discussed yet open to debate and subject to refinement and change; and 'procedural' attributes, which describe actions that encourage actors in the FSC to organise and structure themselves so as to more explicitly embody ethical considerations in their activities. The MCPM can be understood as a form of sustainability appraisal, but also as a cognitive tool with which to instigate further deliberation and action, helping to better manage transitions to sustainability within FSCs.

Keywords: Reflexive governance; ethics; performance; food supply chains; attributes.

Introduction

Food supply chains (FSCs) over recent years have been epitomised by a range of concerns, such as food and nutrition security, contested energy supplies, the distribution of value within chains, social inequality and a growing awareness of the threats posed by climate change to continued food production. Taken together, these factors and others are described by Hinrichs (2014, p. 144) as being "a confluence of intensifying circumstances" that necessitate an urgent re-examination of what we understand by 'performance' within the context of FSCs. There is widespread recognition that ‘business as usual’ where the neoliberal market logic dominates is no longer an option, necessitating the development of new norms, frames and practices (Food Ethics Council 2013).

In this respect, the neoclassical notion of the 'market' as an abstracted economic entity involving 'homo economicus' is increasingly questioned, and there is extensive realisation that all market relations are inevitably and inextricably embedded in both social and cultural relations (e.g. Hinrichs 2000; Knox-Hayes 2015; Sayer 2015). Concomitantly, as all economic relations are embedded in the social, they must inevitably have ethical implications (Sayer 2004). Recognising embedded relations as central to a new market logic implies looking at ethics as a key driver of these systems. Such systems have the potential to function effectively for the ‘common good’ (in this case in relation to the sustainability of FSCs), when individuals' and organisations' behaviour is aligned with regulations. Change then becomes possible, and is more likely to be durable, when modifications to regulations are followed (or indeed preceded) by modifications to frames[i], norms and individual practices. This suggests that economic actors' free choice may produce more or less desirable outcomes with respect to notions of the 'common good' and perceptions of the performance and, subsequently, the sustainability of FSCs.

Considering ethics as a driver of change gives rise to a number of complications. In practice, judgement of performance tends to be based on perceptions and interests, whereby people, and indeed institutions, draw on their own frames of reference when assessing a particular food or food chain. Perspectives on ‘good’ or ‘bad’, ‘better’ or ‘worse’ may be deeply engrained in either individuals or institutions, preventing them from considering alternative assessments of performance. This is manifest in the tendency to delineate between global (bad) and local (good), fast (bad) and slow (good), and so on (Lakoff 2010). There are growing calls to break down these simplistic dichotomies and to acknowledge that the discourses, knowledges, representations and norms of food chain performance (especially in relation to their ethical dimension) are highly geographically, culturally and habitually contingent (Goodman et al. 2010; Guthman 2003; Kirwan et al. under review).

As part of this process, multiple stakeholder perspectives need to be understood as being legitimate (Funtowicz and Ravetz 1993) and to contribute to a shared meaning of the 'common good', or a shared norm of what is understood by performance in relation to FSCs. The broader the area of agreement about notions of FSC performance, the greater is the potential to consider alternatives and to make changes, in that a common perception is a necessary condition for shared norms. However, if shared norms are to be achieved through more democratic processes, it is necessary to promote governance patterns that give visibility and voice to multiple discourses, knowledges and representations of FSC performance.

The aim of this paper is to provide a link between discourse, ethics and governance, and to explore how ethics might be a driver of change in the way performance is assessed within FSCs, subsequently leading to improvements in their sustainability. It does this through proposing a multi-criteria matrix of FSC performance attributes as an heuristic tool, drawing on the findings of an EC-funded project, GLAMUR – *Global and local food chain assessment: a multidimensional performance based approach* – where

the perceptions of actors across four different spheres of debate and communication (public, market, scientific and policy), as well as across five dimensions (economic, social, environmental, health and ethical) are analysed in 12 different countries. In examining this wide range of discourses, focusing in particular on their ethical component (whether implicitly or explicitly articulated), this paper considers the potential role of reflexive governance[ii] in encouraging change to the frames by which actors and institutions judge the performance of food chains. In so doing, the paper makes a methodological contribution to the appraisal of the performance of FSC through highlighting the diversity of views and perceptions held by actors in relation to FSC performance, as well as how different views of performance might be mapped and clustered.

The rest of the paper is structured as follows. Section 2 examines how reflexive governance might encourage deliberation between multiple stakeholders and enable a transition to more ethically-informed understandings of performance. Section 3 then outlines the methodological approach taken in this research, before section 4 presents a comparative analysis across 12 countries to demonstrate how the methodology can be applied to assess the extent to which FSC discourses engage with ethical issues and how understandings of FSC performance might be reimagined. The discussion section then reflects upon the way in which analysis of attributes of FSC performance within a Multi-Criteria Performance Matrix (MCPM) can help understand how reflexive governance has the potential to both accommodate and develop ethical consumers, firms and public institutions/actors.

Reflexive governance and food chain performance

Barnett et al. (2004, p. 6) argue that “everyday consumption practices are always already shaped by and help shape certain sorts of ethical dispositions" (see also Goodman and DuPuis 2002). Specifically in relation to food, Goodman *et al.* (2010, p. 1782) introduce the term 'ethical foodscape', arguing that "food is entangled in

discourses and practices which necessarily have and indeed always will have ethical implications for the humans and nonhumans, societies and environments, involved in its production-consumption relations". But how should an ethical disposition be encouraged in practice, and what is the relationship between individual ethical decisions and a broader societal transition towards a wider engagement with ethics and concern for ‘others’? In a recent article, Hinrichs (2014) argues that people’s everyday social practices develop according to a shared discourse, but that crucially the distribution of power, politics and governance affect the prevailing discourse and help define what are considered as legitimate truth claims. In other words, who is it that defines what is 'good' or 'bad' performance and what are the political processes involved?

Crucial to ensuring change is the need to encourage both individual actors and institutions to submit their respective frames of reference to public scrutiny through deliberation, and subsequently to consider transforming their existing frames of reference when assessing performance. Key to this is the notion of reflexivity, which is variously defined but can be thought of as a “critical reflection on prevailing social arrangements, norms and expectations" (Adkins 2003, p. 22). This requires that, either through a process of self-reflection or policy support, actors (including scientists, policy-makers, institutions, producers and consumers) develop an ethical awareness and hence sense of responsibility for their actions through reflexively critiquing their mode of action and developing new frames of reference in relation both to their practices and to the performance of FSCs. In other words, contrary to the ethics of ‘homo economicus’, for whom everything that is legal is also ethical, the first ethical commitment of citizens is to actively search and ask for information, while the duty of producers is to provide as much information as they can and to 'open up' assessment of their performance to stakeholders.

Frames develop through communication practices within different spheres; specific discourses are generated between different actors and groups, and discursive coalitions unfold. Spheres may differ in their degree of structure, their inclusivity and the objectives around which communication is developed but, following Habermas (1989), what they have in common is to provide an arena for public discourse or interaction on issues of public concern. In relation to discussions around ethical consumption, for example, consumer engagement with ethical obligations is not so much to do with any kind of rational calculation, but rather concerns the "ways in which everyday practical moral dispositions are re-articulated by the policies, campaigns and practices that enlist ordinary people into broader projects of social change" (Barnett et al. 2005, p. 2). As such, ethical consumption can be thought of as a critical component of political action within FSCs. In addition, the individual responsibility of consumers can, in turn, help transform collective political responsibility that extends to institutions, businesses and policy makers (Barnett et al. 2005; Starr 2009). At the same time, it is important to acknowledge that the distribution of power within FSCs is often very unequal, with some actors (most notably corporate retailers and large-scale processors) having a considerable influence over the behaviour (whether ethical or otherwise) of multiple others within the chain. The key question then becomes, how can a more ethical disposition be mobilised to effect substantive and collective change in the way in which performance is judged by individuals, businesses and institutions, and thereby what is understood as being a sustainable FSC?

In examining transitions to sustainability in the Netherlands, Hendriks and Grin (2007, p. 345) suggest that "steering for sustainability can be understood as reflexive governance - a process of fundamentally reconsidering the way our socio-technical systems are structured, practised and most significantly governed". In this respect that it is a "mode of steering that encourages actors to scrutinise and reconsider their underlying assumptions, institutional arrangements and practices" (Hendriks and Grin 2007, p. 333). They distinguish between first- and second-order reflexivity. First-order

reflexivity is described as being largely an unconscious process that does not necessarily result in substantive change to the existing order of things; rather, it entails adapting to external pressures that may have been created by the unintended consequences of the actions of a particular system (Sonnino et al. 2014) (e.g. continuing to use fossil-fuel energy, but making it more efficient, instead of developing systems that reduce energy demand). Second-order reflexivity, by contrast, "evokes a sense of agency, intention and change" that confronts "the approaches, structures and systems" (Hendriks and Grin 2007, p. 335) that have resulted in the problems associated with, in this case, FSCs. Moving from first order to second-order reflexivity requires that "cognitive frames (facts) [are extended] to evaluative frames", thereby encompassing a wider range of complex social, cultural and political norms that can facilitate a reframing of the issues (Marsden 2013, p. 131). Critical to this process is the role of dialogue and the development of collective action and understanding through inclusivity in that dialogue (Sonnino et al. 2014).

At present, reflexivity within FSC governance is usually of the ‘first order’. In this respect, where sustainability strategies are in place, attributes for assessment tend to be chosen by firms autonomously, top-down, and metrics to assess attributes are based on science-based approaches that are inclined to simplify the complexity of the processes involved and measure only part of their effects (Voss and Kemp 2006). Consumer motivations are investigated through marketing research, which tends to lead to an instrumental approach to appraisal. As a consequence, firms carry out 'choice editing' (Dixon and Banwell 2012) having set their own ethical frames of reference. Given the monopoly of knowledge they often enjoy, firms can steer the system - including the choice environment - in directions that may exclude or overlook important dimensions of sustainability (Voss et al. 2006). There is a need for governance mechanisms that encompass a wider range of perspectives that include state, private and civil sectors (which may be operating at different scales), each of which is recognised as having a valid perspective (Pereira and Ruysenaar 2012).

Any process of reflexive governance will not happen in isolation; it must inevitably be embedded within wider socio-political contexts that will significantly affect the outcomes of the debates and deliberations that arise as a result of the reflexivity undertaken. Such spaces of reflexivity can be conceptualised in terms of being "one discursive sphere surrounded by a series of overlapping arenas of public discourse" (Hendriks and Grin 2007, p. 338). Moreover, to be effective they will operate at both a range of scales and encourage interaction between scales (Sonnino et al. 2014). Deliberation has the potential to change the participants' frames (Dryzek 2000), as an effect of exposure to others' frames. A reflexive governance framework needs to be flexible and dynamic, as well as providing adequate spaces for deliberation, 'fora' where consumers, citizens and businesses are encouraged to collaborate and deliberate about food ethics (Pereira and Ruysenaar 2012). These fora are articulations of the public sphere that give voice to a variety of discourses and interests. Examples of such deliberative spaces range from the variety of commodity fora that multinationals have activated in reaction to protest against the unsustainability of certain commodities (such as soybean and palm oil - see Fransen et al. 2016), to local level forums such as School Canteen Commissions (Galli et al. 2014), Solidarity Purchasing Groups, Community Supported Agriculture (Renting et al. 2012) and food councils (Pothukuchi and Kaufman 1999). In turn, these fora provide communication channels from the public sphere to both the scientific and policy spheres, as the deliberative processes undertaken raise issues that need to be investigated further, as well as issues that need to be regulated. They also feed into debates within the market sphere, in terms of product pricing, assessments of quality and communication processes.

In this way, reflexive governance, by creating "more inclusive discursive arenas" (Sonnino et al. 2014, p. 3), can both acknowledge and respect a wide range of perspectives and framings of the problem or issue under discussion. In so doing, it has the potential to open up debates which might previously have been dominated by

powerful actors whose interests are best served by ensuring the continuance of the dominant paradigm; in this case, involving global FSCs based on a neo-liberal economic model. The extent to which reflexive governance can challenge and transform the perspective of the dominant food paradigm will vary, dependent on the scale involved, the context, and the changes demanded of the normative framings of what is considered to be acceptable practice (Marsden 2013).

Smith and Stirling (2007, p. 352) identify two 'ideal-types' of governance: firstly, 'governance on the outside', which involves aggregating the perspectives of the dominant actors within any given context; secondly, 'governance on the inside', which involves acknowledging multiple perspectives and developing integrative framings that can result in the prospective of profound change to the *status quo*. The actual enactment of reflexive governance within FSCs is likely to be contested and highly political, not least because of the often complex and multifaceted nature of the supply chains involved. Discourses and decisions take place in a multitude of different arenas, involving a wide range of actors and political institutions. There is also an inevitable tension between those whose interests are perceived as being best served by retaining the current state of things (because they are materially or discursively committed to it in some way and therefore likely to be resistant to change), and those intent on responding to the insights gained from being more reflexive (which is associated with being self-critical, open to change and creative). Similarly, the existing cultures, approaches, investments and configurations of institutions are likely to impact upon their flexibility and ability to change, resulting in the possibility of institutional inertia. In addition, as mentioned above, power is not evenly distributed throughout the system, meaning that some voices are likely to be heard above others and to exert a disproportionate influence on the discourse (Smith and Stirling 2007).

Analysing the discourse around sustainability performance

In examining how ethics can be a driver of change in the way performance is assessed in FSCs, this paper is intent on making a methodological contribution to how 'governance on the inside' and second-order reflexivity might be encouraged. In this regard, it assesses the extent to which FSC discourses are engaging with ethical issues (whether explicitly or implicitly), and aims at making sense of the diversity of values and interests behind the variety of discourses encountered[iii]. Taking this approach enables recognition that the performance of FSCs is not independent of those involved; rather, it depends on the values and interests of those who have a stake in them. The only way to obtain a shared view - which is necessary in order to build ethical values - is to detect and give visibility and voice to different views, and to develop mechanisms for deliberation. Indeed, Pereira and Ruysenaar (2012, p. 51) argue that "any 'ethical' systemic intervention… need[s] to involve as many perspectives as possible in order to be legitimate". In this respect, the paper analyses how the performance of FSCs is discussed, not only in different countries but also across four spheres of debate (public, market, scientific and policy). The purpose of analysing discourse in different spheres is to facilitate understanding of the dynamics of discourse formation. This is important when trying to establish how 'ethics' can be incorporated into understandings of sustainability, in that discourses have the potential to "set the targets for policy intervention" (Sonnino et al. 2016, p. 477).

The data presented in this paper are based on a cross-country analysis of FSC discourses in 12 countries: The Netherlands, Italy, France, Belgium, Switzerland, Spain, the UK, Latvia, Denmark, Serbia, Senegal and Peru. The 10 European countries were selected to reflect a variety of socio-economic contexts with the potential for difference in terms of shared norms about what constitutes sustainable FSC performance (e.g. Latvia as a post USSR country; Serbia as an aspiring EU member; Switzerland as a non-EU member; and varying degrees of globalisation amongst the other countries in relation to their FSCs); while the addition of Senegal and Peru

provided an important developing world perspective. In each country, a systematic analysis of how the performance of FSCs is perceived, defined and communicated was undertaken. The aim was to identify attributes of FSC performance that were common across discourses in each of the countries, even though they may be framed in different ways by different social actors. In each country, analysis started with a desk-based examination of how FSC performance is assessed and perceived, with particular reference to global and local FSCs. To ensure consistency across the country studies the same broad categories of data sources were consulted in each case, including: scientific/academic sources; policy documents, NGO reports and other policy sources; market reports and food industry sources; newspaper articles and magazines; blogs/Facebook/Twitter; and TV programmes.

The sources were examined to identify a list of attributes related to FSC performance in each of the countries involved, wherein each attribute characterised an important feature of FSC performance, as perceived and represented in that country. The initial list of attributes was further debated in a series of 10-15 interviews with stakeholders across the FSC (including policymakers, consumer organisations and NGOs) in each of the 12 countries, thereby refining the list of attributes chosen. A national-level report was prepared for each of the countries studied, which included a *multi-criteria performance matrix* (MCPM) composed of 20-30 attributes. Each attribute was accompanied by a 'thick description' that both justified and explained its inclusion as part of the discourse analysis of FSC performance, as well as its positioning within a particular cell (or cells) of the MCPM.

The 12 country studies provided a context-specific analysis of FSC performance. A comparative analysis of the performance of FSCs across the 12 countries was then undertaken. This comparative analysis forms the focus of this paper and involved the development of a composite MCPM (see Figure 1 below) that was derived from a list of 207 attributes identified within the 12 country studies. The final 24 attributes included in

this composite MCPM were identified through an intensive coding process that involved face-to-face meetings spread over two days, with the researchers discussing emerging issues/codes/key attributes across the reports. Each of the 207 attributes identified within the 12 individual country reports (and associated national-level MCPM) was assessed against the final list of 24 attributes. The 24 attributes are meta-level codes, each capturing a debate and set of attributes about an aspect of FSC performance. Justification for both the choice and positioning of attributes within the composite matrix was done by noting the number of times the attribute was recorded within each of the spheres and dimensions in the 12 national-level reports. This numerical indication of where the comparative attribute should be placed within the MCPM was also supported by examining the wider descriptions of the national-level attributes given within the individual reports. An example of this coding process is given in Table 1. In this case, the comparative attribute is ‘nutrition’, which encompasses a range of other attributes identified within the 12 national-level reports. The paper turns now to examine how the assessment of FSC performance is influenced by ethical considerations, drawing on the composite MCPM.

Table 1: Coding spreadsheet for the attribute 'nutrition'

Attribute	Country	Dimension/sphere
Obesity	Italy	Economic/Policy; Social/Public; Health/Public
Obesity	UK	Health/Policy
Healthy diet	Italy	Social/Public; Health/Public; Health/Science; Health/Market
Healthy food	Italy	Health/Public; Health/Market; Health/Policy; Economic/Public
Organic	Italy	Health/Public
Freshness /seasonality	Denmark	Environmental/Market; Health/Market
Healthy diets	Belgium	Health/Public; Health/Scientific; Health/Policy
Nutritional quality	UK	Health/Public
Sustainable diet	UK	Health/Scientific
Freshness	NL	Health/Public
Health risk manageability	NL	Health/Policy (partly nutrition, partly food safety)
Food quality	Switzerland	Health/Public; Health/Science; Health/Policy
Food quality	Denmark	Social/Market; Economic/Market
Food quality	France	Social/Public; Health/Public; Health/Science; Health/Market; Health/Policy
Diet	Latvia	Health/Policy
Organic food	Denmark	Health/Scientific
Health	Peru	Health/Public; Health/Science; Health/Policy
High value added food	Serbia	Ethical/market
Nutrition Value of diet	Spain	Health/Public
Nutritional diet	Spain	Health/Science
Public Health	Serbia	Health/Public

Sphere/dimension count

	Economic	Social	Environmental	Health	Ethical
Public	1	2		11	
Scientific				6	
Market	1	1	1	4	1
Policy	1	1		6	

Resultant matrix position: Health/Public, Health/Policy and Health/Scientific

Understandings of food chain performance

The composite MCPM, composed of 24 attributes and identified from the cross-national analysis of FSC performance discourses, is presented in Figure 1. This form of 'epistemic appraisal' (Smith and Stirling 2007) is designed to reflect the multidimensionality of FSC performance (economic, social, environmental, health and ethical) and to capture the multiple perspectives presented through four spheres of debate (social, policy, market and scientific). The attributes are not intended as a complete or comprehensive statement of FSC sustainability, but instead as an illustration of what MCPM-type analyses can reveal. In this respect, the MCPM is

designed as a tool for deliberation and a point of departure. The 24 attributes contained in the MCPM signify characteristics associated with FSC performance in the 12 countries studied. This section of the paper demonstrates how the methodology developed can be applied to examine discourses in different contexts. More specifically, we assess the extent to which FSC discourses engage with ethical issues and how links can be made to the importance of reflexive governance.

Assessing the links between ethics and reflexive governance requires two levels of analysis and reveals two types of ethical attribute. The analysis starts by looking first at how researchers in the 12 national teams classified themes within the debates they analysed in terms of the ethical dimension. This first level of clustering identifies '*commonly identified*' ethical attributes, which are the ethical issues researchers noted as themes that raise ethical dilemmas (e.g. animal welfare and bioethics); furthermore, they typically, although not always, take place in the public sphere, are open to debate, contested and subject to refinement and change. The purpose then is to identify ethical debates that are 'open' and have the greatest capacity to encourage reflection amongst food chain actors and civil society. The way the attributes are clustered in the MCPM (Figure 1) indicates a strong orientation towards the economic dimension and to some extent the social and environmental dimensions; correspondingly, the health and ethics dimensions are less well populated. However, analysis of the MCPM and attribute data shows that ethics were evident in many debates beyond those pertaining simply to the ethical dimension. The 'creation and distribution of added value' attribute, for example, is ostensibly economic and looks at how value is created and how it is distributed within the food chain. The underlying discourse is economic in nature, but there are links with the notion of fairness and equity, as well as with debates about governance, responsibility, labour relations and fair trade.

Ethics, in other words, are inherent in all FSC performance debates to some degree and relevant to all performance dimensions and attributes to a greater or lesser extent.

Analysis of the ethical dimension alone is therefore not sufficient: the challenge is how to encourage reflexive governance mechanisms to more actively incorporate ethics across all dimensions. The second level of analysis thus identifies '*procedural'* ethical attributes. Where *commonly identified* ethical attributes identify areas of ethical dilemma/debate, *procedural* ethical attributes describe actions that encourage actors in the FSC to organise themselves and to be structured in such a way as to explicitly embody ethical considerations/concerns into their activities (thereby demonstrating second-order reflexivity). This second level of clustering therefore identities actions that promote ethical awareness and reflection. Attributes that consolidate ethical awareness and values to some extent do this. The 'polluter pays' principle, for example, helps regulate and encourage responsible environmental actions when producing food and is now enshrined in environmental law. Likewise, fair trade and territorial marketing are patterns of private food governance that signify market expressions of ethical considerations. Nevertheless, for ethics to have real impact and to open up food chain sustainability and performance assessments more broadly, the challenge is to move beyond simply the identification and amplification of ethical attributes towards the active and more widespread integration of ethics into food chain governance. Using the MCPM data, we argue that the focus should be on the means by which to change intentions/perceptions (i.e. procedural ethics), whereby ethics is more likely to be explicitly considered in relation to the performance of FSCs.

Figure 1: Composite multi-criteria performance matrix of 24 attributes

Composite Matrix					
Dimension / Sphere	**Economic**	**Social**	**Environmental**	**Health**	**Ethical**
Public	•Affordability •Creation & distribution of added value •Contribution to economic development	•Information & communication •Food security	•Resource use •Pollution	•Nutrition •Food safety •Traceability	•Animal welfare •Responsibility •Labour relations •Fair trade
Scientific	•Contribution to economic development •Technological innovation •Governance	•Consumer behaviour •Territoriality	•Resource use •Biodiversity •Efficiency •Technological innovation •Food waste	•Nutrition •Food safety	•Fair Trade •Animal welfare
Market	•Efficiency •Profitability / competitiveness •Connection •Technological innovation •Resilience	•Information & communication •Territoriality •Connection	•Efficiency	•Traceability •Food safety	•Fair trade •Territoriality
Policy	•Creation & distribution of added value •Contribution to economic development •Efficiency •Resilience •Food waste	•Consumer behaviour •Labour relations	•Food waste •Pollution	•Traceability •Nutrition •Food safety	•Food security •Governance

Ethical dilemmas in the national discourses

Seven attributes were identified and positioned in the ethical dimension in the cross-national analysis of food chain performance, namely: animal welfare, responsibility, labour relations, fair trade, territoriality, food security and governance. Some are positioned in more than one cell to reflect overlap between spheres, particularly between the public sphere and the market sphere. Three attributes in the ethical dimension – animal welfare, fair trade and labour relations – were common issues in the cross-national analysis, present in the public sphere and debated in terms of ethical values that constitute fairness within FSC. They are illustrative of what we term ‘ethical

dilemmas'. In this respect, a key feature that characterises them is their presence in the public sphere as a common good that is the object of discussion and debate. Each of them is summarised below, including describing the nature of the debate, differences between countries and links to wider discourses/other attributes.

The 'animal welfare' attribute is present in the scientific sphere, but debates are most active in the public sphere. It is a matter of public debate that is well cited in most national studies (e.g. Italy, The Netherlands, Belgium, the UK, Spain, Switzerland), although much less of an issue in Senegal and Peru, where affordability is the over-riding priority. In The Netherlands, for instance, the debate focuses on the ability of food chains to respect animal welfare rights and to integrate animal welfare with other food chain performance outcomes. In Italy, animal welfare debates discuss the physical and psychological conditions of animals involved in food chains, particularly those animals involved in intensive production processes. The ethics underpinning animal welfare reflects concern for animal welfare rights beyond human health concerns. However, there are significant differences evident in the animal welfare discourse linked to: a) animal rights from an ethical dimension; b) competitiveness by proponents of intensive production and thus from an economic perspective; and c) deep ecology activists who argue for organic agriculture and biodiversity preservation. Debates about animal welfare are therefore connected to 'responsibility' from an ethical perspective, 'profitability/competitiveness' and 'technological innovation' from an economic perspective, and 'biodiversity' and 'resource use' from an environmental perspective.

Discourses about 'fair trade' are typically concerned with the trading relations between developed and developing countries, which include the ability of food chains to provide fair prices for primary producers in developing countries, as well as the ability to contribute positively to the food sovereignty of developing countries. This discourse resonates with understandings of fair trade reported in the literature (e.g. Raynolds 2000), but there are wider representations of fairness and equity in the national

discourses studied here. For instance, the term ‘fair trade’ is only used directly by The Netherlands research team, but there is discussion about fair and/or stable producers’ incomes (Italy and the UK), notions of value distribution (Switzerland), the fair distribution of costs and benefits (Belgium) and cost inequality (Spain). Fair trade has been reframed in European national debates beyond the market-based focus on imported produce from developing world countries, to address domestic food chains and fairer returns for producers in those chains. In general, this relates to smaller scale producers/farmers whose position is recognised to have weakened considerably in relation to large-scale retailers, in particular. Debates about fair trade are evident in scientific articles about food chain performance, although the debates are particularly prominent in the public sphere. Key ethical questions thus concern what is fair, especially in terms of cost inequalities. Similar to animal welfare, ‘fair trade’ also links with attributes in the social, economic and ethical dimensions. From an economic perspective, it relates to the ‘creation and distribution of added value’ and ‘profitability/competitiveness’. The social dimension refers to and links with ‘labour relations’ and ‘consumer behaviour’, while the ethical dimension links with ‘responsibility’ and ‘governance’.

In the national discourses, ‘labour relations’ encompasses a range of worker-related issues in the food chain, including: 1) socio-economic welfare and the recognition of workers; 2) health-related labour risks; and 3) the availability of qualified labour to preserve market competitiveness. In Italy, for example, the term ‘labour rights’ is noted in public debate, which concerns the ‘formal and informal rights of workers in relation to their working conditions’ as well as the ‘quality of workers’ life conditions’, implying the ‘degree of control that workers have on the chain and the quality of the human interactions they can establish’. In terms of ethics, the debate thus centres on the social rights and the social conditions of workers and the effectiveness of labour relations. This was reflected in public debate about socio-economic welfare and the recognition of workers (e.g. the rights of workers to a good wage, worker conditions:

noted, for instance, in Latvia, Belgium, Italy, Switzerland, the UK, The Netherlands and Spain), as well as health-related labour risks associated with food chain production. 'Labour relations' is evident too in national policy discourses in terms of the socio-economic welfare of workers.

Two other attributes – 'food security' and 'territoriality' – are not in the ethical/public cell, but are issues that researchers highlighted as values-based, highly contested and clustered in the ethical dimension. Food security is a 'public good' output of food chain performance and a number of national reports noted that food security is now firmly part of the public dialogue about food and society, pushing it beyond policy and scientific analysis. Consequently, it was given high priority by all research teams. It is essentially a social attribute, but it was positioned in the ethical dimension because of the strong moral discourse that is evident in some national reports about 'feeding the world' and enabling better food access for vulnerable groups in developed market economies. Policy, as well as scientific and public discourses, particularly in The Netherlands, the UK and Italy, quoted statistics about the need to 'feed 9 billion by 2050' and the associated pressure to produce enough quantities of food to feed a growing humanity, with reference as well to developing world needs and a moral responsibility or duty to respond to those needs. The other element, perhaps of less relevance here, is the emphasis on national self-sufficiency, a concern which was particularly notable in Senegal and Peru but also in Spain, Serbia, Denmark and the UK. Crucially, food security is associated with significant ideological differences. In The Netherlands, for example, there is a clear ideological clash between a 'bio-economy' and 'eco-economy' response to global food security, with the former associated with sustainable intensification and socio-technical, market-based responses, while the latter is linked to fundamentally different ideas about the role of agriculture in rural development.

‘Territoriality’ encompasses the capability of a supply chain to represent and promote the localness of a product and its link with a specific terroir or place of production. There is a strong link between the production processes involved and a specific place or territory. The ethical dimension is addressed within the market sphere by strategies that link product to place, shorten value chains, etc.; in this respect, the ethical component of the trading relationship is highlighted in order to demonstrate product difference. The economic benefits of communicating the culture and traditions embedded in particular products to final consumers are also important, therefore. It also reflects values and concerns within the public sphere. Notions of heritage and of valued things being passed down through the generations also underpins what territoriality is about. In a number of national studies, the survival of traditions and specific cultures of production are seen as important in themselves, not least because they are connected to the survival of particular rural local communities and ways of living that would otherwise be at risk of disappearing. Debate is centred around two main issues: the protection of cultural identity, traditions, territory and so on for their own sake, and the ability of territorially-linked produce to be able to add value and access markets as a result of increased distinctiveness. The authenticity of the message that is being communicated to consumers about the underlying 'territoriality' of the produce they are buying into is also debated. A number of the reports suggest that global FSC in some cases are engaged in appropriating the underlying values and value added of links to a particular territory or ‘terroir’, without necessarily adhering to the ethos involved including ensuring that the producers are treated fairly in terms of the distribution of added value (echoing earlier observations by Goodman et al. 1987). Several attributes are related to the ‘territoriality’ attribute. For example, when viewed from an economic perspective, it relates to ‘creation and distribution of added value’, ‘contribution to economic development’ and ‘profitability/competitiveness’ in the sense that the authenticity and origin of commodities is significant when competing at the global level. Territoriality also promotes a socio-economic and ethical argument. This

ties the territoriality attribute with ‘information and communication’ and ‘traceability’ in terms of transparency.

The potential of ethics to be more pervasive in food chain governance

The five attributes discussed so far, that are placed in the ethical dimension, evidence the presence of ethical debates and questions in national discourses, especially in the public sphere (about fairer prices, animal welfare rights, labour relations, global food security, protecting local heritage and traditions, etc.). Adding an ethical dimension to sustainability assessments is beneficial in that it can help broaden perceptions (and thereby inform decisions) about what is of value when assessing the performance of food chains. Analysis of the five ethical attributes also shows the way that they connect with other attributes that make up the national FSC sustainability discourses studied. There is not space here to examine each individual attribute in detail, but what the analysis presented begins to show is the cross-cutting nature and potential of ethics to be more pervasive in food chain sustainability assessments. In this respect, all 24 attributes have, to a greater or lesser extent, an ethical component. For example, in the national studies costs and benefits are recognised as being created at all stages of the food chain, but that they are not necessarily fairly distributed amongst those involved, with the dominant position of retailers in the governance of food chains being a key factor in determining the distribution of added value.

The ethical debate in this instance is about ensuring that the costs and benefits of a food chain are fairly distributed. Different values and understandings of food chain performance also emerge in the market sphere, with debates about efficiency and technological innovation being good examples of this. Take the efficiency attribute, for instance, where there is a strong market-based view of productivity in the national discourses. This is linked to the global food security ethic and argues for the need to develop highly productive agricultural systems and food chains to feed the growing world population. This is contrasted with an alternative efficiency framing that values

the carrying capacity of a particular territory, with productivity being important, but not as important as socio-ecological issues such as fairness and sustainability. Similar differences emerge regarding ecological efficiency, which contrasts market proponents who have a strong belief in technological progress with those who promote it in terms of an ecosystem's carrying capacity. Under the 'technological innovation' attribute, for example, the ability of GMOs and sustainable intensification[iv] are debated in the market and scientific spheres. Such innovations are positioned as helping to maintain and improve competitiveness and to ensure global food security and resilience. However, agro-ecological opponents question the use of such technologies in terms of their sustainability, ethics and system-level efficacy.

Similar discourse clashes emerge in relation to other attributes, such as biodiversity or resource use. As Darnhofer (2015) notes, sustainability appraisal as a form of social appraisal/way of knowing is always undertaken from different positions and is a highly contested and political process. What we see in the MCPM data, then, is evidence of contrasting paradigms that argue for different ways to achieve transition to sustainability, each of which is part of a discourse and uses specific standards of legitimacy. If ethics in some way underpins all dimensions, and is set against a clash of sustainability paradigms and values as suggested by the MCPM data presented here, this creates challenges but also opportunities for more reflexive approaches to agri-food governance to more explicitly highlight ethics as a key component of FSC performance. The five attributes reviewed above demonstrate that where the debate is open there is the potential to encourage reflection amongst decision makers. Data from the national studies suggests there are several instances where such ethical debate is currently implicit, yet needs to be more explicit. This draws attention to the importance of what we have termed 'procedural' attributes, which can help establish the extent to which food chain actors are organising themselves to address ethical dilemmas. Such attributes can also help provide the practical governance tools with which to transform

the potential of ethics into actual transformative practices, whereby they become intrinsic to understandings of food chain performance.

Procedural ethical attributes

Analysis of the national food chain discourses identified three attributes in particular that can help action this more pragmatic and dynamic ethics, namely: 'governance', 'information and communication' and 'responsibility'. Two (governance and responsibility) were situated within the ethics dimension and the third (information and communication) emerged during subsequent analysis. Governance issues in the national studies are as follows: France (governance (food democracy), autonomy and justice); The Netherlands (loci of control, self-governance capacity and Corporate Social Responsibility); Denmark (system regulation); the UK (power distribution); Latvia (control); Italy (food activism); Serbia (food chain structure, government regulation); Spain (negotiation power, farmer perception, concentration of power and participation) and Peru (the impact of export-driven policies on national food security). In the MCPM (see Figure 1), 'governance' is therefore widely debated, particularly in the policy sphere; critiques of particular forms of governance are also noted in the scientific sphere and in public dialogue in terms of democracy and social justice. In relation to the latter, country studies frequently make reference to power distribution and democracy, in asking who determines the direction of FSCs. In France, for instance, there is public discussion about citizen participation in decisions about FSCs and debate about ways to be autonomous or independent from public subsidies, especially the CAP; while in The Netherlands there is growing dissatisfaction among both producers and consumers concerning their limited influence on food chain governance. There is a move, in other words, towards reflexive governance. In this context, governance fulfils "distinct diagnostic, prognostic, prescriptive and co-ordination functions" (Smith and Stirling 2007, p. 353), whereby if implemented correctly it can influence food chains by using ethical standards (e.g. minimum wage levels, or

regulations for pollution), as well as determine the variety and representativeness of stakeholder involvement.

‘Information and communication’ is a second procedural attribute that can help to action ethics. When the MCPM data were originally coded, this attribute was named as ‘information’; however, it was subsequently changed to ‘information and communication’ in order to indicate a more dynamic process, with information on its own being seen as overly static. Information and communication is particularly important in terms of raising peoples’ awareness, as well as encouraging activism around food. It therefore includes a range of issues, including awareness and responsiveness, trust and commitment, food integrity, authenticity and trustworthiness. The notion of transparency (discussed in the UK, Switzerland and Belgium, for example) is also included, as a way of helping to ensure an openness of communication throughout the food chain. A final aspect of information and communication relates to the market. The discourse in Latvia, for example, is framed in terms of 'information accessibility', which relates principally to producers. The idea that there needs to be a constant flow of information and that actors need to be able to access this in order to improve their engagement with the market and to develop a risk strategy. In Denmark, 'consumer information' is important not just for the reasons highlighted above, but also in terms of its potential influence on the market. We can link this broader notion of information and communication to other attributes in the MCPM. Food safety, for example, which is positioned in all four spheres but particularly debated in the public sphere, has public good implications and is something that concerns and requires input and participation from actors beyond agriculture and the food industry. The ‘connection’ attribute is also relevant, especially in terms of how it can be used within food chains to improve society’s understanding of the distinctiveness of certain products within the market and thereby to empower consumers when making purchasing decisions.

‘Responsibility’ is the third procedural element that is particularly important in terms of actioning ethics. It can be defined at a firm-level in terms of: a) the presence of a firm’s procedures to account for specific attributes; and b) the range of attributes for which firms are accountable. In this sense it is about ensuring that food chains maintain standards of responsible business conduct (see OECD-FAO 2016), yet it extends also to consumers and policy stakeholders. In the MCPM data, responsibility is mentioned in three country studies (Denmark, the UK and Serbia), although debate about who is responsible for food chains and for setting standards of practice is mentioned in all 12 country studies, especially in the public sphere. Responsibility can shift how food chain performance is framed. It is expressed in national studies as consumer responsibility (e.g. how consumer actions have consequences at larger scales); in Serbia, for instance, consumer actions are described at individual and community levels as needing attention because environmental awareness (responsibility) is currently very low. Corporate social responsibility (including the need for food chain actors to be socially responsible) is expressed in Denmark, for example, in terms of how businesses might take better account of climate, work conditions and social conditions. And in the UK, state responsibility is expressed in light of the increasing deregulation of food markets and public reactions at times of crisis/system failure, particularly debate about whether the state should assume greater responsibility and take a more active role in food chain governance. It is clear that there are links between the three attributes of ‘information and communication’, ‘governance’ and ‘responsibility’ in terms of actioning ethics through reflexive governance, most notably in response to issues about awareness, democracy, social justice and supply chain power.

Discussion

This paper has examined a range of discourses surrounding the performance of food chains, encompassing a diversity of views and perceptions, with a particular focus on the role of ethics. In so doing, it has made explicit links between discourse, ethics and governance, demonstrating how FSC performance might be reimagined beyond the

confines of the neoliberal market logic (Sayer, 2015). While in substantive terms the analysis has classified the key issues that raise ethical dilemmas (such as animal welfare or labour conditions) into the ethical dimension, ex-post we can say that almost all attributes of sustainability can be related to the ethical dimension to some extent, in that they imply an assessment that goes beyond self-interest. Of a different nature are those attributes that enable an assessment of the ethical responsibility of economic actors: that is, the capacity to orient choice in relation to the appraised consequences of action in terms of sustainability. Specific focus has been given to the development of heuristics (‘commonly identified’ ethical attributes and ‘procedural’ ethical attributes) that can enable evaluation of the extent of, and potential for, ethics to be incorporated as a key driver of change into the assessment of performance within FSCs through those involved being more reflexive. In turn, this is related principally to the transparency of information flows, the acknowledgement and organisation of responsibility, and governance patterns that can help develop new practices, norms, frames and policies.

Analysis of the attributes within the MCPM helps us to understand how reflexive governance has the potential to both accommodate and actively develop ethical consumers, ethical firms and public administrations/policy makers. An 'ethical consumer' can be described as a consumer who reflects on the indirect consequences of their choices, given their embeddedness in socio-technical and socio-ecological webs, and as a result changes their frames and behaviour accordingly. As deliberation fosters reflexivity, consumers' engagement with ethical concerns - that is, coherence between individual behaviour and social norms - depends on their level of exposure to deliberation and capacity to change as a result of that deliberation. An 'ethical firm' is a firm that introduces reflexivity into its internal governance structures, opening up appraisal of its decision-making processes and assessments of performance to stakeholders, being prepared to change its operations accordingly. The degree of ethical engagement of a firm is not only related to its performance on specific issues,

such as pollution or labour rights, but also to its intentions, which depends on how it organises its appraisal of sustainability and its subsequent translation into commitment. Public administrations can have a crucial role to play in enabling reflexive governance, as they can establish meta-rules for all actors involved in a chain that can help foster processes of reflexive governance (Smith and Stirling 2007) and help breakdown simplistic dichotomies of what represents ‘good’ or ‘bad’ performance (Lakoff 2010). Reflexivity in public administration itself can enable them to adapt their procedures to issues that emerge through deliberation; nevertheless, their transformative role is often limited by bureaucratic rigidities.

It is possible to see how the MCPM has the potential to inform and influence the governance of food systems. Exposed to the matrix – which needs to be understood as a dynamic matrix, continuously updated through deliberation - consumers are encouraged to reflect upon impacts they might never have thought of, and to search for products and brands that address these specific impacts. In turn, firms can be encouraged to anticipate consumers' choice by addressing aspects of the matrix that they may not have considered important before. Scientists, given the emergence of these issues, may be driven to develop novel evaluative criteria that measure these emerging impacts. In turn, policy makers may be encouraged to regulate in such a way that guarantees the mitigation of negative impacts and/or supports positive impacts. In this way, actors in the public, policy, science and market spheres can give voice to multiple meanings of FSC performance (Funtowicz and Ravetz 1993; Kirwan et al. under review) and more actively reflect, learn and make decisions; furthermore, inputs coming from one sphere (for example, the public sphere) feed reflection into another sphere (for example, the scientific sphere), thereby generating new questions and new dilemmas that require further debate.

Concluding remarks

In a reflexive governance framework, deliberation (in the form of communication carried out in public spaces), is key to appraisal of the observed system. The MCPM is a form of sustainability appraisal – reflecting national, context specific FSC sustainability discourses - but it can be used also as a cognitive tool to instigate further deliberation and action. We see the performance matrix and 'commonly identified' and 'procedural' attributes as a governance tool that can link together appraisal and commitment, with the potential to actively incorporate ethics into the planning and actions of those involved. Attributes may be used as heuristics that help actors in the chain to learn about the potential impact of their practices and to guide their decisions. The performance matrix highlights the trade-offs and ethical dilemmas that individual decision-makers may face, as well as those they may be willing to solve through deliberation. As the incommensurability of different stakeholders' values and belief paradigms make 'the perfect food' impossible (Du Puis 2002), the matrix can provide a starting point for political processes that lead to 'governance on the inside' (Smith and Stirling 2007). In this respect, reflexive governance has been used within this paper to show how it might be possible to change the cognitive frames by which actors and institutions judge the performance of FSCs, which face significant and intensifying pressures (Hinrichs 2014), and thereby to better manage transitions to sustainability. In so doing, the paper helps to develop the idea of a market that gives actors the opportunity (and arguably the duty) to make their choices not only on the basis of utility-maximization and profit-seeking, but also in coherence with values and beliefs negotiated through interaction in a variety of fora. This has the potential to go beyond the dualism between market forces and sustainability - where sustainability is translated into a set of rules constraining freedom of enterprise - to develop the concept of an ethically responsive market, where all actors play a role in building shared ethical norms through reflexivity.

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[i] Frames in this context can be thought of as mental structures that help people / institutions make sense of the world. Crucially, frames are reinforced by practice and repetition (Lakoff 2010).

[ii] Described by Hendriks and Grin (2007) as a process of reconsidering underlying assumptions about the existing order of things.

[iii] This exercise has been carried out within the context of a broader research project which sought to assess the sustainability performance of local and global food chains (GLAMUR). The aim of GLAMUR was to advance scientific knowledge about the impact of FSCs and to help demonstrate how a combination of public policies and private strategies could improve their sustainability.

[iv] Sustainable intensification is defined by The Royal Society (2009, p. ix) as a form of production wherein “yields are increased without adverse environmental impact and without the cultivation of more land”.