



Private Agri-food Standards: Supply Chains and the Governance of Standards

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The articles in this second special issue of the *International Journal of Sociology of Agriculture and Food* on private agri-food standards consider key issues involved in the shift from government to governance within agri-food systems. The first special issue, published in February 2013, focused on ‘the contestation, hybridity and the politics of standards’ (Bain et al., 2013, p. 1). The articles in the first issue complicated our understanding of the relationship between public and private standards by examining the politics associated with their formation, implementation, and outcomes. At the same time, the first special issue drew attention to the diversity of private standards, and the spaces that exist – or get created – for actors to contest the values, content or outcomes of such standards. These are important themes, revisited in the second special issue. However, the concern with the politics of standards is extended through more systematic attention to the relationship between standards, certification, and the governance of agri-food supply chains.

Governance as a concept focuses our attention on understanding the diverse tools, techniques, and activities through which actors, especially retailers, influence and coordinate production and consumption within agri-food value chains (see Higgins and Larner, 2010a; Bain et al., 2013). Private, voluntary standards are a particularly significant technique of governance in the agri-food sector. Such standards are claimed not only to overcome the limits of state capacity to regulate food supply chains in an increasingly globalizing world, but also in response to the willingness of the state to delegate regulation to private actors and multi-stakeholder initiatives (Ponte et al., 2011a). Yet, far from a complete retreat of the state, scholars see the use of private standards in combination with public or quasi-public regulation as an example of re-articulated regulation (Utting, 2008; also see Ponte et al., 2011a). Re-articulated regulation draws attention to the ways in which whole sectors are now being governed through standards and these ‘standards mark a governance field characterized by a complex configuration of deregulation and different modes of re-regulation. It is a political field that poses itself as de-politicized’ (Ponte et al., 2011b, p. 289).

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Despite a broad body of literature that recognizes the importance of standards in agri-food supply chain governance, certain key issues require further research. One growing area of inquiry within the agri-food governance literature is the discursive and organizational mechanisms through which private standards and standard setters achieve and maintain legitimacy (Bain et al., 2013, p. 4). Private standards are developed in settings that do not require open and transparent dialogue among affected parties.¹ Understanding how private governance tools such as standards and certification, and new governance forms such as multi-stakeholder initiatives (MSI), are negotiated, legitimated and settled is critical for advancing efforts to ensure that standards are more equitable, democratic and participatory. In addition, understanding why some standards or certification schemes ultimately fail provides valuable insights for thinking about creating change within global agri-food chains. The first two articles in this issue, Maki Hatanaka and Jason Konefal's analysis of the Leonardo Academy's Sustainable Agriculture Standard Initiative and Ed Challies's examination of private voluntary social standards, focus on the legitimacy of private standards.

Hatanaka and Konefal's article 'Legitimacy and Standard Development in Multi-Stakeholder Initiatives: A Case Study of the Leonardo Academy's Sustainable Agriculture Standard Initiative' explores the legitimacy, or the failure to achieve legitimacy, of private standards developed through MSIs. The authors note that 'non-state market driven (NSMD)' standards tend to be developed through one of four mechanisms: individual firms, industry associations, non-governmental actors, and multi-stakeholder initiatives (MSIs). Of these four, Hatanaka and Konefal argue that MSIs are emerging as the primary mechanism for the creation of NSMD standards. This is because the process of standard development within MSIs is seen by stakeholders as more legitimate than other forms of standard development due largely to the perception that other mechanisms of standard development are biased toward particular interests (e.g. retailers).

Utilizing the framework of Tamm Hallström and Boström (2010), Hatanaka and Konefal view legitimacy as having three distinct, but interrelated processes: input, procedural, and output legitimacy. They note that it is assumed generally that there is a positive relationship between these three processes; in other words, that positive legitimacy for any one of them contributes to positive legitimacy for the others. Instead, they find that in the case of the standard developed by the Leonardo Academy's Sustainable Agriculture MSI, positive input legitimacy may actually contribute to weakened procedural and output legitimacy. In this case, the standard lacks output legitimacy because too many actors with differing opinions on input contributed to a watering down of the standard and because key actors opted out of the process during contentious negotiations.

In 'The Limits of Voluntary Private Social Standards in Global Agri-food System Governance', Challies questions the social value of private standards, including those developed by MSIs, arguing that all such standards are prone to capture by powerful corporate interests. Focusing explicitly on voluntary private social standards (VPSSs), he argues that despite some localized benefits of VPSSs, such as smallholders being guaranteed a fair price for their produce, which is the case for Fairtrade, their value and promise should be judged according to their capacity to address the broader social inequalities and injustices that characterize the global agri-food system. Specific to agri-food systems, Challies argues that VPSSs tend to work best when applied to relatively simple agri-food chains for unprocessed or

semi-processed products, such as fresh produce, coffee or cotton, which have been produced historically under highly unequal and abusive conditions. In these cases there is great value, particularly for retailers, in the 'saleable story' of commodity production under fair and sustainable conditions. In contrast, processed products (e.g. canned goods), which operate within more complex agri-food chains and are much more numerous than unprocessed commodities, are less likely to have social criteria attached to the label. Or, if they do, it is much more difficult to trace and verify compliance to such criteria by the various businesses along the processing chain. Thus, the localized benefits of VPSSs for a relatively small number of growers and rural communities should be seen in the context of the negative social impacts engendered through a company's sourcing of far greater quantities of products that do not have VPSSs.

Furthermore, Challies notes that the capture of VPSSs by corporate interests and MSIs means that issues of global poverty and inequality tend to be depoliticized and the boundaries of legitimate action and discussion on these issues restricted, especially by states. Together, these factors work to preserve the dominance of capital over states and civil society. Challies concludes that the corporate co-option of private sustainability standards demonstrates that the realm of sustainability governance is one that should not be left to the market. The inability of VPSSs to fundamentally transform relations of production and exchange in the agri-food system towards a system that is more just, equitable and sustainable suggests the continued need for public standards and regulation. There are also other issues raised that extend beyond the need to achieve legitimacy. The next five articles in this special issue turn their attention to the tensions and contradictions that emerge with the rise of private agri-food standards.

One contradiction that several scholars in this special edition focus on is the concern over whether standards actually accomplish their intended purpose. In this collection of articles, Amy Trauger and Andrew Murphy's examination of organic banana production and consumption and Carolina Toschi Maciel and Bettina Bock's analysis of animal welfare standards reveal the contradictions that emerge from the development and implementation of private standards. These works also bring to light the growing recognition in the standards literature that the complexity of issues at stake may have reached the limits of calculability and governability through standards (Higgins and Larner, 2010b; Ponte et al., 2011b).

In 'The Moral Equivalence of Global Commodities', Trauger and Murphy focus on the ways in which supranational certification schemes and the standards within these schemes make certain aspects of the organic supply chain legible while obscuring other aspects. Similar to Challies's critique that the positives of VPSSs may not actually outweigh the negatives, the authors explore how fair trade and organic standards are enacted in the Dominican Republic banana production process. The Dominican Republic is among the largest producers of organic bananas and ships more than a third of their bananas (by volume and value) to the UK annually. They then compare this empirical data with UK consumer beliefs and understandings of organic and fair trade bananas.

The authors find that farmers are meeting the required standards that allow them to sell their product as certified organic and/or fair trade. However, producer efforts to capture the short-term price premiums associated with organic and fair trade are creating potentially negative long-term consequences for the environment (due to the intensification of organic production) or worker protection (due to the changing

visa status of workers and the lax enforcement of worker rights among smallholders) that are inconsistent with the values generally associated with organic standards.

In addition, corresponding with other agri-food studies focused on standards, the authors find it is often large-scale producers (as opposed to small-scale producers) that are best positioned to comply with the fair trade and organic standards. In sum, they conclude that for consumers of organic/fair trade labels 'what has ostensibly *not been* in the product, may not actually outweigh what now *is* in the product' (emphasis in the original). In other words, the very reasons consumers purchase fair trade and/or organic products may be negated by the consequences of intensified banana production; for example, forcing farmers to use fungicides to deal with Black Sigatoka disease and thus pushing them out of the organic market. Moreover, consumers may assume all labels are equal, even when they are not. Despite the shortcomings of fair trade and organic supranational certifications, Trauger and Murphy argue that these will remain critical for the sale of organics globally, even if the labels are not fully delivering on the values they promise.

In 'Modern Politics in Animal Welfare: the Changing Character of Governance of Animal Welfare and the Role of Private Standards', Maciel and Bock analyse and call attention to what they consider to be the ambivalent consequences of the shift in governance of animal welfare standards in Europe. Utilizing a political modernization framework they explore the changes in animal welfare governance from a state-centred to a market-centred policy domain. This shift has allowed non-state actors to participate directly and be involved actively in the development of animal welfare policies, which has created new collaborations and unexpected coalitions. Maciel and Bock conclude that the establishment of new coalitions of actors, the mobilization of resources, the redefinition of rules of the game and the enactment of new animal welfare discourses provide new opportunities for using the market to achieve animal welfare. However, there are also reasons for concern.

First, given the imbalance of power among agri-food chain actors and the possible undemocratic institutional design of private standard systems, it can be questioned whether political modernization within animal welfare benefits all actors equally. In addition, it raises the question of what types of standards and rules are likely to be generated within these circumstances. Maciel and Bock argue that food retailers are more powerful than their suppliers; thus, transnational food retailers are in a position of choosing which actors to include in a coalition, which discourses and rules of the game to enact and, ultimately, of directing animal welfare governance in a manner that serves their interests best. Harkening back to issues raised by Hatanaka and Konefal, Maciel and Bock argue that it is inappropriate to assess the private governance of animal welfare based on output legitimacy. The effectiveness of output legitimacy, they argue, 'cannot be measured objectively without prior democratic processes that guarantee that (all) affected stakeholders can participate in the definition of an "effective outcome"'. Thus, the authors conclude that a shift from government to governance in the case of animal welfare produces an ambivalent effect, because transnational food corporations acquire the capacity to act as 'quasi-states', while their actions lack the democratic legitimacy of state actions.

Maciel and Bock's conclusions also point to another area of inquiry within the governance of agri-food chains. In reality not all private standards require establishing or maintaining legitimacy. If a private retailer imposes standards that actors must subscribe to in order to participate in the value chain, then there is little need to study legitimacy. Rather, attention shifts to focusing on the ways in which actors

continue to assert their autonomy, despite the imposition of private standards on the governance of agri-food chains. Several authors in this issue reveal the ways in which the enactment of standards is a negotiated process, which affords farmers, activists, consumers and other actors opportunities for agency not always recognized in the literature. In particular, Jennifer Wiegel's analysis of a global retailer's procurement of tomatoes in Nicaragua, and Rebecca Schewe's article on the decisions of New Zealand dairy farmers and processors regarding organic certification, both focus on the ways in which actors continue to assert their autonomy, despite the governance of the chain through private standards.

In 'A New Breed of Tomato Farmers?', Wiegel highlights the ways in which the procurement of tomatoes in Nicaragua by a transnational food retailer, Ahold/Walmart, does not fully fit with the existing agri-food studies and standards literature. The literature has suggested that the success of transnational supermarkets depends on the effective localization of their operations in each new country. While Ahold/Walmart has successfully localized operations in Nicaragua they did so in an unconventional manner. Utilizing a supply chain management (SCM) lens, Wiegel reveals that rather than sourcing tomatoes from the existing 4,000 tomato farmers, the transnational supermarket created a 'new breed' of tomato farmer, who is new to tomato production.

Wiegel's study calls into question the existing literature that assumes transnational supermarkets will source their products from more capitalized farmers. Instead, she argues that the willingness of farmers to comply with new supermarket procurement requirements and standards, in addition to their ability to comply with them, must be taken into consideration. In the case of Nicaragua, existing tomato farmers resisted complying with supermarket procurement strategies, opting to continue selling to the wholesale market that dominates Nicaragua. Thus, new farmers were identified by Ahold/Walmart for tomato cultivation. Interestingly, these new tomato farmers not only organized their production systems differently (e.g. different varieties, year-round production), they also had very different social organizations of production (e.g. use of labour and financial resources). She concludes that the creation of vertically coordinated supply chains by transnational supermarkets produces not only a differentiated product, but also a differentiated set of costs and benefits of insertion in the chain, making it difficult to compare across chains as well as to switch from one to another. Far from simply figuring out how to buy tomatoes and get them on supermarket shelves, transnational food retailers have established coordinated supply chains that fit their needs. While this process may be unique to Central America, it does suggest that the sourcing of fresh fruits and vegetables in the region is undergoing change and current arrangements are far from stable.

In 'Negotiated Decision-Making: Understanding Farmer and Processor Certification', Schewe asserts that through the framework of negotiated decision-making we can understand better the factors influencing how farmers and processors choose between competing certification systems. Drawing on ethnographic interviews with New Zealand organic dairy farmers and processors, she argues that factors shaping certification choices include financial and ideological motivations, social networks, existing practices, and position in the value chain. In other words, using a negotiated decision-making framework allows for a better understanding of both the structural constraints and individual motivations shaping a farmer's selection of specific organic certifying schemes.

Schewe discovers that the need for market access and regulatory ease of processors leads them to be motivated by previous auditing relationships with certifiers, and the degrees of perceived professionalism and the extent of government affiliation among certifying bodies. On the other hand, graziers generally have smaller profit margins that make it difficult to balance both financial and ideological motivations in choosing certifiers. Since graziers are unable to reconcile the financial and ideological tensions, she finds that they often allow their certifications to lapse, whereby going with a more affordable, but less ideologically agreeable organic certifier is avoided. Ultimately, by developing a clear theory of producer/processor decision-making Schewe asserts that there is 'empirical significance for other environmental and social outcomes of private agri-food standards' in addition to theoretical implications for understanding the roles of the state and market in governing environmental and social goods.

A third area of inquiry when focusing on the shift from government to governance in the agri-food chain is the degree to which private regulation incorporates or usurps public regulation. Stewart Lockie, Anne McNaughton, Lyndal-Joy Thompson and Rebeka Tennent's comparative case studies of GLOBALG.A.P. engage with the role of public versus private regulation within agri-food chains. In 'Private Food Standards as Responsive Regulation: The Role of National Legislation in the Development and Evolution of GLOBALG.A.P.', Lockie et al. challenge the predominant argument that private standards fill a regulatory void created by the retreat of the state. Instead, the authors use three case studies from Vietnam, the Philippines, and Australia to show how private standards, such as GLOBALG.A.P., can be more appropriately characterized as a form of responsive regulation. According to Ayres and Braithwaite (1992), state regulation can be understood as a pyramid of enforcement ranging from 'command and control' mechanisms, whereby the state enforces compliance through disciplinary sanctions, to 'responsive regulation' approaches that rely on voluntary, market-based mechanisms to ensure compliance. Responsive regulation reflects the fact that contemporary states feel compelled to respond to perceived needs for government regulation and therefore continue to play a critical role in its implementation. While responsive regulatory approaches can appear at times independent of the state, they in fact operate within the legal apparatus of the state.

In the case of Vietnam, the authors find that the state has supported the implementation of the international private food standard GLOBALG.A.P., and a national food standard, VietGAP, largely in response to the international development community providing support for these endeavours. Here, Vietnamese state agencies worked to embed GLOBALG.A.P. standards within the state's regulatory framework for food safety. Nevertheless, despite the interest in GLOBALG.A.P. the actual number of certified producers in Vietnam is small and concentrated in industries where substantial technical and financial support has been provided. In the case of the Philippines, multiple certifications (e.g. ISO 22000, GLOBALG.A.P., PhilGAP-FV) with no one regulatory agency actually taking responsibility has led to a situation where the desired outcomes of any one standard may not actually occur and, in some cases, are almost entirely absent, such as in environmental or labour regulations. In Australia, growers face a large number of competing private and state standards for certification in order to participate in domestic and international markets. Rather than view private standards as imposing additional requirements on them, growers argue that GLOBALG.A.P. standards are often redundant because they are simply variations of

legislative requirements that are already in place. In addition, growers felt that many GLOBALG.A.P. standards are unnecessary or insensitive to the local social context in which agricultural production operates, such as the assumption that the children of family farmers are highly exploited through child labour. In conclusion, the authors reveal that private standards, such as GLOBALG.A.P. are best understood as a form of responsive regulation whereby the state plays a critical role in facilitating their implementation and in allowing such standards to flourish. However, the authors also warn that responsive regulation can create opportunities for the concentration and abuse of authority among non-state regulators within specific conditions (e.g. where state regulatory capacity is low).

In conclusion, similar to the first issue, all the authors in this volume raise concerns over democratic participation in the development and implementation of private standards (despite efforts to have the process appear participatory and inclusive). While actors throughout the value chain may have opportunities for the performance of agency, these opportunities are constantly in flux and often threatened, especially as transnational food retailers expand their power over the agri-food system. Certainly, consumers and social activists are demanding standards that can ensure a more just and equitable agri-food system. Yet, several articles in this issue, particularly Challies's analysis of social standards and Trauger and Murphy's analysis of organic and fair trade bananas in the Dominican Republic, suggest that social and environmental goals will continue to be undermined as long as the interests and values of capital are privileged over those of workers and farmers within the value chain and civil society more broadly.

Note

1. While it is assumed that public standards are developed in more democratic settings than private standards, Kimura (2013) observes in the case of the development of radiation standards post-Fukushima, that the standards developed by a non-profit in Japan were more democratic and transparent than corporate and government developed radiation standards.

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Legitimacy and Standard Development in Multi-stakeholder Initiatives: A Case Study of the Leonardo Academy's Sustainable Agriculture Standard Initiative

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Abstract. Non-state, market-driven forms of governance, especially those that use multi-stakeholder initiatives (MSIs), have become a prominent mechanism for regulating food and agriculture. While the standards generated by MSIs and their implementation have been studied widely, the internal practices of MSIs have received less attention. This article addresses this research gap using a case study of the Leonardo Academy's sustainable agriculture standard initiative. Specifically, the focus is on the relationship between the standard-development process and legitimacy. Using a framework that conceptualizes legitimacy in MSIs as consisting of three interrelated processes – input, procedural, and output – we examine: 1. how the practices of the standard-development process affect the legitimacy of the Leonardo Academy's sustainable agriculture standard initiative, and 2. how the quest for legitimacy affects the initiative. In conclusion, we contend that input, procedural, and output legitimacy may not always positively correlate, that legitimacy is best understood as relational, and that legitimacy in MSIs is performative.

Introduction

Non-state, market-driven (NSMD) forms of governance have become a prominent regulatory approach in the US food and agriculture sector. A distinguishing characteristic of NSMD governance is that it enables a variety of actors – from retailers to social movement organizations – to participate directly in the governance of food and agriculture, most notably through the development of standards. Increasingly, both conventional agricultural interests and proponents of alternative food and agriculture are using NSMD forms of governance to construct a US food and agricultural system that reflects their interests. Alternative agri-food activists turned largely to NSMD governance in an attempt to bypass uncooperative states. Industry organizations began to use NSMD governance to develop industry-to-industry standards and, more recently, in an effort to counter alternative agri-food initiatives (Fridell et al., 2008; Jaffee and Howard, 2010). Hence, NSMD governance is becoming an arena

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in which the differences between conventional and alternative food and agriculture are contested and negotiated (Hatanaka et al., 2012).

A key area of contestation that has emerged between proponents of conventional and alternative food and agriculture is sustainable agriculture. Currently, there are multiple efforts to develop sustainability metrics and/or standards for US agriculture using NSMD governance. One effort is the Leonardo Academy's sustainable agriculture multi-stakeholder initiative (MSI).¹ MSIs are a form of NSMD governance that seek to bring together representatives of all potentially affected actors, and use democratic, consensus-based, and transparent practices to develop standards (Tamm Hallström and Boström, 2010; Cheyns, 2011). Thus, compared to other forms of NSMD governance, which are often perceived as biased towards either social and/or environmental movement or industry interests, MSIs are considered to be more legitimate (Tamm Hallström and Boström, 2010; Cheyns, 2011).

While the standards produced by MSIs and their implementation have been widely studied, the internal practices of MSIs are understudied. For example, Djama et al. (2011, p. 188) note, 'most scholars interested in multi-stakeholder initiatives have shown a peculiar lack of interest in exploring concrete dimensions of governance and questions related to how it [governance] is operationalized'. This article addresses this gap in the research by examining the standard-development process of the Leonardo Academy's sustainable agriculture standard (LEO-4000) initiative. In doing so, we focus on a key challenge for NSMD governance – i.e. legitimation. Numerous observers point to legitimacy as a primary issue for NSMD governance organizations, which do not have 'authority' in the same way as governments do (Bernstein and Cashore, 2007; Tamm Hallström and Boström, 2010). Against this backdrop, we examine the ways that the need for legitimacy affects the standard-development process of the LEO-4000 initiative, and how the standard-development process affects the legitimacy of the initiative.

To accomplish these objectives, we draw on recent research on legitimacy and governance. Broadly defined, we conceptualize legitimacy as the relational process through which objects, processes, and practices gain credibility (Weber, 1978). This means that, first, legitimacy is an ongoing process that needs to be actively established and maintained (Tamm Hallström and Boström, 2010; Botzem and Dobusch, 2012; Brunsson et al., 2012). Second, legitimacy is a negotiated agreement. Third, understandings of what counts as legitimate may vary according to the standpoint of actors. To analyse the standard-development process of the LEO-4000 initiative, we use Tamm Hallström and Boström's (2010) three-part framework for assessing the legitimacy of NSMD standard development. Specifically, they divide legitimacy into three distinct, but interrelated processes: input, procedural, and output legitimacy. Input legitimacy refers to the inclusion and balance of stakeholders, procedural refers to the decision-making practices, and output refers to the extent to which the standard is endorsed. Generally, a positive relationship is assumed between input, procedural, and output legitimacy in that legitimacy in one process indicates legitimacy in the others.

The LEO-4000 initiative is an MSI that began in 2007 and held its first standards committee meeting in 2008. The initiative seeks to bring together all relevant actors, which includes actors throughout the supply chain, environmental and labour organizations, and scientific experts. As the Leonardo Academy is an American National Standards Institute (ANSI) accredited standard-development organization, it follows specific procedures to ensure democratic and transparent decision-making

in its standard-development process (American National Standards Institute, 2012). However, given the politicized character of sustainable agriculture, the process has been highly contested from the outset. Consequently, the LEO-4000 initiative is an ideal case study for examining the complex and dialectical relationship between the development of standards and legitimacy in MSIs.

The findings presented in this article are based on three sets of data. First, 17 in-depth interviews were conducted in 2011–2012. Interviewees include 11 current standard committee members, two observers, three ex-members, and one facilitator with the Leonardo Academy.² Interviews ranged from approximately 45 minutes to 3 hours and all except two were conducted in person. Interviews focused on two primary topics: how the standard-development process works and understandings of sustainable agriculture. Second, beginning in 2011, participant-observation has been undertaken at a variety of standard committee meetings – both face-to-face and virtual meetings. Lastly, content analysis of the Leonardo Academy’s documentation of the LEO-4000 initiative, as well as press releases, letters, and media coverage related to the initiative, was conducted. Regarding documentation of the initiative, the Leonardo Academy makes meeting notes and motions, subcommittee reports, and meeting presentations publicly available on the Internet. Additionally, they have a publicly available wiki link that contains documents related to the LEO-4000 initiative. Using the Nvivo software programme, all three sets of data were, then, analysed using a combination of inductive and deductive codes and line-by-line analysis.

The remaining portions of the article are organized as follows. First, we review relevant literature on standard development, MSIs, and legitimacy. Second, we provide an overview of the LEO-4000 initiative to date. Third, drawing on Tamm Hallström and Boström’s (2010) framework of input, procedural, and output legitimacy, we examine the relationship between the standard-development process and legitimacy in the LEO-4000 initiative. Specifically, the focus is on the complex character of establishing and maintaining legitimacy, and the contradictory relationships among input, procedural, and output legitimacy. In conclusion, we present three preliminary observations on standard development and legitimacy in MSIs. First, we contend that input, procedural, and output legitimacy may not always correlate positively. Second, we maintain that legitimacy is best understood as relational in that understandings of what counts as legitimate may vary according to the standpoint of actors. Lastly, we argue that legitimacy in MSIs is performative, as it continually has to be maintained.

Standards, Multi-stakeholder Initiatives and Legitimacy

NSMD governance has become a prominent mechanism for regulating food and agriculture (Higgins and Lawrence, 2005; Marsden et al., 2010; Busch, 2011). Typically, NSMD governance entails the development of standards by non-state actors and the oversight of the implementation of the standards by third-party bodies (Cashore et al., 2004; Hatanaka et al., 2005). In NSMD governance, standards tend to be developed through one of four processes (Djama et al., 2011). First, individual firms may develop their own private standards. This is often done in conjunction with suppliers. Standards for non-genetically modified foods tend to be developed in this way (Konefal and Busch, 2010). Second, industry associations can develop their own standards. This approach is found in aquaculture, where the Global Aquaculture Al-

liance has produced a set of best-practice standards. Third, non-governmental actors, such as certification bodies, can develop their own standards. In the US, multiple certification bodies have developed their own standards for sustainable agriculture (e.g. Food Alliance and Sure Harvest). Lastly, standards may be developed through MSIs. While standards for US agriculture continue to be developed through each of these processes, MSIs are rapidly becoming the norm.³ This is largely because MSIs tend to be viewed as more legitimate than other forms of standard development, which are often viewed as biased towards particular interests (Tamm Hallström and Boström, 2010; Cheyns, 2011).

Unlike government regulations, which have legitimacy bestowed on them largely as a result of the authority of governments, NSMD governance initiatives have to actively develop and maintain legitimacy (Bernstein and Cashore, 2007; Tamm Hallström and Boström, 2010; Fuchs et al., 2011; Brunsson et al., 2012). Botzem and Dobusch (2012, p. 741) observe that, 'given the regulatory void at the transnational level, being legitimate is important in standardization processes as it signals "the rightfulness and appropriateness of authority" in bringing about political and social order setters'. In other words, establishing legitimacy is fundamental for NSMD governance organizations, as the degree to which they are able to do so significantly affects the adoption of standards.

Broadly defined, legitimacy is the processes by which objects and relations gain credibility (Weber, 2004). This takes place through making objects and relations consistent with the shared culture and practices of a given community (Johnson et al., 2006; Bernstein, 2011). Put differently, for a relation or object to be considered legitimate, it needs to be viewed as valid and credible, and also considered appropriate by a particular group (Johnson et al., 2006).⁴ This means that for NSMD governance to be legitimate, stakeholders need to have confidence in it, and support and trust it. Specifically, first, stakeholders have to believe NSMD governance is a valid and credible mechanism. In other words, NSMD governance has to be thought of as fair, objective, accountable, and effective. Second, stakeholders need to view NSMD governance as an appropriate form of governance. That is, given current conditions (e.g. neo-liberalization and globalization) and/or the issue or problem being addressed, NSMD governance needs to be viewed as the best approach among stakeholders.

Over the last decade, there have been a number of innovations in NSMD governance aimed at increasing its legitimacy (Loconto and Busch, 2010). One such effort is the increasing use of MSIs to develop standards. Because of their structure and practices, MSIs have emerged as the most legitimate approach for developing standards in contemporary society. Specifically, MSIs seek to bring together stakeholder representatives from all areas potentially affected by the proposed standard, use democratic and transparent decision-making procedures, and often seek to develop standards by consensus (Tamm Hallström and Boström, 2010; Cheyns, 2011). Tamm Hallström and Boström (2010) note that the structure and practices of MSIs often lead to positive assumptions about them. That is, their inclusive, participatory, consensus-based practices are often assumed to lead to standards that are both democratic and effective. Hence, MSIs are increasingly recognized as the best approach for developing standards and consequently, their use is proliferating (Tamm Hallström and Boström, 2010; Cheyns, 2011). While the efficacy of MSIs is largely presumed, stakeholders and scholars sometimes question the degree to which particular standard-development initiatives meet the criteria of an MSI (Cheyns, 2011; Murphy and Yates, 2011).⁵

To assess whether standard-development initiatives fulfil the criteria of MSIs and thus are legitimate, existing studies examine a combination of who gets to participate, the balance of participants, decision-making processes, transparency, and/or the resultant standard (Tamm Hallström and Boström, 2010; Fuchs et al., 2011; Partzsch, 2011). Two frameworks have been developed specifically for analysing the legitimacy of MSIs. Tamm Hallström and Boström (2010) have developed a three-part framework that consists of input, procedural, and output legitimacy. Input legitimacy refers to the balance of stakeholders, procedural refers to the decision-making process, and output refers to the usefulness of the standard. Fuchs et al. (2011) have also formulated a three-part framework that examines participation, transparency, and accountability. In their framework, to be legitimate, a MSI needs to include all potentially affected actors, ensure all participants have access to information (i.e. internal transparency), be open to public scrutiny (i.e. external transparency), and both stakeholders and the initiative need to be subject to oversight to ensure accountability.

Both frameworks identify several characteristics MSIs have to exhibit if they are to be deemed legitimate. First, MSIs have to be inclusive and balanced in their representation of interests. Research indicates that having a diverse set of stakeholders participating in standard development facilitates information sharing, and increases the likelihood that the standard will be adopted (i.e. output legitimacy) (Brunsson et al., 2012; Van den Ende, 2012). Second, to be considered legitimate, MSIs must be participatory, transparent, and entail consensus-based decision-making.

Despite having much in common, the frameworks of Tamm Hallström and Boström (2010) and Fuchs et al. (2011) diverge in their treatment of output legitimacy. Whereas Tamm Hallström and Boström (2010) include output legitimacy in their framework, Fuchs et al. (2012) dismiss it as a useful measure. Specifically, Fuchs et al. (2012, p. 359) argue that evaluating output legitimacy is empirically difficult, as 'different stakeholders will tend to define different objectives, or even similar objectives differently'. While we agree with Fuchs et al. (2011) that output legitimacy is a negotiated outcome, we contend that this does not preclude output legitimacy from empirical assessment.⁶ Thus, we concur with Tamm Hallström and Boström's (2010) notion that the resultant standards need to be adopted and endorsed by relevant stakeholders to be legitimate (i.e. output legitimacy). Consequently, while informed by both frameworks, our analysis draws explicitly on Tamm Hallström and Boström's (2010) framework, as it also allows for analysis of the degree to which the standard is adopted. Building on the above observations on legitimacy in MSIs, the remaining sections of the article examine the ways that the Leonardo Academy has sought to achieve and maintain legitimacy in its LEO-4000 initiative, and how this has affected the standard-development process.

Making the Standard: The LEO-4000 Initiative

This section provides an overview of the LEO-4000 initiative to date. First, the different understandings of sustainable agriculture that currently exist in US agriculture are briefly outlined. Second, a chronology of the LEO-4000 initiative to date is provided. The chronology focuses on the Leonardo Academy's efforts to comply with ANSI requirements for standard development, and points of contention that have occurred in the standard-development process.

Developing a national sustainable standard for US agriculture requires coordinating and bridging diverse understandings of agriculture and sustainability. As stakeholders in agriculture and sustainability (e.g. farmers, retailers, certifiers, environmentalist, and farmworkers) have different interests and concerns, their perspective on what constitutes sustainable agriculture varies significantly. For example, some actors envision sustainable agriculture as chemical free and thus, similar to organics. Others view sustainable agriculture as more encompassing in that it would include provisions on economic and social sustainability, which are not part of the US organic standard. And still others see sustainable agriculture as being a bridge between conventional and organic agriculture. Advocates of this position argue that sustainable agriculture should accept at least some chemical use, and be open to all technologies, including genetically modified organisms (GMOs).

Seeking to codify these different understandings on 'sustainability', various agricultural actors (e.g. input companies, farmers, processors, and retailers), social movement organizations (e.g. labour, and environmental organizations), and certifying bodies have begun to develop, often jointly, sustainable agriculture standards and/or metrics. Current efforts include the Leonardo Academy's LEO-4000, the Keystone Center's Field to Market initiative, the Stewardship Index for Specialty Crops, and the Sustainability Consortium. This article focuses on one of these efforts, the LEO-4000 initiative.

It was Scientific Certification Systems (SCS), a certifying body, that began the effort to develop a US sustainable agriculture standard. After developing a draft standard for sustainable agriculture (SCS-001), SCS asked the Leonardo Academy, which is a non-profit standard-development organization accredited by ANSI, to coordinate the process. In September 2007, the Leonardo Academy became officially responsible for managing the development of the standard and facilitating a MSI process.⁷

As an ANSI accredited process, the initiative has to adhere to certain guidelines for standard development, including committee membership and due process (American National Standards Institute, 2012). Regarding standard committee membership, the committee must include representatives of all potentially affected actors and balance different interests. Based on ANSI protocol, the Leonardo Academy issued a public call for applicants to serve on the standard-development committee. Potential participants included representatives from producers, industry, environmental organizations, certifiers, and academics. Based on applicants' qualifications as to their expertise, experiences, and the roles the applicants' organizations play in agriculture, the Leonardo Academy selected 58 committee members from diverse organizations and backgrounds. SCS, who initiated the whole process, applied and became one of the 58 committee members. Furthermore, observers are also allowed to attend and participate in standard committee meetings. Similar to committee members, there is an application process that interested parties must go through to become an observer. While observers do not have voting rights, they can participate in all meetings and comment on drafts of the standards.

However, before the first meeting of the standard-development committee, significant controversy arose regarding the initiative. In the winter of 2008, the Biotechnology Industry Association expressed concerns with the draft standard and the standard-development process in a letter to President of the Leonardo Academy, Mr. Michael Arny (Biotechnology Industry Association et al., 2008). First, as the draft standard was largely a beyond organic proposal, concern was expressed

that the standard from the outset excludes particular management practices and technologies. Second, the letter stated that the Leonardo Academy did not notify adequately all 'materially affected stakeholders' regarding the adoption of the draft standard (Biotechnology Industry Association et al., 2008, p. 2). In a letter, Mr. Arny responded that the draft standard was a 'placeholder document' and that all aspects of the standard were open to modification (Arny, 2008). In May 2008 and June 2008, the US Deputy Secretary of Agriculture, Mr. Charles F. Conner, expressed 'serious concerns' regarding the process in two letters to the Leonardo Academy. Similar to the letter from the Biotechnology Industry Association, concerns were raised as to the ways that sustainable agriculture was defined in the draft standard, and that such a narrow view of sustainable agriculture excludes 'modern biotechnology, synthetic fertilizers, or other technologies' that 'are well within sustainable agriculture as defined by the law' (Conner, 2008, p. 2). Subsequently on 11 and 12 September 2008, Mr. Lloyd Day, Administrator of the USDA/Agriculture Marketing Service, and Ms. Belinda Collins, Director of Technology Services in the Department of Commerce, sent letters to ANSI reiterating the concerns expressed earlier by the Biotechnology Industry Association and USDA and called for the Leonardo Academy to be de-accredited as an ANSI standards developer (Collins, 2008; Day, 2008). On 19 December 2008 the Leonardo Academy and the USDA presented their cases in front of the ANSI Standards Committee (Clapp, 2009), and on 13 January 2009 the committee denied the USDA claim (Caldes, 2009). However, ANSI did warn the Leonardo Academy to make sure that all stakeholders were sufficiently represented on its sustainable agriculture standard-development committee.

In the midst of the ongoing controversy between the Leonardo Academy, the Biotechnology Industry Association, and the USDA, the first standard committee meeting on the LEO-4000 standard was held on 25–26 September 2008. There were two primary agendas at this meeting. First, in response to the ongoing controversy, the bulk of the meeting was devoted to the SCS-001 draft standard and whether or not to set it aside. Given the concerns that many expressed, the committee voted, with two objections, to set aside SCS-001 and treat it as a reference document. The second key area of discussion was the purpose of the standard. Specifically, there were four points of contention: 1. what sustainability entailed, 2. whether such a standard was needed in the first place, 3. whether the standard would be a public or business-to-business standard, and 4. whether it was meant to be a standard with wide market adoption or a niche market standard. One important outcome of the first standard committee meeting was the establishment of task forces to begin to tackle these issues (Leonardo Academy, 2008).

Prior to the second standard committee meeting, the chairs and co-chairs of each of the task forces met on 21 January 2009 and 25 March 2009. At the 25 March meeting, the leaders of the task forces agreed on three recommendations to make to the standard committee at the upcoming May meeting. These were: 1. the standard should end at the farm gate, 2. the standard should initially be limited to crop production, and 3. the standard should be performance based. At the second annual standard committee meeting in May 2009, the three recommendations presented by the task force leaders were adopted. Furthermore, through a committee-wide discussion, the most contentious issues that the committee would need to overcome were identified. What they referred to as 'elephant issues' included:

- 'acceptability of various technologies in the standard (agrochemicals, fertilizer, biotechnology);

- coexistence between the existing agricultural systems (side-by-side conventional, organic and biotech crops);
- what constitutes valid scientific data, documentation and research?
- whose science is acceptable and whose is not?
- minimum thresholds for a sustainability scorecard/measurement' (Leonardo Academy, 2009b).

An important outcome of the second standard committee meeting was the establishment of seven subcommittees, which replaced the task forces and would take the lead on developing positions on each of the elephant issues. The first three were criteria development committees with a separate committee focused on economic, social, and environmental sustainability. Additionally, there were committees formed for reference library and information, structure and process of standard development, fundraising and communications, and an executive committee. The subcommittees were charged with 'taking a direct role in exploring key issues, developing draft criteria, and providing recommendations and guidance to the standard committee' (Leonardo Academy, 2012a). Membership of the subcommittees was open to all interested parties, and committee members and observers were expected to serve on one or more of the subcommittees.

Subcommittees were expected to meet monthly via teleconference to work on their tasks. At this point it was decided that the Leonardo Academy would increase the number of standard committee meetings to four per year: three via teleconference (about two hours) and one face-to-face (two days) where subcommittees would present their work for discussion and voting. Using this format, everybody on the standard committee would have the opportunity to comment on the draft standards and the work of the subcommittees. Thus, the idea was that through discussion, standard committee members would try to work out their differences and find middle ground, which all the stakeholders would eventually support. Once general consensus was reached, a vote would be held to formally move the process forward.

The third annual standard committee meeting was held at the University of Arkansas on 14–15 June 2010. The bulk of this meeting was devoted to subcommittee reports and discussion of them. The first day of the meeting largely entailed subcommittee reports, whereas the majority of the second day was devoted to discussion and voting on subcommittee deliverables. Several important deliverables were approved. First, a timeline for the development of the standard was approved, with the standard to be completed in October 2012. Second, guiding sustainability principles were approved for economic, social, and environmental criteria. However, for each of the three sets of principles the votes were quite close. Thus, while a majority of participants approved the guiding principles, there was significant disagreement among members of the standard committee. Lastly, there was discussion as to whether to make the standard a tiered standard with different levels of sustainability.

On 18 October 2010, 10 committee members representing conventional agriculture, including representatives from the National Corn Growers Association, the American Soybean Association, the American Farm Bureau, and the United Fresh Produce Association, sent a resignation letter to the Leonardo Academy and the media. Additionally, 46 national agriculture organizations – from the American Seed Trade Association to Washington State Potato Commission – co-signed the letter (Williams et al., 2010). In the letter they contended that the Leonardo Academy's process of standard development was 'biased against a balanced and open analysis

of modern agriculture'. In a press release, Mr. Arny of the Leonardo Academy responded that he and other officials of the Leonardo Academy were saddened by the organizations' resignation, but they were welcome to rejoin the process in the future (Leonardo Academy, 2010). On 28 October 2010, the Leonardo Academy issued a call for new members in the producer, user, and general interest categories. On 9 February 2011, three more committee members representing conventional agriculture resigned by sending a resignation letter to both Mr. Arny and the media (Greenhouse Grower, 2011). Similarly, in their resignation letter, they claimed that 'the current committee make-up and established process' would not 'lead to the intended outcome of a National Standard acceptable to agricultural businesses'. Additionally, they noted that other initiatives currently underway are likely to 'develop meaningful standards for our industry much faster' (Greenhouse Grower, 2011).

After the withdrawal of a substantial number of the committee members, work in the subcommittees largely came to a halt. The Leonardo Academy needed to refill the standard committee and reassign volunteers to serve on the different subcommittees. As one interviewee commented, 'when such a massive number of people resigned, it slowed down the process significantly'. By the next annual standard committee meeting in April 2011, seven new members were added to the standard committee. The April 2011 meeting was focused largely on 'reactivating the subcommittees', as another interviewee claimed. Since April 2011, the focus has been on filling vacant committee seats, and the subcommittees have focused on drafting the standard. A draft of the standard were presented at the fifth standard committee meeting in Washington DC in April 2012. Currently, the standard committee is revising the draft standard for release for public comment.

Legitimizing Standards and Ensuring Legitimation: Analysis of LEO-4000

Drawing on Tamm Hallström and Boström's (2010) framework of input, procedural, and output legitimacy, the standard-development process of the LEO-4000 initiative is analysed in the sections below. Specifically, the representativeness and balance of the standard committee, the kinds of decision-making practices used, and the potential for the standard to be adopted are assessed. At the end of each subsection, we present some preliminary observations on standard-development and legitimacy in MSIs.

Input Legitimacy

At first glance, the Leonardo Academy's sustainable agriculture standard-development initiative appears to meet the requirements of input legitimacy. The LEO-4000 standard-development committee consists of members from four diverse categories: producer, user, environmental and general interest. As noted above, through a formal application process, the Leonardo Academy carefully selected an initial 58 representatives from a pool of nearly 200 applicants based on their experiences, skills, and credentials. As a result, the committee included representatives from 'a broad range of perspectives from across all areas of agriculture, including commodity producers, specialty crop producers, agricultural product processors and distributors, food retailers, environmental, labor, and development organizations, NGOs, industry trade associations, government representatives, academics, regulatory officials and certi-

fiers' (Leonardo Academy, 2012b). In particular, given the potentially contentious character of the standard, the Leonardo Academy paid close attention to balancing representatives from conventional and alternative agriculture on the committee.

However, analysis of the LEO-4000 standard-development process indicates that establishing and maintaining input legitimacy is more complex than ensuring balanced representation. First, at least in the case of the LEO-4000 initiative, committee membership has not been stable. Since the first standard committee meeting in September 2008, there have been several changes in the committee's membership. Most notable was the resignation of representatives of conventional agriculture in late 2010 and early 2011. When committee seats opened up, the Leonardo Academy advertised them and solicited new applications, and also tried to fill the vacancies from the pool of previous applicants who were not selected. However, while sometimes the Leonardo Academy has replaced departed members fairly quickly, other times filling vacated seats has taken considerable time. Furthermore, in some instances, committee members have not been replaced. For example, whereas the standard committee meetings in 2008 and 2009 had 59 and 58 members on the committee, as of early 2012 there were only 48 members on the committee (Leonardo Academy, 2012b). As the number of committee members fluctuates, the balance between stakeholder categories also varies. Thus, depending on the point in time at which the standard committee membership of LEO-4000 is assessed, it may have more or less input legitimacy.

The second factor that needs to be considered in assessing input legitimacy is the standpoint of actors. Research on MSIs indicates that not all actors always agree on what constitutes a balanced committee (Tamm Hallström and Boström, 2010; Brunsson et al., 2012). From the first standard committee meeting in 2008, the make-up of the committee was a contested point. Points of contention included whether or not all affected stakeholders were represented adequately, as well as the balance of stakeholders. For example, at the first standard committee meeting, Dr. A.J. Bussan from the Department of Horticulture at the University of Wisconsin noted on multiple occasions that key stakeholders were missing from the committee. Specifically, he maintained, 'many interest groups are not represented on the committee – animal agriculture and related fields' and asked 'how will we deal with this as a committee?' (Leonardo Academy, 2008). At the same time, Mr. Jonathan Kaplan from the National Resources Defense Council, countered that 'environmentalists feel under-represented (less than 1 in 4). Probably more than half of [committee members] are already producers'. Thus, he expressed that he was 'leery of adding more producers' (Leonardo Academy, 2008).

The question of the balance of committee members has continued to be a key point of contention throughout the standard-development process. It came to a head with the resignation of the 13 committee members in 2010 and 2011. The initial 10 members who resigned, alleged that the LEO-4000 initiative was 'biased against a balanced and open analysis of modern agriculture' (Williams et al., 2010). Specifically, they stated:

'Mainstream agriculture has been given a decided minor voice in Leonardo Academy's process... Despite the Leonardo Academy's claim that the Committee is made up of members from "across all areas of agriculture," in reality the Committee is dominated by environmental groups, certification consultants, agro-ecology and organic farming proponents. These groups have neither the vision nor desire to speak for mainstream agriculture and

the 95 percent of farmers who will be materially affected by any resulting standard' (Williams et al., 2010).

However, other committee members contested this interpretation of the committee membership, noting that it was well balanced. For example, one interviewee, commenting on the resignations, said, 'Well, it probably is a lot less balanced now, right?... Because they walked away. But I think it was pretty balanced before.' Additionally, in interviews, proponents of alternative agriculture noted that the 13 committee members resigned only after they narrowly lost votes on principles that defined sustainability in ways with which they disagreed. Hence, they argued that the members resigned because the initiative was advancing a notion of sustainability that they disagreed with. Thus, the interpretations of committee membership indicate that actors' social location affects their perception of a balanced committee.

Based on the case of LEO-4000, several preliminary observations regarding input legitimacy can be made. First, in highly politicized areas, such as sustainable agriculture, input legitimacy may not be possible. This is because what counts as balanced representation is subjective and thus, likely to vary significantly between representatives of conventional or alternative agriculture. Second, what constitutes a balanced committee is not a simply a technical practice, but also a political question. Put differently, establishing and maintaining input legitimacy entails not only selecting representatives, but convincing both committee members and interested parties that the representatives on the standard committee are both appropriate and balanced. Lastly, input legitimacy is a process that actors can contest in order to try to discredit and/or stop an MSI. Today, regardless of their standpoint, interviewees largely agree that the committee is not as balanced as it initially was. With the withdrawal of many of the representatives from conventional agriculture, the committee tends to favour advocates of alternative agriculture now.

Procedural Legitimacy

The LEO-4000 initiative *structurally* has procedural legitimacy in that the standard-development process is characterized by participatory, democratic, and transparent practices. First, regardless of the size or influence of the organization they represent, every committee member has an equal voting right (i.e. one vote). Second, committee members, as well as observers, can and are encouraged to serve on the subcommittees of their choice and participate in writing the standards. Third, the work conducted in each subcommittee is shared in the full committee meetings, where everyone has the opportunity to comment. Fourth, discussion is encouraged in order to try and reach consensus. Lastly, nearly all of the meeting minutes are publicly available, as they are posted on the Leonardo Academy's website.

A key aim of the practices of MSIs is generating agreement among the diverse participants. Whereas input legitimacy requires the inclusion of diverse stakeholders, procedural legitimacy is designed to facilitate cooperation and consensus among committee members. In other words, the procedures of MSIs are designed not to eliminate interests and politics, but to overcome them by developing middle-ground positions that a majority of participants can support. The outcome, then, is as one interviewee commented, 'some middle ground that people can agree is beneficial to both sets of interests, but maybe not perfect for either one'. Additionally, to help facilitate consensus, MSIs tend to require that positions be supported by science.

In joining the LEO-4000 initiative, most stakeholders had the intent of advancing their own interests. For example, one current committee member, in interviews, described the standard-development process as follows.

[In a MSI] you don't maintain neutrality... You argue your invested interest. You argue your position and then after arguing you have a discussion and you try to come to acceptable middle ground... It's really not about neutrality, it's about... working through a process. You are provided a neutral environment. It's facilitated by Leonardo... So, people are representing their organization... So they are wearing the hat of that organization. It's not value-neutral.'

Thus, on the one hand, there were representatives of conventional agriculture on the committee who would like the standard to allow for, at least, some chemical use, and be open to all technologies, including GMOs. Consequently, for such committee members a sustainable agriculture standard should focus more on quantitative measures, techniques, and technologies that lessen the negative impacts of agriculture. On the other hand, many advocates of alternative agriculture opposed to the inclusion of GMOs in the standard, and wanted to develop a standard that would set 'aspirational goals'.

As the LEO-4000 initiative progressed, the committee members largely divided themselves into three groups based on their interests and understanding of sustainable agriculture. First, there were proponents of conventional agriculture, most notably larger industry and producer groups (e.g. the Farm Bureau, National Corn Growers Association, and the American Soybean Association). Second, there were supporters of alternative agriculture that were represented by environmental groups, certifiers, and academics. Third, there were those actors who were neutral' in the sense that they were not aligned with either of the aforementioned groups. In the language of interviewees, 'a conventional agriculture perspective' claims that 'current agricultural practices can be labeled as sustainable' and 'believe that they can continue to farm the way they are farming now indefinitely'. In contrast, from the 'progressive agriculture perspective', current agricultural practices 'need to be changed to be sustainable'.

At the third standard committee meeting in Fayetteville, Arkansas in June 2010, the tensions between conventional and alternative agriculture came to a head. As indicated by interviewees, prior to the meeting, it became clear that the meeting would be crucial in determining the future direction and potential outcome of the LEO-4000 initiative. Formally, the primary concern was whether the proposed standard would take the form of a graduated standard with different levels of qualification or a yes/no standard with a single qualifying line. However, the underlying tension was whether or not GMOs would be allowed in the standard. Reflecting back on the meeting, one interviewee, who is aligned with alternative agriculture, commented, 'the issue that the Earthworms felt, and we were there to make sure it did not happen, was that the GMOs would be part of the basic definition of sustainable agriculture'.⁸

Prior to the Arkansas meeting, committee members representing both conventional and alternative agriculture were working to strengthen their positions. For example, prior to and at the meeting, both groups collectively strategized. One member, who was aligned with alternative agriculture, described their strategizing:

'There were a lot of emails back and forth [prior to the meeting] and we were very active... Some of the leaders of the Earthworm group... organized the LISTSERV and organized the group through this LISTSERV... The Earthworms, we, were all linked together through the whole process and as important things came up we could talk to each other on our laptops... and we could coordinate the voting.'

Thus, there was clearly collective action and mobilization being undertaken by committee members representing alternative agriculture. Similarly, one ex-committee member interviewee noted that conventional agriculture committee members were also collaborating. He commented that it became rapidly apparent that because the 'alternatives had banded together' the 'conventional agriculture people had no choice but to work together'.

While the votes on the sustainability principles at the Arkansas meeting were quite close, they tended to favour the positions of alternative agriculture. Several months after the meeting, first 10 and then three more committee members publicly resigned from the LEO-4000 initiative. One interviewee noted that they undertook what is referred to as 'best alternative to a negotiated agreement' (BANTA), which is a right that all participants have in MSIs. He further explained that, 'when you're in a multi-stakeholder negotiation... either side can decide at some point it's no longer in our interest to negotiate and we're going to walk away. It has just happened and the mainstream agriculture interests reached that point.'

Two general positions emerged with respect to the resignation of the committee members. On the one hand, the committee members who resigned, together with other representatives of conventional agriculture, justified the action by claiming that the committee was unbalanced and undemocratic, as representatives of alternative agriculture dominated the LEO-4000 standard-development process. For example, one interviewee who resigned from the process argued that the proponents of the alternative agriculture did not act in good faith at the Arkansas meeting. He stated,

'They [advocates of alternative agriculture] weren't, in my opinion, being open and transparent. They were trying to do things at the last second. And they had the votes to do it, so they waited patiently while everybody thought they were on board with a consensus. Then at the last second they just changed it [their position].'

As a result, he and other members decided to leave the initiative. On the other hand, many committee members and observers, including some who considered themselves neutral, viewed the resignation as 'a political move' to try and delegitimize the initiative. For example, several interviewees explained that after the meeting in Arkansas, 'they [the committee members who resigned] didn't communicate to the committee for four months'. The other committee members tried to set up the sub-committee meetings to continue to move the initiative forward; however, nobody, including Mr. Army, could get hold of these committee members. 'Then without any warning, they all quit... with this... press release... It was completely orchestrated.' Hence, interviewees commented that the representatives from conventional agriculture were strategically using the media to construct the Leonardo Academy's sustainable agriculture initiative as biased and undemocratic.

Thus, whereas structurally the Leonardo Academy's standard-development process met the criteria for procedural legitimacy, in practice achieving and maintain-

ing procedural legitimacy has been difficult. Our findings indicate that, first, having procedural structure and rules in place did not always lead to practices that encouraged consensus building. Specifically, the procedures were not able to overcome the pre-existing differences that many of the committee members entered the process with. For example, one interviewee commented,

‘I think it [the LEO-4000 initiative] has been democratic and transparent. But the problem with democracy is if you have a vote, and the vote is 27 to 25, the 27 win but the 25 are not happy. And a lot of them left. And that’s the problem with democracy.’

Several interviewees affiliated with alternative agriculture commented that if the vote went the other way, and alternative agriculture lost, then there is a good chance that they would have resigned from the process. Additionally, several interviewees, who are affiliated with conventional agriculture, were critical of how consensus was defined in the initiative. Prior to the fourth annual meeting in 2011 in San Francisco – the first meeting after the mass resignations – a motion only needed a majority to pass.⁹ On this, one ex-committee member commented, ‘If you’re going to say majority rules then say majority rules, don’t say you’re going to rule by consensus. That was a problem.’ Thus, even if MSIs adhere to the practices of procedural legitimacy, this does not mean that they will be able to overcome pre-existing differences, especially in highly politicized areas such as sustainable agriculture.

Second, we found that, within the rules and procedures, there is significant space for politicking, maneuvering, and negotiating. Thus, as the standard-development process was highly politically laden, it became a battlefield among multiple stakeholders with diverse understandings of sustainability. Consequently, instead of being a forum to develop consensus, the standard-development process became a contested arena between two highly organized groups. For example, one interviewee described the process as ‘everyone had their guns drawn’ in that they were there to ‘protect their own interests’. Hence, to channel the standard in the direction that each side viewed as appropriate, the various interests manoeuvred within and outside of the standard-development process. Lastly, similar to input legitimacy, standpoint affects assessment of the procedural legitimacy of the LEO-4000 initiative. Whereas some interviewees commented that the process has been very open, fair, and transparent, others have argued otherwise.

Output Legitimacy

The third type of legitimacy necessary for the successful development of standards in MSIs is output legitimacy. Output legitimacy refers to the standard being supported and adopted by relevant actors (Tamm Hallström and Boström, 2010; Botzem and Dobusch, 2012). In the case of the LEO-4000 initiative, this entails the standard being adopted by farmers and supported by processors, retailers, consumers, and social and environmental advocacy organizations. Put differently, to be legitimate the standard needs to have both market and moral authority (Tamm Hallström and Boström, 2010). Since the LEO-4000 standard is still being developed and is at a draft stage, the extent to which it achieves output legitimacy cannot be fully assessed. However, based on its input and procedural legitimacy to date, whether the LEO-4000 will have output legitimacy can be preliminarily examined.

As noted above, to maximize its input legitimacy, the Leonardo Academy sought to have broad participation on the standard committee of all potentially affected stakeholders. Research indicates that high input legitimacy often increases adoption of the standard in that it increases the applicability of the standard and enrolls more potential adoptees of the standard (Botzem and Dobusch, 2012; Van den Ende, 2012). However, in the case of the LEO-4000 initiative, high input legitimacy, coupled with a breakdown in procedural legitimacy, may limit the output legitimacy of the standard. Specifically, in trying to maximize inclusiveness, the Leonardo Academy created a committee with diverse and, in many instances, conflicting understandings of what sustainable agriculture entails. Furthermore, the procedures were not able to lead to consensus on sustainable agriculture, as illustrated by 13 representatives of conventional agriculture having resigned from the committee. One outcome is that the standard committee now largely favours the views of advocates of alternative agriculture. Consequently, some committee members have expressed concern as to the effect this will potentially have on the resultant standard. For example, one interviewee commented that the resignation of the 13 committee members might 'permanently damage the process and... it [the initiative] may not be possible to come up with a national standard in sustainable agriculture through ANSI'. Hence, there is now concern that the resultant standard may not be perceived as legitimate because of a deficit of input and procedural legitimacy.

Additionally, with the resignation of the 13 committee members, the initiative has lost many of the key actors that could facilitate the adoption of the standard. Research indicates that networks and relationships are important for facilitating the adoption of standards (Van den Ende, 2012). Thus, without having committee members who represent conventional agriculture, which continues to constitute the overwhelming majority of US food and agriculture, the LEO-4000 standard is at a disadvantage in the marketplace. For example, when asked about the impact of the potential LEO-4000 standard, actors from conventional agriculture responded that it would be either a 'niche' standard or 'irrelevant'.

The resignation of the 13 committee members also raises questions as to the relationship between input and output legitimacy. Indeed, it is generally presumed that the more diverse stakeholders are involved in the standard-development process the more legitimacy an MSI has. Thus, ideally, MSIs should try to maximize their diversity of stakeholders. However, often not taken into consideration is that diverse stakeholder involvement also means that the resultant standard is likely to be less rigorous in terms of sustainability and ethics. For example, on this point, one interviewee commented,

'If it [the standard] were written in a way that could have included all those major field crop operations, then the standards would have necessarily been weaker in order to accommodate them. So... you have to do the math: weaker standards over greater acres versus stronger standards over smaller acres. Which is better for the environment? I don't know whether there is a conclusive answer to that.'

Thus, the LEO-4000 initiative points to a conundrum faced by MSIs. Specifically, how is output legitimacy maximized – through stringent standards that have lower rates of adoption, or weaker standards that have higher rates of adoption? Furthermore, if the standard leans too far on one side or the other, it faces undermining its

output legitimacy. In short, the LEO-4000 initiative raises the question of whether a 'legitimate' standard that is also stringent can be developed through MSIs.

Conclusion

MSIs are becoming an increasingly prevalent form of NSMD governance in food and agriculture. This article has examined the LEO-4000 initiative to assess the relationship between standard-development processes and legitimacy in MSIs. While ensuring legitimacy is a key task of MSIs, our case study of the LEO-4000 initiative indicates that this can be a complex and difficult process. Building on our analysis of the LEO-4000 initiative, in conclusion, we present three preliminary observations on legitimacy and developing standards.

First, whereas the prevailing position is that there are positive synergies between input, procedural, and output legitimacy, our findings indicate that this may not always be the case. Most notable is that a high level of input legitimacy may negatively impact procedural and output legitimacy. Specifically, in maximizing input legitimacy, the Leonardo Academy created a standard committee that was too diverse and divided to generate consensus. As a result, the standard-development process became a battleground between conventional and alternative agriculture, where each side used various strategies to try and advance their position. Additionally, as many representatives of conventional agriculture have resigned, the standard-development process now has less input legitimacy, but may have more procedural legitimacy in that it has become more cooperative and efficient. Nevertheless, given the controversies with respect to both input and procedural legitimacy, the output legitimacy of the potential standard is in question.

Second, we contend that legitimacy is relational. By this, we mean that the standpoint of a given actor or group affects how they view a MSI and the degree to which it is a legitimate. Unlike most 'technical' standards that have a single audience, 'social' standards, such as sustainability standards for agriculture, have multiple audiences (Murphy and Yates, 2011). This means that MSIs for social standards have to convince multiple audiences of their credibility. As the case study of the LEO-4000 initiative illustrates, this can be difficult in situations where there is significant variation in interests and perspectives. This raises questions as to the ability of MSIs to make standards that are legitimate, in the sense of broad and balanced participation, democratic- and consensus-based practices, and significant adoption, in areas that are politicized.

Lastly, our findings on the LEO-4000 initiative support other studies that conceptualize legitimacy as fragile for MSIs (Tamm Hallström and Boström, 2010; Botzem and Dobusch, 2012; Brunsson et al., 2012). As the LEO-4000 case demonstrates, legitimacy is an ongoing process, and the possibility of delegitimization is always present. Hence, borrowing from science and technology studies, we suggest that legitimacy in MSIs is performative. That is, legitimacy for MSIs is best understood as 'webs of relations [that] only hold if they are enacted, enacted again, and enacted yet again' (Law, 2008, p. 635). This means achieving and maintaining legitimacy entails constructing and stabilizing networks both internally (i.e. among the committee members) and externally (i.e. the larger networks that committee members are part of). We contend that such an understanding of legitimacy raises questions regarding whether the quest for legitimacy may overtake the objective of MSIs. In other words, given the current structure of NSMD governance, there is a danger that

enacting legitimacy may become primary objective of MSIs, and the actual content of the standards may become secondary. Given the above findings, we contend a dialectical perspective best captures the complex relations between legitimation and standard development in MSIs.

Notes

1. Other initiatives include the Field to Market Initiative, the Stewardship index for Specialty Crops, and the Sustainability Consortium.
2. One interviewee was with an organization that resigned from the LEO-4000 standard-development committee, but was not the actual person who resigned. Instead, the interviewee was the person in charge of sustainability for that organization.
3. This also seems to be the case globally, where MSIs are being used to develop many global standards. Prominent global examples include the Aquaculture Dialogues, Round Table for Responsible Soy, and the Roundtable on Sustainable Palm Oil.
4. What counts as appropriate is subjective and can entail any number of criteria, such as efficiency or democracy. Consequently, how actors or groups define what is 'appropriate' may vary.
5. For example, there has been debate as to whether small producers have been sufficiently included in the Roundtable on Sustainable Palm Oil and the Round Table for Responsible Soy (Cheyons, 2011).
6. Additionally, in making such a distinction between output legitimacy and the components of their framework, we contend that Fuchs et al. (2011) reify participation, transparency, and accountability. As our findings indicate, these are also negotiated outcomes and not objective criteria. This is a point on which we elaborate in the conclusion.
7. ANSI has two routes for initiating the standard-development process: 1. draft standards for trial use (DSFTU) and 2. project identification numbering systems (PINS). The DSFTU starts with a draft standard, whereas the PINS option does not begin with a pre-established draft standard. Given that SCS had developed a draft standard, the Leonardo Academy initiated a DSFTU process.
8. Over the course of the standard-development process, the proponents of the alternative agriculture on the standard committee began to call themselves the 'Earthworms' to distinguish themselves from other committee members.
9. At the San Francisco meeting, the guidelines were revised from 50% to 60% of the present members of the standard committee for a motion to be passed.

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The Limits to Voluntary Private Social Standards in Global Agri-food System Governance

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Abstract. Private agri-food standards, along with certification and labelling schemes, are rapidly becoming the predominant mechanism by which global agricultural production and trade are governed. This article examines voluntary private social standards (VPSS) and certification schemes in agri-food system governance and contends that, while such standards may secure important localized material gains, these are not altogether unproblematic. Furthermore, the potential for voluntary social standards to confront structural injustice in the agri-food system and to contribute to a transformation towards just and sustainable agriculture and food appear rather limited. It is argued that prominent multi-stakeholder standards are increasingly prone to capture by powerful private interests, and that a central role for decisive public regulation in agri-food system sustainability should therefore not be dismissed.

Introduction

The global agri-food system currently faces converging social and ecological crises, which stem directly from the fundamental contradictions of globalizing industrial capitalism (Weis, 2010). The subordination of social and ecological concerns to economic interests has become almost universal, as globalization processes have assisted capital to outpace and escape state-based regulation (Jessop, 2000). The resultant deterioration of interconnected social–ecological systems has accelerated to the point that the earth system as a whole is now threatened (Biermann et al., 2012). In agriculture, a thoroughgoing process of accumulation by dispossession (Harvey, 2003), characterized by land concentration and agribusiness consolidation, has had profound impacts on rural communities, as rural people have been simultaneously separated from the land and compelled to seek work in the cities or the ‘rural non-farm economy’. Smallholder farmers that have not been expelled from commercial production altogether are increasingly drawn into global networks of cross-border agri-food chains as suppliers to distant export markets.

Meanwhile, important shifts in the relative power and authority of public sector, corporate and civil society actors have accompanied the globalization of industrial capitalism. Significant in this respect has been the rise of non-state forms of govern-

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ance. The implications of private governance arrangements have been far reaching in the global agri-food system, as public sector regulation and standards have been overlain, and largely overtaken, by a multitude of private standards and codes of conduct. Recently agri-food standards have been reoriented towards product differentiation and the indication of a number of 'credence attributes' (Ponte and Gibbon, 2005), or 'extrinsic qualities' (Mutersbaugh and Lyon, 2009) associated with integrity of the production *process* rather than the material qualities of products themselves. As a result of trend, (social and environmental) sustainability standards and labels have proliferated in the agri-food sector. Advocates believe that private sustainability standards are an effective means to internalize social and environmental externalities of globalizing capitalism, and realize a sustainable agri-food system. Critics, however, hold that such standards are a distraction and a means for powerful corporate actors to maintain the status quo.

This article focuses primarily on voluntary private *social* standards (VPSS), which have arisen alongside private environmental standards or as a component of broader private sustainability standards. The article does not dissect or critique particular standards, but rather examines more general criticisms of various types of VPSS, reflecting occasionally on specific standards for illustrative purposes. My point of departure is the contention that despite localized benefits of VPSS, their value and promise should be judged according to their capacity to address the social inequalities and injustices that characterize the global agri-food system, and therefore contribute to the transformation of the system to one that is just and sustainable. The (in)capacity of VPSS to fundamentally transform relations of production and exchange in the agri-food system should also shed light on the role that private sustainability standards at large might or might not play in contesting and transforming neo-liberal capitalism.

The article proceeds as follows: Section 2 discusses the rise of private governance as a result of bargaining among corporate, civil society and public sector actors in the wake of contemporary globalization. Section 3 turns to shifting modes of governance in agriculture and food, and attempts to situate voluntary private social standards within broader agri-food system governance, before providing an overview, examples and a tentative categorization of types of VPSS with relevance to agri-food. Section 4 considers the effectiveness of VPSS in terms of, first, their scope to deliver material benefits in accordance with their stated aims and, second, their ideational and symbolic power as tools for the social construction of sustainability. Section 5 discusses limits to the transformative capacity of VPSS, and concludes with some reflections on the prospects of private governance and the need for alternatives.

Private Authority in the Wake of Globalization

The emergence and globalization of neo-liberal capitalism has seen a reconfiguration of interrelationships between state and non-state actors at multiple scales. On one hand, governments and public sector institutions have faced important challenges to their ability to effectively regulate, both within and beyond nation-state boundaries (Held, 2000).¹ Decisive regulation has been politically unsustainable in the face of 'Washington consensus' ideology and, increasingly, practically infeasible given the increasing complexity of globally integrated networks of production-consumption (Urry, 2003). On the other hand, private interests have succeeded in de-

ploying state power and authority (and diverting significant public resources) for the making, steering and policing of markets (Tickell and Peck, 2003). It is in the context of the reluctance and apparent inability of states to address many of the negative 'externalities' of global capitalism that alternative modes of governance have proliferated. Impetus has come from civil society actors and 'new' social movements as advocates for environmental sustainability, human rights and social justice (O'Connor, 1998; Buechler, 2000), but also from firms seeking regulatory certainty and commercial advantage, and from states in pursuit of administrative efficiencies and harmonization (Büthe, 2010).²

The reorganization of power and authority among state and non-state actors can be seen therefore as the pursuit of diverse agendas (and attempts to legitimate these agendas) by corporate, civil society and public sector actors alike. In this view, the array of actually existing private governance arrangements arise out of a multitude of struggles, stand-offs and compromises between actors in pursuit of governance regimes that align with their interests and bolster their political legitimacy. Current iterations of this bargaining game can be seen as a necessary response to converging social and ecological crises and the challenges these present for global capitalism generally, and the legitimacy of corporate actors in particular. Innovations in response to these sustainability challenges are becoming more central to contemporary capitalism, as it is reconstructed in the form of a postmodern brand of ethical capitalism (Žižek, 2011).

Civil society actors, and social movements more broadly, have been instrumental in reshaping transnational governance. Bernstein and Cashore (2007, p. 359) observe three firm-level responses to civil society critiques. An initial response involves 'fending off', whereby firms underline their compliance with national and international laws, and seek to discredit or marginalize civil society critics. In the event of renewed or increased pressure by civil society groups, potentially involving protests, public awareness-raising campaigns, boycotts and other more or less confrontational approaches, a second response is the introduction of company codes of conduct, corporate social responsibility (CSR) strategies, and other attempts by firms to reconstruct themselves as 'good corporate citizens' (Matten et al., 2003). Where these company codes and standards are seen as inadequate, continued pressure may compel firms to respond by adopting multi-stakeholder standards and third-party audited certification schemes (Utting, 2008), which are considered more transparent and legitimate than unilateral initiatives. This ongoing confrontation/collaboration produces non-uniform outcomes, depending on the calculations of firms and NGOs with respect to each other's behaviour in light of numerous contextual factors (Bernstein and Cashore, 2007; Mayer and Gereffi, 2010).

In particular, a wide range of private (and public-private) governance arrangements have emerged out of this bargaining in pursuit of desired regulatory outcomes. Private governance is defined here broadly as governance arrangements overseen by non-state actors – normally either corporate or civil society actors, or both in collaboration. Such arrangements may of course engage public sector actors and institutions to varying degrees, and interact with public regulation, but they are not driven by states – 'the sanctions involved for non-compliance are not enforced by the state, but by the market' (Busch, 2010, p. 67). Private governance arrangements therefore tend to be consumer focused, with impetus for corporate engagement coming primarily from the promise of social legitimacy secured through

'responsible' conduct (Bernstein and Cashore, 2007) – in the eyes of discerning customers and watchful civil society organizations.

Private governance approaches may involve individual actors or multiple collaborating stakeholders. In the case of the former, thousands of domestic and transnational corporations have established company codes of ethical conduct, CSR strategies and/or production and sourcing standards and associated labelling schemes in order to be seen to address a range of issues along their supply chains, including safety, quality, labour rights (and human rights more generally), social justice and environmental sustainability.³ Similarly, civil society organizations and NGOs have developed codes, standards, and monitoring and certification schemes independently around particular issues or targeting particular sectors. Multi-stakeholder schemes have also proliferated, involving cooperation among firms engaged in specific industries, the mobilization of CSOs around certain social and environmental issues, or the collaboration of corporate and civil society actors in specific sectors or in relation to particular issues. While there are important differences among the various types of initiatives, most arise out of tensions between the values and practices of corporate actors, on the one hand, and civil society groups (and society at large), on the other.

Global Agri-food System Governance in Transition

Friedmann (2005) has identified an emergent 'corporate-environmental food regime', linked directly to the larger restructuring of capitalism in response to 'green' issues, and characterized by 'very specific and unequal compromises among social movements, states, and powerful agrofood corporations' (2005, p. 228). In this awkward environment, new conditions of confrontation are laid down and new contradictions arise, as various civil society projects are appropriated by powerful corporate and state actors, so that the emerging regime 'is already contested by the very movements it draws on' (Friedmann, 2005, p. 257). However, while recent neo-liberal re-regulation and corporate re-branding have been primarily about 'greening', or addressing environmental concerns, the social dimension, I argue, has tended to be discursively and practically subordinated. Therefore, the contradictions of 'ethical capitalism' more broadly – and particularly the social dimensions – are deserving of critical attention. In what follows I frame contemporary agri-food system governance in terms of a broader renegotiation of transnational private governance, and discuss characteristics that may catalyse or block a transformation to socially and ecologically sustainable agriculture and food.

Situating Voluntary Private Social Standards in Agri-food System Governance

A clear tendency in the globalizing agri-food sector has been the expansion of private authority in parallel with consolidation in agricultural inputs, food processing, and (particularly) food retail. Unprecedented cross-border integration of supply networks has deepened interdependence between distanced regions of production and centres of consumption. Global commodity chain (GCC) analysis has shown how powerful firms can 'drive' chains in their role as lead producers or buyers (Gerffi and Korzeniewicz, 1994). In the agri-food sector, lead buyers such as transnational food processors and supermarkets govern global supply chains with increas-

ing efficiency via private codes and standards (Dolan and Humphrey, 2000; Reardon et al., 2003; Gibbon and Ponte, 2005; Biénabe et al., 2007; Minten et al., 2009).

Standards are defined here broadly (following Ponte et al., 2011) as norms selected as a model by which actors, actions and objects can be judged, compared and evaluated. VPSS more specifically, are standards promulgated by non-state actors, to which a number of parties voluntarily subscribe. They address a range of social issues (albeit often as part of a broader engagement with sustainability, quality and/or safety), including but not limited to labour practices, human rights, worker health and safety, ethical business practices, fair trade and community development. They apply to processes (at various stages of production, exchange and consumption), but also support the certification and labelling of products. VPSS may apply at various scales: from sub-national productive sectors, to global sourcing networks and supply chains, to industrial sub-sectors or entire industries. Before examining examples of VPSS in agri-food system governance, I briefly highlight the extent of diversity within this category of private governance, as this has been identified as often receiving insufficient attention (Henson and Humphrey, 2010).

First, *private* governance is often defined in opposition to *public* government or regulation, and described as arising in response to limitations of the latter. Insofar as 'public' and 'private' equate to 'state' and 'non-state' respectively, the public/private distinction has some conceptual value in identifying different types of governing actors in complex social reality. However, precisely this complexity renders the public/private distinction problematic, as public and private governance are not easily separated empirically. Historically, of course, private authority has been exercised alongside public regulation at multiple scales, and corporate self-regulation has long existed in parallel with government regulation (Rosenau, 2002; Vogel, 2009). Private standards must operate within national and international legal bounds, and their political legitimacy is often secured through compliance with and recognition by public regulation and state authority (Bernstein and Cashore, 2007). On the other hand, governments and multilateral institutions are increasingly looking to private standards as models of 'best practice'. While effective private authority may actually 'enhance state capacity by allowing the state to escape innate constraints and to focus more effectively on other areas of regulation' (Ponte et al., 2011, p. 4), it also serves to weaken the case for regulation (Gereffi et al., 2001; Newell, 2008; Busch, 2010). Interaction and interdependence between public and private standards is therefore very important.

Second, the distinction between *voluntary* and *mandatory* standards, is seldom clear cut. On the one hand, only states (and public sector institutions) can formally enforce regulations. Compliance with national food-safety regulations or binding international labour agreements, for example, is mandatory for parties to whom they apply. Firms and NGOs, on the other hand, cannot force adoption of or compliance with private standards, but must rely instead on persuasion (Pattberg, 2005). In practice, however, public standards need not be mandatory (indeed they often come in the form of recommendations or non-binding guidelines),⁴ while private standards in some cases and for some actors become *de facto* mandatory. For example, civil society groups, and global social movements mobilized around specific issues (Drache, 2008) can increase significantly the costs to firms of not adopting sustainability standards by threatening brand integrity and corporate image (Sasser et al., 2006). Similarly, powerful corporate actors (particularly lead firms in global commodity chains) can apply standards in such a way that compliance is essentially

a prerequisite for market access and commercial survival for supplying firms and farms (Fox and Vorley, 2006; Swinnen, 2007; Vorley et al., 2007; Lee et al., 2012). Thus while the voluntary/mandatory distinction is not straightforward, it is analytically useful in foregrounding shifting power relations in contemporary governance.

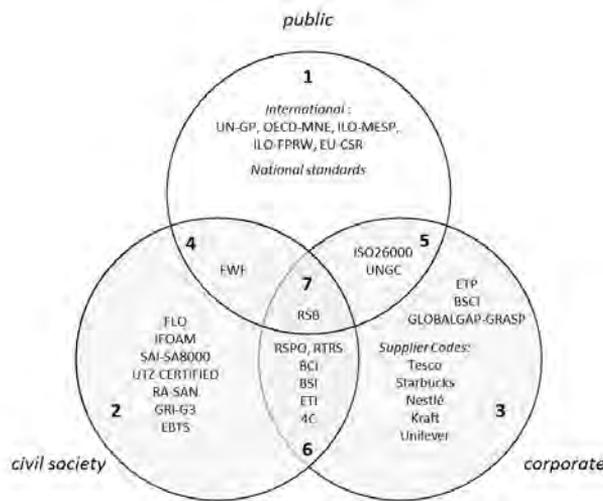
Third, private standards are frequently classified as addressing primarily either environmental or social issues. While there is a tendency among some standards towards increased acknowledgement of the inseparability of environmental and social systems, environmental and social initiatives remain largely separate in organizational and institutional settings. Cases can be made for both separation and integration of environmental and social issues in the formulation of sustainability standards (Blowfield, 1999), and research and analysis may also necessitate separate or integrated treatment. Overall, however, the private governance and standards literatures do not afford equal attention to both dimensions, and environmental concerns tend to dominate over social concerns.⁵ This, along with the observed separation of social and environmental issues in practice, and the underdeveloped and underprivileged status of social sustainability standards (along with the social dimension within broader standards) justifies attention to VPSS.

Overview of Voluntary Private Social Standards in Global Agri-food System Governance

VPSS have arisen over the last two decades within a globalizing agri-food system penetrated increasingly by capital at all stages of production/consumption. Three successive waves of voluntary sustainability standards can be identified (following Djama et al., 2011): 1. a social movement-oriented wave from the late 1970s, with its roots in organics and fair trade, initially supporting alternative models of production and trade and targeting niche markets; 2. a 'business to business' wave in the 1990s, founded on technical food safety and quality standards for mainstream markets; 3. a multi-stakeholder wave since the early 2000s, combining elements of both previous waves, and characterized by managerialist consensus formation, auditing and benchmarking. Standard schemes characterizing this latter wave emerge increasingly as 'authoritative' self-governing institutions, capable of strongly incentivising compliance, and sanctioning non-compliance (Bernstein, 2011).

Figure 1 depicts types of VPSS as outcomes of bargaining among public sector, corporate and civil society actors (following Abbott and Snidal, 2009). Contemporary civil society, corporate and multi-stakeholder standards are discussed below broadly in accordance with the three waves outlined above. Generally, standard types (and specific standards) associated with these historical waves, have co-evolved over time, and what can be observed at present is the product of overlapping waves and jostling between standard types – or what Busch (2011) has called a 'cacophony of governance'.

Figure 1 maps examples of standards schemes in global agri-food system governance. With the exception of region 1 (public), all regions of the Venn diagram may produce VPSS. Regions 2 to 5 represent private standards promulgated by civil society or corporate actors, with or without public sector collaboration. Regions 6 and 7 represent standards that are the product of bargaining between corporate and civil society actors, or among all three types of actor. For the purposes of this article I define the latter two sets as multi-stakeholder standards.⁶ Standard schemes are allocated to regions according to classification of the actor(s) with primary responsibility for governance of each scheme. This should be taken as indicative, rather than



Public standards	1	UN-GP	United Nations Guiding Principles on Business and Human Rights: Protect, Respect and Remedy (2008).
		OECD-MNE	OECD Guidelines for Multinational Enterprises (rev. 2011). Part of the Declaration and Decisions on International Investment and Multinational Enterprises (1976).
		ILO-MESP	International Labour Organization Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy (rev. 2006).
		ILO-FPRW	International Labour Organization Declaration on Fundamental Principles and Rights at Work (1998)
		EU-CSR	European Union Strategy for Corporate Social Responsibility (2011).
Civil society standards	2	FLO	Fairtrade Labelling Organizations International (est. 1997), Fairtrade Standards.
		IFOAM	International Federation of Organic Agriculture Movements (est. 1972), Organic Production Standards.
		SAI-SA8000	Social Accountability International (est. 1997), SA8000 standard for decent work.
		UTZ CERTIFIED	UTZ Certified (est. 2002): Coffee, Tea and Cocoa Codes of Conduct.
		RA-SAN	Rainforest Alliance (est. 1986), Sustainable Agriculture Network Standard.
Corporate standards	3	GRI-G3	Global Reporting Initiative (est. 1997), Sustainability Reporting Guidelines, Food Processing Sector Supplement (third generation, 2006, rev. 2011).
		EBTS	Union for Ethical BioTrade (est. 2007), Ethical Bio Trade Standard.
		ETP	Ethical Tea Partnership (est. 1997), ETP Global Standard.
		BSCI	Business Social Compliance Initiative (est. 2002), BSCI Code of Conduct.
		GLOBALGAP-GRASP	GLOBALGAP (est. 1997) Risk Assessment on Social Practice.
Multi-stakeholder standards	4	FWF	FairWild Foundation (est. 2008), FairWild Standard and International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants.
	5	ISO 26000	International Organization for Standardization, Guidance on Social Responsibility (2010).
		UNGC	United Nations Global Compact (est. 2000).
		RSPO	Roundtable on Sustainable Palm Oil (est. 2004), Principles and Criteria for Sustainable Palm Oil Production.
		RTRS	Round Table on Responsible Soy (est. 2006), RTRS Standard for Responsible Soy Production.
	6	BCI	Better Cotton Initiative (est. 2005), Production Principles and Minimum Criteria.
		BSI	Better Sugarcane Initiative (est. 2007), Bonsucro Standard.
	ETI	Ethical Trading Initiative (est. 1998), ETI Base Code.	
	4C	4C Association (est. 2003), Common Code for the Coffee Community (4C).	
	7	RSB	Roundtable on Sustainable Biofuels (est. 2007), RSB Principles and Criteria.

Figure 1. Private social standards in agri-food system governance.

definitive⁷ and it should be noted that only selected examples of important agri-food sector VPSS are presented. While an exhaustive stocktake would be impossible, an examination of selected cases allows some cautious assertions about the structure and dynamics of agri-food sector VPSS at large.

Public Standards

Public sector instruments (region 1, Figure 1), while obviously not private standards, interact in important ways with private governance instruments. In reality, region 1 is very densely populated by public social standards and regulations operating at various scales. The International Organization for Standardization (ISO) counts 111 member countries with fully developed national standardization bodies, and some 50 in the process of developing them. State-based standards are influential at a range of scales, but major multilateral agreements and initiatives in particular provide the foundation for many private standards. The basic human rights and labour dimensions of most VPSS can be traced to key multilateral treaties, including the United Nations (UN) Universal Declaration on Human Rights (1948), and the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work (1998), which address issues such as slavery, child labour, and the worst forms of exploitation and discrimination. The 2011 Guiding Principles on the UN Framework on Business and Human Rights stress the duty of states to protect citizens from harm inflicted by third parties (including businesses), and the responsibility of corporate actors to respect human rights. The Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises (rev. 2011) contain non-binding recommendations, endorsed by 42 OECD and non-OECD governments, on responsible business practices for multinational corporations. These largely require compliance with existing national and international laws and standards. The ILO Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy (rev. 2006) fulfills a similar function. Public sector initiatives with relevance to agri-food VPSS have also emerged from the European Union (EU) since the mid-1990s, the most recent development being the renewed EU Strategy on Corporate Social Responsibility (2011–2014), which provides a public policy framework in support of private CSR efforts (European Commission, 2011).

Civil Society Standards

Civil society actors have driven the development of agri-food standards with a strong social component in response to disparities and injustices created by globalizing industrial agriculture (regions 2 and 4, Figure 1). Prominent examples are the global fair trade and organic agriculture movements, which ‘challenge existing production and consumption patterns, and seek to create a more sustainable world food system’ (Raynolds, 2006, p. 51). Fair trade and organics have distinct origins and characteristics, but both arose out of social movements (in the global North) that sought to address directly impacts of modern agriculture. While fair trade is more obviously concerned with social justice and fostering sustainable livelihoods for producers in the developing world, the organics movement is also prominently underpinned by social values.⁸ Both (but particularly organics) witnessed a proliferation of certification and labelling schemes in response to growth in international agri-food trade and consolidation in the food retail sector from the late 1980s, but this was succeeded by a strong tendency towards convergence and harmonization. The Fairtrade Labelling Organizations International (FLO) and International Federation of Organic

Agriculture Movements (IFOAM) standards include strong provisions on human rights, employment and working conditions. FLO standards, in addition, provide for fair prices, payment conditions and supply contracts with producers across a number of subsectors, including bananas, sugar, cocoa, coffee, flowers, cotton and tea. While FLO is the most widely recognized fair trade initiative, there are other fair trade standards in the market, many of which are associated with specific products or retailers. Competition is even greater among organic standards and labels, where private standards exist alongside public regulation. Other examples of VPSS with origins in civil society initiatives are: the Social Accountability International (SAI) standard 'SA8000' on human rights and labour rights; the Rainforest Alliance 'Sustainable Agriculture Network' ecological and social standards; the 'UTZ Certified Codes of Conduct' for socially and environmentally responsible production of coffee, tea and cocoa; the Union for Ethical BioTrade 'Ethical BioTrade Standard' promoting 'sourcing with respect' of ingredients derived from 'native biodiversity'; the Global Reporting Initiative (GRI) 'G3 Sustainability Reporting Guidelines' for the food processing sector; and the 'FairWild Standard' for the sustainable collection of wild plants and crops.

Corporate Standards

Within private agri-food governance, corporate initiatives (regions 3 and 5, Figure 1) are most prevalent. Thousands of CSR initiatives exist, but they differ significantly in their origins, objectives, content and coverage. Although many initiatives amount to little more than aspirational statements, branding, or corporate philanthropy, the CSR programmes and codes of conduct of many large agribusinesses and food retailers incorporate substantive VPSS. The Tesco 'Nurture' scheme, Starbucks 'C.A.F.E. Practices', and the agricultural and supplier codes of food companies like Nestlé, Kraft and Unilever are prominent examples. Firms also act collectively to promulgate agri-food VPSS. Inter-firm collaboration can occur horizontally within industry associations or sectors, or vertically along supply chains. Examples of the former are the Ethical Tea Partnership (ETP) 'Global Standard', concerned with labour standards and worker health and safety in the supply chains of ETP members; and the Global Aquaculture Alliance 'Best Aquaculture Practice' standards, governing production and processing in a number of aquaculture sub-sectors, and incorporating worker health and safety and 'community relations'.

Perhaps the most prominent and prevalent corporate agricultural production standards belong to the GLOBALGAP good agricultural practice standards. GLOBALGAP was initiated by several major European retailers with the aim of harmonising their various food safety, labour and environmental standards.⁹ The more recent addition of a dedicated social standard, the 'GLOBALGAP Risk Assessment on Social Practice' (GRASP), allows supplier farms to be audited against a range of control points for on-farm 'social risks' – associated with employee rights, representation, and working conditions. GRASP, however, is a voluntary standard within GLOBALGAP, and compliance (or lack thereof) does not affect GLOBALGAP certification (see Heise and Uhlig, 2010). More specifically focused on social responsibility, but not exclusively targeting agriculture, the Business Social Compliance Initiative (BSCI) Code of Conduct is overseen by free-trade lobby the Foreign Trade Association. BSCI supports over 700 companies, including many food companies, in supply-chain monitoring and auditing against the BSCI Code. The code itself, like

other corporate codes discussed here, essentially integrates pre-existing ILO, UN and OECD conventions.

Several major standards integrate corporate and public sector initiatives, essentially extending public sector support to business self-regulation. In 2010 ISO added 'ISO 26000 Guidance on Social Responsibility' to its portfolio of over 19000 international standards. ISO 26000 is supposed to represent an international consensus on social responsibility and provides guidance for implementation of socially responsible practices within organizations. It is formulated deliberately as a 'soft' guidance document and not a certification standard like other important ISO standards. Also of particular significance in the landscape of high-level public-private initiatives is the 'United Nations Global Compact'. It also draws directly on basic UN and ILO principles and is specifically directed at corporate actors, 8,700 of which are currently signatories. Signatories are encouraged to address human rights and labour issues through the adoption of ten fundamental CSR principles.

Multi-stakeholder Standards

Multi-stakeholder standards (regions 6 and 7, Figure 1) emerging from interaction and bargaining between corporate and civil society actors and (less frequently) the state, are increasingly prominent in the agri-food sector. Multi-stakeholder VPSS have emerged out of the ongoing drive for legitimation on the part of *both* corporate and civil society schemes. A multi-stakeholder standard itself needs to have (and retain) legitimacy in the eyes of those party to it, or likely to join. But different actors demand different things in return for granting legitimacy, as Bernstein (2011, p. 28) notes: 'many global civil society organizations highly value accountability, participation, transparency and equity, while business actors may value efficiency, the rule of law, and fairness in the marketplace'. Despite their demands, these actors also require political legitimation from consumers, constituents and society at large, as they seek to 'scale-up' standards and embrace (and construct) mainstream markets for ethical products. Multi-stakeholder standards therefore tend towards consensus, balancing the legitimacy requirements of all parties.

Several notable examples of multi-stakeholder VPSS are relevant to agri-food system governance. While there are exceptions, most have emerged around particular agricultural commodities. Typically they incorporate actors from all stages of global agri-food chains, including farmers and rural workers (and their organizations), indigenous peoples, agribusinesses involved in primary production and processing, retailers, customers and consumers, and civil society actors. An increasingly common format for the governance of such standards is the 'round table' (Cheyns, 2011). The Roundtable on Sustainable Palm Oil (RSPO), for example, has certified over 600 oil palm plantations, processors and traders, and consumer goods manufacturers under its 'Principles and Criteria for Sustainable Palm Oil Production'. The Round Table on Responsible Soy (RTRS) maintains the 'RTRS Standard for Responsible Soy Production' and the 'RTRS Chain of Custody Standard', which govern primary production and the global movement of soy and soy products. The Roundtable on Sustainable Biofuels (RSB) certifies 'socially, environmentally and economically sustainable' production of biomass and biofuels. Other similar initiatives include the Better Cotton Initiative, the Better Sugarcane (or Bonsucro) Initiative and associated production standard, and the 4C Association's '4C Code of Conduct' for the coffee sector. Apart from their multi-stakeholder character, these initiatives have in common a commodity focus and a tendency towards multiparty consensus. More explic-

itly concerned with trading relations, and not focused on any single commodity, is the Ethical Trading Initiative (ETI). Established with support from the UK Government and the involvement of unions, companies and NGOs, ETI seeks to address poverty and vulnerability among workers and farmers engaged in the production of internationally traded consumer goods. The ETI 'Base Code and Principles of Implementation' is based on ILO labour codes, and has been adopted by over 70 corporate members, and major labour unions and NGOs.

The 'Effectiveness' of Voluntary Private Social Standards

This section focuses on VPSS as outcomes of bargaining between multiple actors in the struggle to attain, retain and consolidate authority, and further their respective goals and interests. Here I follow others who have conceptualized authority as the product of power and legitimacy (Bernstein and Cashore, 2007; Fuchs and Kalfagianni, 2010; Bernstein, 2011). Actors' competition for power and legitimacy (and governing authority), and the role of private standards in this, may be informed by the Gramscian notion of hegemony as a 'congruence of material and ideological forces that enables a coalition of interests to maintain a dominant position in society' (Levy, 1997, p. 129). In this reading, hegemony is secured through 'material control over economic resources as well as ideological control over symbols, imagery and modes of thought' (ibid.). In considering the role and implications of VPSS in the globalizing agri-food system, I focus below on their 'effectiveness' in two senses. On the one hand, we might ask how far various VPSS effectively address the well-documented socially deleterious effects of globalizing capitalist agriculture. On the other hand, we might ask to what extent VPSS effectively obscure and elide power relations and conditions of production and exchange in the global agri-food system. In this framing, the question of effectiveness is clearly a political one. My aim here is not so much to draw concrete conclusions on the effectiveness of VPSS in either sense, but rather to juxtapose these questions, and problematize the role of VPSS in this context. This, it is argued, can highlight blind spots in the arguments of both proponents and critics of VPSS (and private sustainability standards more generally), and further illuminate the contested and political nature of private agri-food system governance.

Material-Practical Effectiveness

The material impacts of VPSS, and related initiatives like CSR and ethical sourcing, within the agri-food sector are difficult to ascertain. To begin with, at the core of many VPSS are requirements to comply with existing laws and international agreements. While private standards may improve compliance, their particular contribution (e.g. to combating forced labour) is not easily established – that is, the attribution of positive change to a particular standard is not straightforward. Moreover, different social standards may interact in unexpected ways, and pose important trade-offs. As Scoones (2009) warns, for example, efforts to foster resilient rural livelihoods in one place often create vulnerabilities elsewhere (see also Ellis, 2000). Ultimately, despite burgeoning literatures on agri-food standards and private governance, there is little knowledge of how far VPSS have gone towards addressing global social problems. As in the case of CSR (Prieto-Carrón et al., 2006; Blowfield, 2007), there is

a far greater understanding of (and considerably more research on) the implications of standards for firms and firm strategy than there is of the impacts on communities at which VPSS are ostensibly aimed.

The business case for ethical and socially responsible practices centres on assertions about their coupling with firm financial performance. Within the business and management literatures, arguments for and against CSR, for example, are almost exclusively concerned with how far CSR either detracts from competitiveness and undermines profitability or secures favourable social and political operating conditions in the mid- to long-term (see Carroll and Shabana, 2011, pp. 88–89). The substantive social impacts of private standards and similar initiatives are usually asserted through both the reporting of aggregated statistics on membership and suppliers, and showcasing ‘success stories’ of smallholder farmers integrated into global markets.

Agribusinesses frequently highlight the scope and scale of their operations in asserting positive impacts of their sourcing decisions. For example, Unilever sources and processes product valued at almost US\$30 billion annually, and supplies major retailers like Walmart, Kroger and Tesco. With its ‘Sustainable Living Plan’, it has committed to sourcing all of its agricultural raw materials ‘sustainably’ by 2020 and aims to link some 500 000 smallholders and small-scale distributors into supply chains under its ‘Sustainable Agriculture Code’. Kraft Foods purchased 50 000 tonnes of Rainforest Alliance certified coffee, 24 000 tonnes of Fairtrade sugar, and 19 000 tonnes of Fairtrade cocoa in 2010. Starbucks reports that farms certified under its C.A.F.E. Practices standards employed some 2.9 million workers over the period 2008–2010 (Starbucks Coffee and Conservation International, 2010).

The figures reported by many civil society and multi-stakeholder schemes are similarly impressive at face value. For example, Fairtrade International members label the produce of an estimated 1.2 million producers in 63 developing countries. Global sales of FLO-labelled products rose by 27 percent to reach US\$5.6 billion in 2010 (Fairtrade International, 2011a). Meanwhile IFOAM counts over 750 affiliates in 120 countries, and reports 1.8 million certified producers in 2010, while global sales of certified organics were valued at US\$59 billion. The Roundtable on Sustainable Palm Oil has certified some 30 large-scale producers and 141 processing mills across the Asia-Pacific, Africa and Latin America, and reports 200 000 hectares under production by RSPO-certified smallholders. Social Accountability International (SAI) reports that in 2010 its SA8000 standard covered some 1.6 million workers employed at 2,700 facilities in 62 countries.

The expansion of these standards schemes is evident, yet they account for only a small proportion of global agricultural trade, and their actual material impact is unknown. Statistics on certified farms and farmers, suppliers and workers, under various private schemes provide a rough proxy for the scope and coverage of VPSS, but tell us very little about the integrity of the standards, the extent of monitoring and verification, or concrete benefits to farmers and workers. Similarly, sales of fair trade and organic products reflect the growth of these markets but reveal little about where power is concentrated, value is captured and rents are extracted along fair trade and organic commodity chains. These characteristics must be described empirically, and the expanding body of case-study research suggests that experiences are mixed, and benefits are not automatic or assured.

- Private standards serve as a neo-liberal tool (Busch and Bain, 2004; Blowfield and Dolan, 2008; Djama et al., 2011) by which powerful corporate actors, with

or without civil society collaboration, 'discipline' suppliers in the coordination of global supply chains. Even multi-stakeholder standards, which derive legitimacy from appeals to their inclusive and participatory nature, are often dominated by powerful corporate interests and/or NGOs (García-López and Arizpe, 2010; Cheyns, 2011; Ponte and Riisgaard, 2011). Insofar as standard-setting bodies tend to work within the global trading system and embrace free markets and South-to-North agri-food trade, they are almost certain to be co-opted and reproduce existing injustices. For example, fair trade certification may significantly increase returns to participating producers in developing countries, but this does little to address structural imbalances in global agri-food trade. This is reflected in the fact that of \$5.8 billion in Fairtrade sales in 2010, only 13% reached certified producers and workers (Fairtrade International, 2011b).

- Standards mostly originate in the global North, and embody values and norms of Northern consumers, NGOs and companies. Despite varying degrees of 'stakeholder engagement' and participation, the voices of developing country consumers and producers remain relatively marginalised. This is not to suggest that standards and standard-setting go completely uncontested. As a number of authors have noted, various corporate actors effectively negotiate and challenge prescribed standards (Fold, 2002; Campbell and Le Heron, 2007; Bain, 2010), while workers and farmers in developing countries also exercise agency in disrupting and adapting standards and standard-setting (Selwyn, 2007; Mutersbaugh and Lyon, 2009; Klooster, 2011). However, dominant private agri-food standards are controlled by Northern corporations and NGOs, and input by other actors is highly circumscribed.
- Though ostensibly voluntary, dominant standards may become de facto mandatory (Fox and Vorley, 2006), and pose insurmountable barriers to market access for different actors (Guthman, 2007; Fuchs et al., 2009; Reardon et al., 2009). GLOBALGAP is a prime example, having evolved into a prerequisite for European market access. The often prohibitive compliance costs create new patterns of inclusion and exclusion at different scales. Existing inequalities are exacerbated, as the firms and farms that are able to comply tend to be those that are already successful.
- There is arguably a necessary relationship between certified 'ethical' and 'non-ethical' production/consumption. As Guthman (2004, 2009) notes, it is the 'constructed scarcity' of ethical foods (constructed, that is, through product and process certification against specific standards) that enables extraction of economic rents, but also makes 'ethical foods' dependent upon the exclusion of, and differentiation from other 'non-ethical foods'. In this way, certification against VPSS and other standards of ethical production is an excludable service, and directly implicated in the perpetuation of 'non-ethical' practices. This confines certified ethical products to niche status (despite the 'mainstreaming' of certain ethical commodities) and, ultimately, constrains the expansion of fair trade, organic and ethical certification.
- Imperfect monitoring and enforcement of VPSS can allow various actors to persist with exploitative or unsustainable practices, and may even create unique opportunities for this type of behaviour (Challies and Murray, 2011). Where certified actors are able to get away with this – engaging in 'clean-washing' (Low and Davenport, 2005; Reynolds and Murray, 2007) – the ethicality and 'social sustainability' of entire supply chains can be compromised. This becomes

more likely as supply chains become more complex, and suppliers are further removed from standard setters. For the same reason that complex manufacturing chains are practically impossible to monitor in their entirety (Talbot, 2009), governance of agri-food chains becomes more problematic as we move from simple commodities to highly processed, multi-ingredient foods. Informal, seasonal, migrant and/or family labour (Barrientos and Dolan, 2006), and specific politico-cultural institutional structures (Pritchard et al., 2010) may also present governance challenges in South-to-North agri-food chains.

- Bargaining can lead to a weakening of standards over time, as pressure mounts to compromise and soften requirements in order to ‘scale up’ or ‘mainstream’ standards and recruit more and bigger firms (Bernstein and Cashore, 2007). This dilemma is reflected in the 2011 separation of Fair Trade USA from Fairtrade International as a result of the former’s stated need to make ‘more business-friendly decisions’, engage larger producers (particularly coffee estates), and boost sales (see WFTO, 2011). Of course multiparty bargaining does not *necessarily* lead to watered-down standards. The outcome of the process depends on the particular case and on the disposition and relative bargaining power of stakeholders.

In summary, evidence on the material impacts of VPSS is inconclusive. What seems clear, however, is that VPSS have as yet had very little impact in addressing major social issues and structural inequalities in the agri-food system. An accumulating body of case-study research reveals localized and uneven benefits, while the wider impacts of such standards schemes are less certain, and contradictory outcomes have created new patterns of exclusion and vulnerability. While this is probably unintended by those who promulgate private agri-food standards, standards can be (and are) imperfectly applied or hijacked and misused. Insofar as there is a gap between the presented or perceived realities, and the actual material realities of global agri-food production–consumption, sustainability standards and certification may be as much part of the problem as part of the solution. It is to the problem of a mismatch between what is implied by VPSS and what is actually achieved that we now turn.

Ideational–Symbolic Effectiveness

Private standards are pursued by certain actors for private gain. Indeed, the business rationale for voluntary social (and environmental) standards, and the basis on which they are actively promoted, is that sustainability ‘pays’. As discussed above, sustainable and ethical business practices can bring direct savings, create conditions conducive to business and command premium prices for certain products. But in addition to these direct benefits, pursuit of social responsibility, including the adoption of VPSS, serves to foster an image of benevolent corporate citizenship, and to legitimize firms (both individually, and categorically – as ‘the private sector’) as responsible social actors.

However, there is typically a gap between what corporate (and civil society) actors report or suggest the impacts of their activities to be, and what the impacts *actually* are. While this gap might reasonably be expected to be at its widest in the case of unverified firm-level codes, and at its narrowest in the case of audited multi-stakeholder standards, things are not so straightforward. Threat of consumer backlash, NGO scrutiny, and loss of brand value provides some disincentive for highly visible

firms (e.g. branded supermarkets and food companies) to deceive customers or contravene social norms. On the other hand, civil society and multi-stakeholder standards are not unproblematic, and the aims and demands of civil society actors cannot simply be assumed to align with social justice and sustainability (O’Laughlin, 2008). Yet despite mounting evidence of complications and contradictions with private sustainability standards, many hundreds of firms and thousands of their products, trade on the perceived integrity of prominent multi-stakeholder schemes.

The fact that VPSS *can* have positive local effects is vital to their ideational power. The extent to which VPSS can conceivably alleviate social problems such as poverty and injustice determines how useful they are for the discursive construction of responsibility and ethicality. That is, the perceived potential material effectiveness of VPSS is what makes them attractive to corporate actors, but they need not actually *be* effective to serve corporate ends. Much like with the notion of ‘triple bottom line’ accounting (Norman and MacDonald, 2004), the *idea* of social responsibility is more important than its real efficacy or lack thereof. This is the basis for corporate greenwashing, or clean-washing.

Multi-stakeholder standards are also implicated in the neo-liberal depoliticization of global problems and the forestalling of debate and contestation. Central to this is the role of consensus formation in multi-stakeholder standard setting. As VPSS seek to scale up and enrol more actors, a broadening of consensus generally occurs and, as consensus formation entails compromise, standards may be diluted. This is not a necessary outcome of consensus formation, but is likely where bargaining is shaped by underlying power imbalances, and prone to corporate capture. As Bernstein (2011, p. 43) concludes, this need not jeopardize the legitimacy of particular standards or actors: ‘There is no necessary relationship between legitimacy and solving the world’s environmental or social problems’.

The contradictory demands on corporate responsibility are highlighted by Blowfield and Murray (2008, p. 11): ‘on the one hand it must deal with [the fact that] capital, poverty and inequality are intertwined; on the other, it must promote capitalism as a solution to the key social and environmental issues of the age’. This mirrors the fundamental contradiction, described by Žižek (2011), inherent in the notion that (ethical) capitalism is capitalism’s own counter-agent, and evident in the ‘Starbucks logic’, which implies that consumers can counteract the negative impacts of their consumption by consuming products constructed as ‘ethical’. In this sense, while ethical production and consumption legitimates and validates Northern consumers, it disempowers Southern farmers and workers by putting their well-being into the hands of the ‘stewards of virtue’ (Blowfield and Dolan, 2008) among the consuming classes of the global North. The primary vehicle for securing social justice and sustainability becomes ‘ethical’ consumption.

Discussion and Conclusions: Limits to Voluntary Private Social Standards

Insofar as they tend to be captured and put to work in the service of capital – in constructing corporate actors as ethical and responsible, in obscuring the realities of production and exchange in global agri-food, and thereby creating an illusion of progress (and progressiveness) while perpetuating the status quo – VPSS work against their stated goals. The case of global agri-food system governance provides some insight into this tendency, and into the limited transformative capacity of VPSS. Compared to other productive sectors, the agri-food sector provides examples of global

commodity chains that can be relatively well delineated and grasped (Talbot, 2009). It is not that these chains do not entail complex productive relations or institutional settings, for example, but rather that the actors and sites of production and exchange can be relatively clearly identified. The implementation, monitoring and verification of VPSS in agri-food tends to be most successful in cases of simple unprocessed or semi-processed products like fresh produce, coffee, cacao, cotton, sugar, etc. It is no coincidence that the most important fair trade products are sourced from such commodity chains, which also happen to involve mostly former colonial crops historically produced under highly exploitative conditions. Producers of these crops are of course deserving of respect and fair treatment, but such commodities are also ideal candidates for fair trade and ethical sourcing because their production under fair, socially sustainable conditions makes for a particularly compelling and saleable story. Basic agri-food chains are therefore particularly appealing to firms and standard setters looking to showcase their ethical sourcing and certification activities. In consuming the whole 'backstory' along with the final product, consumers are able to 'know' and 'virtually engage' (Lyon, 2006) with the producer and/or farmer beneficiaries of their consumption choice (although this acquaintance is almost always a one-way street).

The value of high-visibility fair trade or ethically sourced products is significant for large agri-food businesses. Companies such as Kraft Foods, Unilever and Nestlé boast dozens of brands and thousands of products, and engage hundreds of thousands of suppliers. While some of these firms have made apparently bold commitments to social and environmental sustainability, they can only hope to implement sustainable sourcing meaningfully in a few product lines. So when a company like Kraft Foods commits to sourcing all of its coffee from fair trade certified sources the implications are significant. Simply by virtue of the volumes sourced, many growers and rural communities should benefit directly and indirectly. But this should be seen in the context of the social impacts of the less-visible majority of a company's sourcing practices, and attention should be paid to just how far it lives up to its image of social responsibility.

The capture of VPSS by corporate interests proceeds unspectacularly through the on-going process of implicit and explicit bargaining among public, corporate and civil society actors. The reluctance of states to regulate capital, and their active intervention to facilitate markets and private authority, has bolstered the bargaining power of corporate actors in the negotiation of arrangements for governance beyond the state (Swyngedouw, 2005). Despite the momentum behind various social movements, and the not insignificant power of NGOs, multi-stakeholder standards tend to converge on consensus, which serves to depoliticize issues such as global poverty and inequality, restrict the bounds of legitimate action and discussion (Hajer, 1995), and preserve the 'ecological dominance' of capital over state and civil society (Jessop, 2000).

To address social and ecological crises in agriculture and food a fundamental transformation is required, away from the current industrial capitalist agri-food system and towards truly just and sustainable agri-food systems. This article has proposed that the value of agri-food VPSS should be assessed against their capacity to contribute to such a transformation. I have argued that while individual standards schemes have been shown to have positive local effects, VPSS at large do not appear to have the transformative capacity to support a fundamental shift due to their susceptibility to capture by corporate interests. Even where individual standards

retain integrity and resist co-option, the field as a whole faces a crisis of legitimacy, as high-profile 'success stories' and examples of 'corporate social responsibility' obscure the persistence and predominance of unethical and unsustainable corporate practice (Fox and Vorley, 2006).

The dilution of standards and the depoliticization of social and environmental problems as a result of bargaining and consensus-formation within multi-stakeholder initiatives means that now many of the high-profile 'roundtable' standards entail little more than obligations to comply with existing national laws and international agreements. That standards and certification are required to motivate corporate actors to comply with even basic human rights and environmental laws would seem to suggest that these actors cannot be relied upon to self-regulate in the interests of the common good. The trend towards corporate co-option of private sustainability standards highlights the realm of sustainability governance as one which should not be left to the market, but rather calls for regulation by strong democratic states.

Positive alternatives to agribusiness and global agri-food trade (and to globalizing capitalism more broadly) emerged from social movements like organic agriculture and fair trade. The rationalization, standardization, verification and auditing of these projects only became necessary as they themselves were lured into 'mainstream' markets and global trade. I suggest that insofar as a transformation away from unsustainable capitalist agriculture is necessary, and as sustainable alternatives will need to embrace social and ecological diversity, the value and utility of global private standards can and should be questioned.

Notes

1. The point here is that the role of the state has been transformed rather than simply diminished. States remain powerful not least in their enforcement of neo-liberal policies.
2. Technical experts across various sectors and epistemic communities in the standard-setting profession (Murphy and Yates, 2011) have also driven demand for private governance (Busch, 2010; Büthe, 2010).
3. There are no reliable data on the number of companies that have adopted various types of voluntary standards, but the phenomenon is very widespread. There is also great diversity among such schemes, which range from outright 'greenwash' to relatively progressive codes of conduct.
4. The capacity of states to govern directly (through coercion and enforcement) is diminished at the transnational scale, where they, like civil society organizations, must rely more on persuasion, leadership and legitimation (Abbott and Snidal, 2009).
5. This even despite the significant body of scholarship on fair trade and CSR. The latter in particular appears to focus increasingly on environmental dimensions, as CSR is subtly reframed as 'corporate responsibility' or 'corporate citizenship'.
6. I adopt the broad definition of 'multi-stakeholder initiatives', provided by Fransen (2012, p. 116), as 'a universe of initiatives in which the expertise, skills and finance of non-profit and for-profit organizations are pooled'. I do not argue, however, that these necessarily have 'governance structures allowing for an equal possibility of input among the different partners in steering the initiative' (ibid.).
7. Figure 1 is based on Abbott and Snidal's (2009) 'governance triangle' framework. The approach taken here is somewhat simpler, in not differentiating between standards *within* regions of the diagram.
8. The foundational principles of organic agriculture as defined by IFOAM are health, ecology, fairness and care. Fairness, for example, is characterized by 'equity, respect, justice and stewardship of the shared world', and requires 'systems of production, distribution and trade that are open and equitable and account for real environmental and social costs' (IFOAM, 2005).
9. On the development of GLOBALGAP, see Campbell, 2005; Campbell and Le Heron, 2007; Bain, 2010.

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On the Moral Equivalence of Global Commodities: Placing the Production and Consumption of Organic Bananas

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Abstract. Rapid change and growth in certified organic food sectors has led to the development of export-orientated certified organic food production in developing economies. This lengthening of the supply chain requires the development and implementation of meaningful standards to make the production process in developing countries legible to consumers in developed economies. As an example of the globalization of organic foods and analysis of its corresponding standards, this article discusses the political, cultural and economic context for the supply of and demand for organic bananas in the Dominican Republic and the United Kingdom, respectively. We focus on the role of certification schemes that have emerged in response to this global expansion, and suggest that, contrary to consumer expectations, there are political, economic and environmental outcomes that are inconsistent with organic standards.

Introduction

Organic foods are receiving much attention of late, both from consumers demanding fresh, quality and ostensibly safer foods (Soil Association, 2011), and from academics attempting to understand the intersections of economic and cultural value embedded in a rapidly growing consumer market and expanding social movement (Morgan and Murdoch, 2000; Zanolini and Naspetti, 2002; Milestad and Hadatsch, 2003; Baker et al., 2004; Dabbert et al., 2004; Guthman, 2004a; Rosin and Campbell, 2009; Goldberger, 2011). The involvement of organic bagged spinach in the 2006 E. coli O157:H7 outbreak in the United States revealed the embeddedness of organic agriculture in the conventional food system and the increasingly uneasy tensions and blurry lines between organic and conventional agricultural practices and products. Historically, consumers of organic foods have chosen organic produce because of a personal conviction about what is not in the food (namely pesticides and fossil fuels) but, as the organic agriculture sector grows increasingly larger and organic foods are more widely distributed and more processed and packaged, the alternative basis of

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consumption is increasingly challenged (and in some cases revealed) by the realities of production practices, suggesting a logical fallacy of moral equivalence.

This article responds to questions posed by Freidberg (2010) regarding the demand for metrics and the rigor and purpose of private standards in food governance, including the question of 'who can eat what in different places' (p. 1872). In particular, this article focuses on the role of standards in 'audit culture' (Campbell, 2005) in making certain aspects of the organic supply chain legible, while obscuring others. The organic sector has been growing at a faster rate than the food market as a whole, and production is rapidly expanding throughout the world from its base in developed economies as consumers demand exotic and seasonal fruits and vegetables year round (Soil Association, 2011). Research on the expansion of this sector can hardly keep up with its growth, much less with the social implications of a continuously and rapidly evolving market. Using organic bananas as a case from which to draw conclusions, we investigate the consequences for organic production and consumption with the expansion of the organic sector into developing countries, as driven by the needs and requirements of consumers in developed economies.

We are interested in: how organic bananas are viewed by these consumers, particularly in the United Kingdom (UK); the role of private standards in an extended supply chain; and the realities of production in developing countries, with a particular focus on the Dominican Republic. This article is divided into three parts. In the first part, we will outline the structures of consumption, certification and production of organic foods, with particular emphasis on the development of certification schemes. In the second part, we will discuss production and consumption for organic bananas, using the Dominican Republic and the UK as case examples. In the third part, we will discuss how, contrary to UK consumer expectations, there are political, economic and environmental outcomes of organic banana production that are inconsistent with organic standards. These outcomes, ironically, are driven by the certification process, which allows for the extension of the supply chain and renders certain production practices illegible to consumers.

The Organic Food Production System

Organic foods are unique in several ways. First, organic fresh fruits and vegetables gain additional value through controlled and monitored production processes, which are traceable and accountable through certification schemes. Organic food eaters consume more than just the commodity: they pay a premium for what *is not* added to the product (pesticides, growth hormones, genetic modification) or, in the case of social issues, the *perception* of contributing to a more just food system (especially regarding rural development and working conditions). Second, organic food social movements have emphasized the establishment of networks of trust through short supply chains, where producers have face-to-face interactions with consumers and can assure the quality, security and safety of food products to the consumer, either through certification or personal relationships (Renard, 2003; Renting et al., 2003; Freidberg, 2004). Organic foods have ultimately gained additional value through embeddedness, by promoting an ethos of 'localness', which encourages consumers to invest in particular cultural values (sustainability, local, alternative).

The internationalization of organic agriculture presents challenges in providing many of the qualities consumers seek to find in organic foods, including the safety and quality of the food itself, as well as contributing to the preservation of rural and

agricultural livelihoods in both developed and developing market economies. The consumption of organic foods imported from developing countries in preference to conventional foods may actually present a problem of moral equivalence when considered from the standpoint of social, environmental or political realities in the places of production. Working backwards from consumption in the UK to production in the Third World, and the Dominican Republic in particular, we seek to address this question through the analysis of one particular commodity: the organic banana. The following discussion sketches the organic food supply network and how organic values are infused and codified in organic foods via standards.

Consumption

The growth in demand for organically produced food continues to outstrip supply worldwide (FAO, 2001; Barrett et al., 2002; Soil Association, 2003; Dabbert et al., 2004; Willer and Kilcher, 2011). Growth rates for organic food consumption have ranged between 10–40%, and up to 85% in Europe (Dabbert et al., 2004). Organic Monitor reports that worldwide organic food and drink sales have trebled between 2000 and 2010, rising from US\$18 billion to US\$59 billion (Willer and Kilcher, 2012). The biggest increase in organic demand occurred between 2004 and 2005, as a nexus of increased consumer and producer awareness, production subsidies or other assistance, production scale economies and greater adoption within the retail sector permitted demand and supply to grow simultaneously, albeit not necessarily conjointly (Rigby et al., 2001; Soil Association, 2006, 2010). Nonetheless, the percentage of total food consumption comprised by organic foods remains rather low: the United Nations Food and Agriculture Organization (FAO) estimated a range of 1–3% of food expenditures for most developed economies (FAO, 2001), with the United States falling in the middle of this range in 2010.¹ The majority of organic food consumption currently takes place in developed economies, with production increasingly occurring worldwide, although ongoing global economic recession has slowed sales somewhat (Willer and Kilcher, 2011).

It is well documented that an increase in organic food consumption follows food scares and particularly so in the UK where consumers lost trust in the safety and quality of the food supply following scares over the last decade (Renard, 2003; Freiberg, 2004; Guthman, 2004a). Organic foods are perceived to be safer because of the traceability of the food product and the perception that organic farming uses less toxic or more 'natural' chemicals in production. Interlinked with the organic food movement are local foods movements, which emphasize establishing relationships of 'trust' between consumers and producers with short supply chains (Halwell, 2002; Winter, 2003). The movement is embedded philosophically in a desire to promote rural development in developed economies, but equally important is retaining a market niche that is increasingly dominated by supermarkets and retail organic/natural food chains. Sixty per cent of British consumers of organic foods are more likely to state a preference for UK origin, and 70% of those preferring local foods indicate a willingness to pay more for it (Soil Association, 2004).

Codifying Supply

The 'organic movement' is considered generally to begin with Dr. Rudolf Steiner's 1924 Agricultural Course and writings on biodynamic agriculture, based in Dornach,

Switzerland. Graduates of the Agricultural Course established biodynamic farming practices throughout interwar Switzerland, Austria and Germany, and organic-style farming is commonly known in these countries as ecological or biological farming (Dabbert et al., 2004). The codification of organic/biodynamic farming predates the introduction of nitrogen fertilizers, growth hormones and antibiotics and the intensification of scale that occurred from the 1950s onward (Dabbert et al., 2004). However, growth in organic food production and sales was slow for most of the twentieth century, with substantial growth only occurring from the late 1980s. In the very early years, most consumers were also producers, and the development and proliferation of standards and certification schemes was coincident with the expansion of supply and demand (Campbell and Liepins, 2001). The Soil Association, founded in 1946, is now the UK's leading organic certifier and lobbying organization (Reed, 2001) and was instrumental in establishing a normative discourse of what ought to be, rather than what can be positively proven. This included the establishment of standards and a subsequent role as a certifier and of managing/coordinating the supply chain. It increasingly assumed quasi-governmental roles of (self-)regulation and information provision (through the Organic Conversion Information Service), and increasingly adopts these roles in the developing nations of Africa and elsewhere.

The organic food sector has benefited from the establishment of organic as a multifaceted and multilayered signifier: of reassurance of the process of production; of the 'fairness' of the product to the environment and society; and of the distinctiveness of the sector as a whole, as a brand. Indeed, Guthman (1998) suggests that the expansion of the organic market is simply one more way to differentiate a product (see also Adams and Salois, 2010). This differentiation has been achieved through the system of certification, which enables producers and retailers to attach a branded sign of acceptance to organic products through the establishment of standards and accreditation of certifiers. Guthman (1998) also observes that this is a double-edged sword for producers and consumers, as regulation makes 'nature safe and available' for consumers, but it also makes 'organic agriculture safe for capitalism' (p. 150; see also Mutersbaugh, 2004). Consumers seeking a more social form of food production increasingly have to look elsewhere, while consumers seeking an ostensibly safer or more legible product need only look for a certification logo (Figure 1).

The certification system attempts to provide reassurance to the end consumer of an authenticated and seamless production and retailing system. Meuwissen et al. (2003, p. 53) define certification as 'the (voluntary) assessment and approval by an (accredited) party on an (accredited) standard'. For this to be reassuring and seamless to the consumer a number of factors must come into play. First, the 'standard' must be meaningful to both consumers and producers, as both desirable and attainable; second, the accrediting 'party' must be credible in ensuring said standards are



Figure 1. Organic certification logos.

adhered to. Jahn et al. (2005, p. 57) term the resulting certified mark as a 'quality signal', which in turn enables higher margins (Guthman, 2004c). This is reflected in the inclusion of 'quality' claims in many organic certification labels (Figure 1). Establishing and maintaining a meaningful standard, and the credibility of the certifier, are essentially exercises in brand creation. Certification symbols, or organic brands, have evolved and become established in complex ways, which bear a brief review.

The UK's Soil Association first published a set of organic production guidelines in 1967 to assist the conversion to organic production; by 1973 this had been codified into a set of certifiable standards, enforced and inspected by the Soil Association Organic Marketing Company (now known as SA Certification Ltd, SACL), a wholly-owned subsidiary of the charity. In 1983 the Soil Association helped create the British Organic Standards Committee, in concert with other newly established (mostly) national certification organizations such as Organic Farmers and Growers, Scottish Organic Producers Association, and the Bio-Dynamic Agricultural Association (using the Demeter logo). This was superseded in 1987 by the UK Register of Organic Food Standards (UKROFS), the governing body that helped oversee the substantial growth in UK organic food production and consumption through the 1990s, and which became a minor-league certifier in its own right. In 2003 UKROFS was replaced by the Advisory Committee on Organic Standards (ACOS) of the Department for Environment, Food and Rural Affairs (DEFRA). The increasing scale of regulatory enforcement partly reflects the increasing scale of production and trade, but also the introduction of first UK (1983) and then EU (1991) regulations governing organic food production, labelling and sale.

Along with the increasing numbers of suppliers and regulations has come proliferation in certification and labelling schemes. In 2002 there were nine UK certification bodies recognized by UKROFS; in its final year the body approved a further five. SACL, responsible for the most commonly found UK5 identification code, attracts the largest number of suppliers, and supplies an estimated 80% of all certified organic products sold in the UK (Soil Association, 2012). Of these UK certifiers, only SACL is accredited with IFOAM (the International Federation of Organic Agriculture Movements), and therefore has international credibility. SACL also enjoys preferential treatment from the UK supermarket chain Sainsbury's, which will only stock products carrying the Soil Association UK5 mark.² Consumers must recognize a certifier's brand, such as the Soil Association's UK5 code or logo, and believe that the organization is trustworthy in vetting and monitoring production and retailing processes, with this belief established perhaps through public relations campaigns, prior experience, or word of mouth. What the consumer does not see in the 'certified organic' code or logo is the complex web of inter-organizational relations that are required for the organic food production system to appear so seamless (Figure 2).

The 'sharp end' of the certification system involves an agent from the certifying body (such as Soil Association Certification Ltd) inspecting a farm and observing its production processes and paperwork. The certifying body in turn must submit its certification inspection systems for approval by state bodies (such as the UK's, ACOS) and, desirably, international bodies as well (such as IFOAM, 2005). These 'meta-certifiers' allow the standards of one certifier to be equated to those of others (those accredited by IFOAM), in the same country or internationally. What this is supposed to mean is that a strawberry from a farm certified by SACL should be as 'organic' as a strawberry from a farm certified by Bioland eV of Germany or Organic Crop Improvement Association International (OCIA) of the United States.

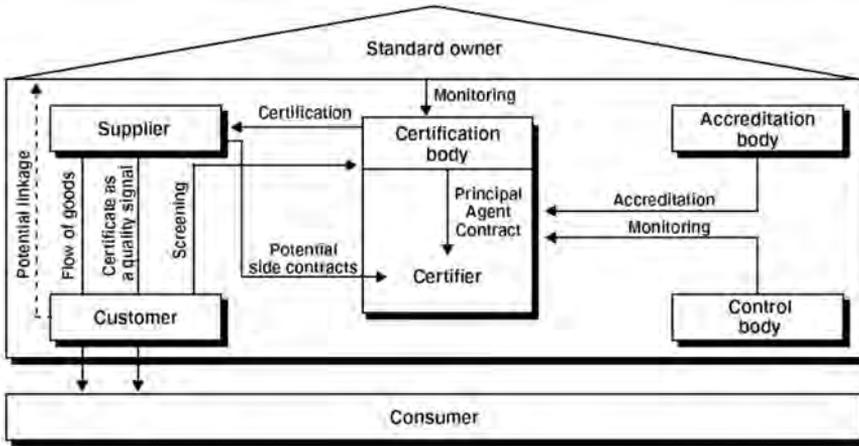


Figure 2. Certification process.

Source: Jahn et al., 2005, p. 60.

All three of these certifying bodies are accredited to IFOAM, and thus carry the moral (although not legal) weight of equivalence. Each certifier operates in different ways, however, with variations in the frequency of inspections, checklists used and allowable levels of 'must-haves' (separation distances from non-organic production, crop rotation frequencies, livestock densities) and 'must avoids' (pest control mechanisms, antibiotics). Consumers may not be able to observe or taste the difference in these legalistic minutia, but to a farmer the differences can be quite important administratively, operationally and financially. In practice the standards that are comparable internationally are the absolute minima that can be agreed to comprise 'organic': no artificial chemical pesticides, nitrate fertilizers or growth-enhancing pharmaceuticals, and no genetic modification (for discussion of the IFOAM Basic Standards, see Reynolds, 2004, p. 731).

Globalizing Production

Dabbert et al. (2004) argue that while organic food production and consumption may have been rooted initially in a social movement, policy directives and subsidies in the EU have played a crucial role in expanding production and consumption. Guthman (2004a) argues that organic food production is driven by the value-seeking behaviours of both small-scale and large-scale producers. She suggests that high land values, and the resulting imperative to extract greater returns, pushes producers into high-value, niche markets. The influence of market forces on organic production has the effect of reducing it to a technical practice (Renard, 2003; Guthman, 2004a; Harris, 2005) that lends itself most simply to the production of commodities, not the production of community or healthier food or more productive soils. Critics of the technocratic and industrializing directions of organic agriculture call this process 'conventionalization', which has been subject to much attention and debate in recent years (Campbell and Liepins, 2001; Guthman, 2004b; Goldberger, 2011).

There are a number of reasons given to justify the expansion of organic production into developing economies. The most frequently cited is that the diversification

of farm output toward high-value exports can reduce the vulnerability and increase the profitability of small-scale farms and resource-poor farmers (FAO, 2001). Similarly, organic production is promoted as a development scheme in developing countries because diversifying production to capture the high value of organic markets is seen as a way to expand revenue and help alleviate poverty (FAO, 2003a). It is also hoped, and in some cases demonstrated, that organic and fair trade production in developing countries would increase food security, reduce livelihood vulnerability, and improve the sustainability and quality of life for producers (Hillocks, 2002; Bacon, 2005). Many farmers in developing countries are already organic by default, with low levels of pesticide application as subsidies on imports have declined under deregulation and trade liberalization policies (Hillocks, 2002).

The extension of the organic food network necessarily involves enrolling importers, wholesalers and retailers, which erodes the short linkages based on trust that have complemented the certification process. While consumers believe they are consuming a safer and more just food, it is very difficult, if not impossible, for them to find out for themselves in globalized production–consumption networks. The extension of the supply chain through certification introduces new variables into local production systems and can have positive or negative effects on the agrarian communities in question (Mutersbaugh, 2002; Getz, 2008). The consumer is left to place trust in the label and the certification process, rather than the farmer. In addition to concerns about environmental or social conditions on the farm, there are concerns that the increasingly globalized supply chains for organic food mean an increase in ‘food miles’ (Halwell, 2002; Lawrence, 2004), potentially limiting the appeal of organic food to those interested in them for social and environmental sustainability or nutritional content reasons. Indeed, it is feared that through certification ‘consumers are buying a clear conscience and are forgetting their ideals’ (Renard, 2003, p. 92).

Organic foods are new to the global food economy, and as such data on multinational organic production and consumption are scarce and unreliable (FAO, 2001), and theorization of the implications scarcer still. The cultural politics and practices of the organic food movement are increasingly criticized in the developed world (Grossman, 1998; Striffler and Moberg, 2003; Campbell, 2005; Shreck, 2005; Campbell and Rosin, 2011), but little empirical research has been done on the implications of the expansion of organic agriculture worldwide. Using a supply chain analysis of one organic commodity, the banana, we hope to provide insight into the way standards promote the globalization of organic foods, and illustrate the implications this has for producers, consumers and the certification process.

The Organic Banana in the Global Economy

To understand the dynamic configurations and structures within the global organic banana agro-system, we engage in two levels of analysis with two different kinds of data. First, we use data on organic (and fair trade)³ banana production, consumption and trade, to examine organic banana commodity flows. This allows us to see the general patterns of trade and relationships that are established for organic bananas, and to explain why this particular trade flow exists. We also present some primary empirical data from our field research in the UK and Dominican Republic to further explain the supply chain and its implications. From these data we draw some conclusions about the influence of standards on production outcomes.

In spite of a rather marginal share of the world market, annual growth rates for organic banana demand are very high and estimated between 65% and 80% in 2000 (FAO, 2003a). The global market has increased steadily since 1998, although there has been a flattening in the growth rate since the global financial crisis hit in 2007. The Dominican Republic, Ecuador and Peru are among the largest producers (Table 1); however, this pattern is likely to change further once other major banana producers bring organic plantations to scale.

Place of Consumption: UK

According to the FAO, the UK is the second-largest market for organic products in the EU and the largest for organic bananas (Liu, 2008). Global sales of organic foods was estimated at just under US\$55 billion in 2009, growing 5% from 2008, the first year growth has dropped below 10% year-on-year (Willer and Kilcher, 2011), and up from an estimated US\$986 million for organic products in general and US\$300 million for organic fruits and vegetables in 2000 (FAO, 2001). However, in spite of very high rates of growth in demand far exceeding that of the general food sector, the total share of food sales has not yet much exceeded 1% in many national markets, though it accounts for just under 3% of the total food market in the UK and just over 3% in Germany (Liu, 2008; Soil Association, 2010). The UK also has just over 4% of productive land dedicated or in conversion to organic production, and well-developed domestic markets comprising multiple retailers, specialist food stores, farmers' markets and home delivery organizations. The demand for imported produce is driven largely by a high latitude growing season, which limits year-round availability of locally produced temperate organic foods. Furthermore, despite the increase in land and food production dedicated to organics, the 'thinness' of the market, with relatively few suppliers and consumers, means supply and demand are difficult to balance, and many of the suppliers tend to be small scale. Imports can be used as a short-run supply filler, and may become permanent if the quality and quantity are reliable enough, and the price cheap enough. There is also an expanding market for tropical and exotic fruits and vegetables, as well as for fruit juices and drinks (Soil Association, 2003). Having no domestic production, bananas are exclusively imported.

The United Kingdom sources its bananas from up to 39 separate countries, although the 10 largest sources provided 92% of the total imported value and 93% of the quantity in 2009 (FAO, 2011). Of these, the Dominican Republic provided 14% of the total quantity of bananas, and 16% of the value, making it the highest per-unit cost supplier to the UK in 2009. Saint Lucia, one of the Windward Islands, a member of the Commonwealth, and a recipient of past favoured-nation status for fruit trade via its relationship with importer Geest and as part of the 'ACP' (Africa, Caribbean and Pacific) group of formerly colonial nations, has traditionally been amongst the top sources of bananas for the UK. Its ranking has dropped sharply since the reduction in UK government preferences for the Windward Islands, Jamaica, Belize and Suriname from 1993, and since the scheduled replacement of quotas by tariffs, as an outcome of the 'banana saga' between the European Union, the United States and Latin American countries (WTO, 2009). The Dominican Republic features even more prominently in the organic banana trade. In 2001 the Dominican Republic exported 25760 metric tonnes of organic bananas to the UK, accounting for 38% of the organic banana volume shipped from the Dominican Republic that year, and at US\$8.5 mil-

Table 1. Total organic banana exports, 2002 and 2007 (metric tonnes).

Exported by	2002		2007		2002		% of 2007 Exports	Europe sources from (2007 %)	Europe sources from (2002 %)
	All exports	All exports	Europe	North America	North America	Other			
Ecuador	24000	143420	92176	47280	3,964		44.2	48.8	12.1
Dominican Republic	63650	66777	62770*	3,200*	807*		20.6	33.2	71.3
Peru	18900	65000	31850	26650	6,500		20.0	16.8	9.6
Colombia	9,700	30000	1,500*	22500*	6,000*		9.2	0.8	4.7
Other	19990	19200*	768*	14400*	4,032*		5.9	0.4	2.3
Total imports	136240	324397*	189064*	114030*	21303*				
% All imports			58.3	35.2	6.6				

Note: * estimated from summary data.

Source: derived from FAO, 2003c; Liu, 2008, pp. 19–26, 30.

Table 2. Banana exports from Dominican Republic, 2010.

Rank	Exported to	Total quantity (mt)	Organic quantity (mt)	Organic value (US\$000)	Average price (\$/kg)	% Organic quantity	% Organic value
1	United Kingdom	172920	55890	24290	0.43	46.4	41.8
2	Belgium	61120	45350	22510	0.50	37.7	38.7
3	Netherlands	18930	6,900	4,400	0.64	5.7	7.6
4	Germany	n/s	5,740	3,010	0.52	4.8	5.2
5	Switzerland	n/s	3,940	2,470	0.63	3.3	4.2
6	Haiti	12660	n/s	n/s			
Total		286350	120330	58140			

Notes: Organic includes biodynamic production. Value is calculated FOB (free-on-board, i.e. excludes insurance/transport costs). Belgium acts as a port of entry for the EU and beyond. There are data quality issues in comparing datasets derived from quite different sources, particularly conventional, organic and fairtrade.

Source: Estadística Dirección General de Aduanas y Centro de Exportación e Inversión de la República Dominicana, 2010.

lion, 42% of the value (CEDOPEX, 2002). This has subsequently more than doubled to 55 890 metric tonnes (46%) and US\$24 million (42%) by 2010 (Table 2).

Distribution channels for organic produce include supermarkets (especially so in the UK and US), organic and health food retailers (such as Whole Foods Market) and independent buyer-owned cooperatives, on-farm retailing and Internet sales outlets. Outlets that emphasize local sourcing, such as producer-only farmers' markets, generally do not include organic bananas due to the fact that bananas must be imported. Supermarkets are becoming increasingly important for fuelling growth in organic markets, especially so for imported and tropical produce, as larger retailers try to add value through diversification of offerings and broadening the market (Willer and Yussefi, 2004). Multiple-store retailers accounted for 72% of the UK organic food market in 2010 (Soil Association, 2011).

In 2002, 22% of British consumers cited food safety as their primary purchasing trigger for organics (Soil Association, 2003). 'Taste' and 'quality' are further motivations for consumers to choose organics over conventional products (Soil Association, 2003; Winter, 2003). More recent research by OnePoll suggests that the purported 'natural' and 'unprocessed' nature of organic food is the top reason for its purchase, followed by the restricted use of pesticides in production, and better taste (Soil Association, 2010). Quality organic produce is by definition a fresher product, because preservatives cannot be used to prolong shelf life. This is a primary motivation for upscale restaurateurs capturing the 'yuppie chow' market (Guthman, 2003). Quality is supplied to the consumer through what is ostensibly not in the product (pesticides, preservatives) and assured through certification, although this only applies to the production process, rather than the end product. To determine the extent to which consumers recognized food certification labels, and the degree to which they trusted those labels to represent a variety of food-related constructs, intercept interviews were conducted with 85 consumers in supermarkets and city centres in seven locations in the south and south-east of the UK in 2007–2009. Consumers were asked about their knowledge and experience of organic foods, and about food certification labels – both unprompted (top of mind) and prompted through the showing of label pictures.

Consumers had good awareness of the Fairtrade logo, and rated it very highly for being associated with practices that were 'worker friendly' (Table 3); unsurprisingly, this certification scheme was rated poorly for fostering 'local' produce, given its emphasis on assisting the development through trade of less developed areas. Organic certification schemes run by the Soil Association and Organic Farmers and Growers (OF&G) were recognized by just under a quarter of interviewed respondents, with OF&G rated more positively on every dimension than its larger competitor, with four of these being strongly statistically significantly above the ratings for all labels combined ('local', 'health conscious', 'tasty' and 'environmentally friendly', in order of significance). The Soil Association was rated as significantly weaker in being 'worker friendly', shared with the biodynamic label Demeter, and the LEAF label. The same respondents were asked to rate a range of criteria that might influence their decision to buy or not buy organic food, or to buy more or less of it (Table 4). Results show that avoiding additives, pesticides and colouring were the main drawbacks of organic foods, followed by perceived health improvement, taste, quality and being free of genetic modification. Seasonality and local sourcing benefits were still supported but at a much lower level (Table 4). Respondents had some concerns

Table 3. UK consumer certification label perceptions.

Construct							All
% Recognition	21	1	22	5	8	39	
Environmentally friendly	5.7**	4.0	5.4	5.0	4.8	4.7	5.1
Worker friendly	4.9	3.5***	4.1***	3.8***	4.3	6.0**	4.8
Health conscious	5.8**	3.9	5.1	4.1	5.1	4.8	5.1
High quality	5.5*	4.1	5.4	3.9	5.1	5.0	5.0
Inexpensive	3.5	3.0	3.0	2.8	3.3	3.7	3.4
Local	5.2**	2.6	3.9	2.8	3.3	2.5***	3.5
Tasty	5.6**	3.8	5.0	3.8	5.1	4.9	5.0
Attractive	4.8	3.7	4.4	3.5	4.4	4.8	4.5
% Sample evaluating	4.8	12	41	16	21	62	

Notes: Scale 1 = very low level of trust... 7 = very high level of trust; * significantly above 'all' ($\alpha < 0.05$), ** significantly above 'all' ($\alpha < 0.01$), *** significantly below 'all' ($\alpha < 0.01$).

Table 4. UK consumer perceptions: benefits and barriers to organic food consumption.

Benefits	Mean	Barriers	Mean
Avoiding additives	6.4		
Avoiding pesticides	6.4		
Avoiding colouring	6.4		
Better for own health	6.1		
Taste	6.1		
Avaoiding genetic modification	6.1		
Quality	6.0		
Better animal conditions	6.0		
Better for (farm) environment	5.8	Higher prices	5.7
Better prices/ wages for farmers/workers	5.3	Difficult to get information about	4.8
Locally grown	5.3	Poorly promoted	4.4
Seasonality	5.1	Don't last as long	4.2
		Poor range	3.9
		Difficult to find in shops	3.8
		Seasonality	3.7
		Don't look as attractive	3.5

over prices of organic foods, but were not worried about the 'look' or shelf life of their food.

Place of Codification: The Supranational

As an emergent form of global food governance, third-party certification, such as organic, is part of a growing 'audit culture' in the food system (Campbell et al., 2012). The lengthening of the organic food supply chain from its local context necessitated the development of international standards that are evaluated and certified via supranational regulatory frameworks. While spearheaded by organic certifiers, claims to sustainability are now increasingly deployed by supermarkets (i.e. Tesco) and supranational alliances (i.e. GLOBALG.A.P.) to capture high-end markets or to

appeal to health/safety/ethics conscious consumers (Freidberg, 2010; Campbell et al., 2012). These standards often reduce organic production from complicated and place-specific processes to a series of must-haves and not alloweds, allegedly to facilitate transparency and legibility within the food system (Mutersbaugh, 2004; Getz and Shreck, 2006). Campbell (2005) and Le Heron (2003) suggest that the rise of 'audits' also facilitates the neo-liberalization of the food system and promotes a neo-colonial food order based on the needs and wants of consumers in the Global North.

Organic food production and trade requires the oversight of a certification scheme, either based in the country of origin or in the destination market. The largest certifier for the UK is SACL, a subsidiary of the Soil Association, and it is the preferred certifier for Sainsbury's supermarkets (which, through its 'Sainsbury's Organic' brand, is heavily promoting organic food sales). SACL does not have global representation, however, and through multilateral agreements relies on other certifiers such as Germany's BCS Öko-Garantie or the USA's OCIA to run inspections in places such as the Dominican Republic. This intermediation is not transparent to the consumer, and introduces questions of equivalence in the organic standards themselves. For example, Germany's Bioland, while accredited to IFOAM, is not itself a registered inspection body under European Union regulations, and subcontracts other certifiers. BCS Öko-Garantie, a key German competitor, is not accredited to IFOAM but operates in 22 countries including the Dominican Republic, and also certifies for American certifiers such as QAI (using National Organic Programme (NOP) standards), that have different standards from SACL.

SACL, while using EU standards as a baseline, has higher standards than some of the EU certifying bodies with respect to animal welfare, genetically modified organisms and the use of certain pesticides (Soil Association, 2011). While the standards may be roughly equivalent in terms of what is/not allowed, examinations of the fine print reveal how standards can be interpreted and enforced very differently depending on who is applying and evaluating them. For example, in the organic standards programme in the United States, also known as the National Organic Program (NOP) certain synthetic pesticides (such as copper sulphate) may be used in certain situations to control the spread of disease in plant crops. There are no requirements listed in the regulation for documenting how much is used, when, where or how often. The only stipulation is that the use be 'documented in the organic system plan' (AMS, 2012, Reg. 205, 206: d2e). SACL standards permit only copper products as synthetic pesticides, which are severely restricted in the amount that can be used (6 kg/ha/year), and require permission for each use, with the submission of a detailed plan of why it needs to be used and under what circumstances (Soil Association, 2012, Std. 4.11.11). The EU has similar standards to the UK for amount of and authorization of use of copper products, but allow for some variations in the amount of application if the total application works out to 6 kg/ha/year. Thus, it is up to individual farmers to accurately document their practices, and up to inspectors to allow or disallow certain practices that, in the case of copper products, may be permanently damaging to ecosystems.

The attempts to simplify certification schemes, such as combining the state-based US certifications into the National Organic Program, has not necessarily guaranteed equivalence of the standards between nation states, nor reduced the complexity of the intergovernmental relationships that regulate international trade. In an effort to streamline the trade of organic commodities between nation states, some countries have entered into a variety of 'equivalence arrangements' with other nations, such

as those between the United States and the EU (AMS, 2012). Equivalence means that if products are certified in the US as organic, they may be sold in the EU as organic, and vice versa. This effort aims to counter the problems inherent to the varying standards in different certifying bodies, which ultimately make organic products a non-fungible commodity. The equivalence agreements aim to make standards legible across space (Mutersbaugh, 2004), as well as prevent the need for one nation’s certifying bodies to operate within the boundaries of another national state. These agreements, however, redefine radically the regulation of organic production by shifting the locus of power to a supranational scale, and by dint of international agreements, render potentially significant differences in organic production practice moot.

Place of Production: Dominican Republic

To investigate whether and how the values consumers seek in third-party certified foods are translated through the supply chain, field work was undertaken in the banana growing regions of the Dominican Republic in 2007 and 2010 (see Figure 3). Sixty-five intensive, semi-structured interviews were conducted with certifiers, plantation owners, banana associations, small-hold farmers, exporters and labourers. The study area is located in the semi-arid banana growing regions in the North-west of the country, near the Haitian border and the primary banana exporting port near Monte Cristi.

As bananas cannot be grown in northern latitude nations, colonial holdings in the Caribbean have been important sources of bananas, particularly so for the British Isles. As such, post-colonial economic development schemes have focused on this historically important commodity for former colonies now struggling to establish ‘independent’ economies. For example, the Windward Islands and Jamaica had exclusive supply contracts to the UK through UK-based importers Geest and Fyffes, and thus dominated the supply of bananas to the UK until 1995. The loss of this due to American trade pressure, coupled with low economies of scale due to poor topography and soil quality, meant the small banana farms of the Caribbean islands, with



Figure 3. Map and study area.

their higher costs, could not compete with the industrial agriculture plantations of Costa Rica and Colombia. This was devastating to the banana-dependent small island economies of the south-eastern Caribbean, and for Saint Lucia, Saint Vincent, Dominica and Jamaica particularly (Grossman, 1998; F. W. Salmond, Managing Director Geest Bananas, pers. comm., August 2005).

Organic and fair trade certified bananas attempt to rewrite the history of the banana in developed economies. Economic development initiatives are increasingly encouraging the cultivation of organic products in the least developed economies of the world, due to their improved margins relative to industrialized conventional production. It is hoped that these initiatives will alleviate poverty and increase the standard of living in rural and agricultural communities. Bananas are cultivated throughout Latin America, parts of Africa and in the Mediterranean. The majority of bananas, however, come from the Caribbean islands and South American nations bordering the Caribbean. The Dominican Republic is a leading producer of organic bananas for the world market and has been an unparalleled success story for organic conversion. In 1998, none of the bananas exported from the Dominican Republic were organic, in 2004 75% were organic (Boshart, 2004).

According to primary data sources in the study area in 2012 about one quarter of all organic bananas were sold as fair trade certified. About one third of the fruit is sold as organic, but is not fair trade certified. Another one third is sold as conventional, but is fair trade certified. While about 80% of the growers are certified for fair trade production, not all the fruit is sold as such. The remainder (approximately 10%) is neither organic nor fair trade certified, and is likely sold directly to a supermarket, such as Tesco. Most producers selling through the three largest banana exporters are certified for organic production by NOP (US), JAS (Japan), EU (Europe) Bio Suisse (Switzerland) and Krau (Norway). The third largest exporter (Horizontes) is also certified by Demeter international for biodynamic production. The primary market for organic banana exports remains UK consumers, but the EU and US markets are also growing. Primary sources in the Dominican Republic indicated that 90% of organic certification is performed by a German certifier, BCS Öko-Garantie. There is currently no Dominican-based certifier, and sales of organic bananas in Dominican markets are very small.

Other certifications utilizing private standards carried by banana producers in the Dominican Republic include GLOBALG.A.P. and supermarket labels such as Tesco's Nature's Choice. GLOBALG.A.P. sets out to make farming practices legible to consumers (and others in the supply chain) through an exhaustive list of protocols regulating everything from seed stock to worker protection (Campbell, 2005). Tesco developed its own 'environmental and responsible' (Tesco, 2012) scheme 'Nature's Choice' as an attempt to distinguish its products from other similarly 'branded' organic or fair-trade products (Ouma, 2010). Certification is a costly process, and smallholding farmers join banana associations to share the costs that could not be borne by individual farmers alone (see also Mutersbaugh, 2002). Large-scale plantation operators (who are in some cases also the exporter) often bear the cost of certification for farmers who contract with them. In all cases, to capture the widest market, the banana associations, plantations and importer/exporters seek certification from as many third parties as possible. Organic and fair trade certifications still dominate the market, in spite of the influence of other private standards.

The topography of the Dominican Republic does not generally support the large-scale plantation agriculture seen elsewhere in the Caribbean. As such, organic ba-

bananas are much more likely to be cultivated by independent smallholding farmers and cooperatives than on plantations by large-scale corporations. Part of this can be explained by the experiences of multinational corporations that have previously located in the Dominican Republic: Chiquita withdrew rather abruptly from its arrangements in the 1980s and has only recently (along with Dole) looked to reinvest in the country (F. W. Salmond, Managing Director Geest Bananas, pers. comm., January 2007). A key requirement for organic production is a landscape either free of Black Sigatoka disease, or a dry environment where the fungal spores cannot thrive, because the infestation is difficult to manage with organic methods (FAO, 2001). The Dominican Republic has dry hillsides that were never cultivated intensively with bananas, and that lend themselves to small-scale production by smallholdings. The soils are deep, calcareous and have high natural fertility, which decreases the amount of imported and expensive approved fertilizers required for organic production (Willer and Yussefi, 2004). In addition, due to the stagnating economy, purchased conventional inputs such as pesticides were not commonly used, which facilitated rapid organic conversion (FAO, 2001). Lastly, the Dominican Republic promises two key advantages over its competitors: it is an ACP country, and thus benefits from the (increasingly marginal) benefits accorded; it also has a lower cost structure approaching that of the mass-producing nations of Central and South America.

As one of the first countries to export certified organic bananas, the Dominican Republic continues to supply a substantial proportion of the world market in organic bananas, and until 2006 was the single largest exporter of organic bananas (see Table 1; Liu, 2008; Vagneron and Roquigny, 2011). Dominican dominance has reduced from 50% of total organic banana exports in 2003 to 26% in 2007, but quantities have continued to increase, with exports totalling over 120 000 tonnes in 2010 (see Table 2; FAO, 2003b), about twice the values for 2005 reported by Reynolds (2008). Organic bananas are grown mainly in the rural provinces of Azua in the south and Valverde and Montecristi in the north (see Figure 3). The majority of farms have traditionally been small scale (less than two ha), primarily (but not entirely) utilizing family labour, with the use of hired labour on harvesting days. Interviews conducted with workers on these farms (n=16, all of whom were Haitian) reveal patterns of working for one or two days on a several small hold farms throughout the week. Plantations employ outside labour every day of the week, and primary data sources (both interviews and observation) indicate this labour force is 90% Haitian in the study areas. While small farms are still larger in number, the market has seen a number of mergers and farm size growth over the last decade. The market for organic bananas within the Dominican Republic is currently small (and data are uncertain), but is expected to rise with an increasingly urban and health-conscious population along with a growing tourist industry (FAO, 2001).

There are two structures for producing bananas for export in the Dominican Republic (Figure 4). The first structure is organized through banana associations, which bring smallholders into collectives large enough to produce enough bananas each week to fill containers. The second structure to the industry is composed of large-scale plantations greater than 60 hectares (by definition, these producers are excluded from participating in the banana associations). The expense of certification and the need for a certain volume each week prevents small-scale growers from operating independently, while the large-scale plantations can both manage the expense and the production volume. Both models use up to 90% Haitian labourers, some of whom are legally allowed to work in the Dominican Republic on one-year

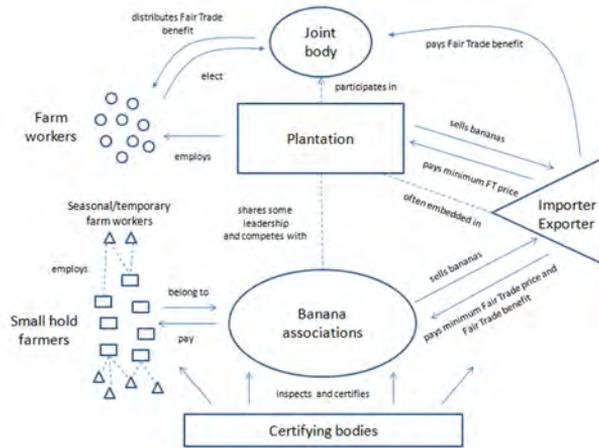


Figure 4. Structure of organic and fair trade banana production in the Dominican Republic.

temporary visas. Until 2011, on large-scale plantations the visas are paid for through the fair trade premiums administered through the joint body (see Figure 4). It was unclear how workers on the smallholdings obtained visas, which cost more than several months' pay, and it is likely that they worked without legal documentation.⁴

All export is controlled by three companies owned and operated by expatriates from the Netherlands, Austria and Italy; each step of the production and export process is certified by third parties who have headquarters outside the boundaries of the Dominican Republic; there is no Dominican-based certifier. In addition to the ways supranational organizations simplify standards across nation states outlined above, certifying bodies shape production practices and promote particular production outcomes in the Dominican Republic in a variety of ways.

First, the structure of the banana industry distributes the one dollar premium per box of bananas given by fair trade benefit highly unevenly. In the plantation model, the dollar premium is appropriated and used by workers via the 'joint body' to provide clinics and schools, but also food and visas. In the banana association model, the premium is appropriated and used by smallholders via the governing structures of the banana associations to pay for clinics and schools as well, but not for food or visas for workers. Until 2011, The Fairtrade Labelling Organizations (FLO) allowed (or did not disallow) the fair trade benefit to be used to purchase one-year visas for the Haitian workers (and supplemental food). Haitian labour in bananas has increased from 60% in 2001 (FAO, 2001) to 90% in 2010 (based on observation and interviews), and the visas and generally higher wages in banana production encourage and facilitate migration to the Dominican Republic from Haiti. At the time of the research, plantation workers (both Haitian and undocumented Dominicans) such as Gerard said, 'I don't know what will happen when we lose our visas. We may be stopped on our way to work and sent to Haiti. The police check every person in every van.' The gravity of the situation was underscored by the ongoing 2010–2011 cholera epidemic in Haiti.

Second, the current high prices for organic bananas, and the ease of entry to the market via the banana associations, attract new smallholders. The rapid influx of

farmers into production has created higher densities of banana plants (both organic and non-organic) in the banana growing areas. Higher densities mean higher infestation rates of Sigatoka in these areas, which was virtually unknown in the area a decade ago. The environmental manager at a large-scale organic plantation observed grimly, 'We've seen a 10-fold increase in Sigatoka, and with the higher densities of banana plants as more farmers enter the market, it will only continue to increase.' Many growers have dropped organic certification so that they could use aerially applied fungicides, leaving organic producers to battle Sigatoka with more costly and labour-intensive methods. One third of the producers we interviewed had started growing bananas in the past two years, and most expressed some version of Eduardo's comment as he showed us the difference between organic and conventional bananas in his accounting books, 'The money in organic bananas is really good right now! Who knows how long it will last, but I might as well try it while the prices are high. Look at those prices!' The motivating factor for engaging in organic production for most smallholders was short-term economic gain, rather than commitments to environmental or worker protections.

Lastly, fair trade, organic and other certifications require certain workplace facilities (i.e. bathrooms) workplace protections (i.e. limiting exposure to fungicides) and higher minimum wages (typically 200–300 pesos per day) within the banana industry: fair trade and other labels establish wages that are higher than the state minimum wage, which is 150 pesos per day. Ironically, the banana plantations are much more likely than the smallholdings to actually provide the required facilities, pay higher wages and purchase visas for workers, and these workers speak highly of the fair trade model. In contrast, a Haitian worker on a smallholding could not tell us what fair trade was or how this farm differed from other farms, regardless of the language we asked the question in, and in spite of the required signage in three languages on the walls of the packing shed. In his words, 'I work on this farm for a few days each week, and then I go to the next farm. The pay is the same.' Like all the workers on smallholdings that we interviewed, his clothing was stained brown from the aerial applications of fungicides while workers are in the fields: a clear and blatant violation of fair trade rules and organic standards.

Discussion and Conclusions

The market structure within the organic-food production system for local or regional food is still very fragmented and direct producer–consumer relations are a key aspect of it. This thinness of the market in the face of burgeoning demand (in concert with regulatory frameworks) has driven organic agriculture worldwide. However, the globalization of organic food, within the context of demand for tropical fruits and vegetables such as the banana, necessarily requires the intervention of intermediaries. This includes certification bodies, but also importers, wholesalers, retailers, and so on. It can also mean the entrance of transnational corporations, such as Del Monte or Chiquita and supermarket chains, seeking to diversify their businesses and products, and capture more of the value added in the growing market of organic food. Although consumers may be willing to pay a price premium for organically produced tropical products, these surpluses might not necessarily flow through to the farmers or workers

The increasing global demand for organic food and the changing regulatory environments within the nation state, however, have extended the reach of organic food

networks. The production of organic foods has been vertically integrated into large corporations in developed economies and the location of production is beginning to shift to developing economies while consumption has largely remained in an upper-class market in developed economies. This begs the question of whether third-party certified food produced in developing countries actually poses an alternative to conventional production, or if it is, as many have argued (e.g. Guthman, 2004a), simply another value-seeking behaviour on the part of transnational corporations. This has implications for the way in which organic food is marketed to consumers, as the purported organic values may no longer be consumable in the product. What has ostensibly not been in the product, may not actually outweigh what now is in the product.

For Europe and North America, the local supply of tropical fruit such as the banana is not a viable option. The cultivation of organic bananas in the major sites of conventional organic banana production is increasing. For the time being, however, countries such as the Dominican Republic and the Windward Islands, which lost the market for conventional bananas to mass plantations in Costa Rica and other South American producers due to poor economies of scale and therefore high costs, have a chance to regain exports of value by capturing the organic market. They realize this potential might require a shift to larger-scale production and a resulting loss of environmental resilience and sustainability in the pursuit of economic gain, as well as the continuation of better margins for organic bananas in the longer term.⁵ Supranational regulatory frameworks are key to this expansion of supply chains behind a circumscribed local economy for organic produce. The extension of the supply chain, however, brings with it the risk that the values promised through certification are not achieved, such as the degradation of the environment, or that there are unintended consequences, such as the semi-legal employment of an immigrant labour force.

The debate over the equivalence of local and global organic products is writ large in the alienation of producers and consumers that the certification process allows in extended supply chains. The intertwining of certifications, (e.g. organic and fair trade) for marketing purposes complicates an otherwise simpler narrative of 'environmentally friendly' or 'worker friendly'. The high prices attained for organic bananas drew more producers to the market, and encouraged existing Dominican Republic producers to scale up. This intensification led to an increased incidence of Black Sigatoka and ultimately greater application of fungicides as organic producers dropped organic certifications to cope with the fungus. Fair trade premiums bring benefits to workers in one production model, but not the other, and the fair trade labelled banana consumed in the UK could be produced in either model, with the consumer never knowing the difference. Consumers may presume all things are equal on the other end of the supply chain, encouraged by the simplification of complex processes into an easily identifiable label.

The moral equivalence between organic certifications that is supported by the labelling scheme and the 'equivalence agreements' between nation states is belied by the material realities of production in place-specific contexts. While producers may adhere to organic production practices in the Dominican Republic for short-term economic gain, those advantages are outweighed easily by the long-term economic costs of managing Sigatoka organically. The economically strategic use of certifications sets up a positive feedback loop that generates widespread environmental change, and the intensification of non-organic agricultural practices as the incidence of Sigatoka increases. Similarly, the bifurcated nature of the banana industry, be-

tween plantations and banana associations, leads to dramatically different benefits to the most vulnerable actors in the food supply chain. Because all fair trade bananas are aggregated together and packed on container ships for export, consumers can never know whether or not their banana was truly worker friendly. The source of this miscommunication lies with the standards that are supposed to allow for legibility in the supply chain, but which in fact are instrumental in obscuring as many critical aspects of the supply chain as they reveal.

While the inward-looking set of values is satisfied with organic product no matter its origin, the external set of values must be guaranteed through certification by external and often supranational organizations. This is signified by a trend toward certifying organic foods as also fair trade, and the emergence of 'certified naturally grown', and the marketing of food (organic or otherwise) as 'locally' grown. Whether these developments will actually provide the alternatives consumers demand remains to be seen, but supranational certifications will remain critical to the globalization of organic food supplies, whether or not they are able to deliver on the values they promise.

Notes

1. Sahota (2011) reports US organic food and drink sales comprised 90 per cent% of North American organic food and drink sales revenue, which are estimated at US\$26.3 billion in 2010. The US Department of Agriculture estimate total US food sales at US\$1,241 billion in 2010 (of which US\$646 billion is spent at home). Therefore US organic food and drink sales represent 1.9 % of US food sales; this ratio falls to 1.7% if alcoholic drinks are included in the denominator, and rises to 3.7% if only food sales at home are compared.
2. Note that under IFOAM Basic Standards the certifying body cannot also advise on farm practice (the third-party certifier rule). Thus SAFL is a subsidiary of the Soil Association, and only certifies, although references are blurred between both organizations on their respective websites.
3. While our concern is primarily with organic bananas, the two certifications are intertwined in the case of the Dominican Republic and cannot be completely separated for analysis.
4. The legal status of workers was not directly asked about directly, to avoid compromising informants.
5. The price differential between organic and 'conventional' bananas reduced in 2005 due to conventional production supply problems. The resulting price increase induced farmers to switch back to conventional production for short- runterm profitability. This creates a lag in eventual return to organic production due to certification requirements.

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Modern Politics in Animal Welfare: The Changing Character of Governance of Animal Welfare and the Role of Private Standards

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Abstract. Political scientists generally agree that there has been a change in the political arena of modern societies: a shift from government towards governance, a process often referred to as political modernization. Some evaluate this development as positive, allowing for more direct democracy and more effective policymaking, whereas others are concerned about democratic legitimacy and accountability. This article examines whether the rise of private standards in animal welfare politics does provide a good example of political modernization, and whether it indeed creates a more democratic and more effective mode of policymaking. Using the framework of political modernization, we examine whether the collaboration of retailers and non-government organizations (NGOs) in developing private standards in Europe, and especially in the Netherlands, can be interpreted as a new political arrangement involving a new coalition of actors, a new discourse about animal welfare, and new rules of the game. Our analysis of these private animal welfare standards confirms, and challenges, the assumptions often made about the modernization of politics. Our analysis shows that private standards have indeed replaced the implementation of stricter animal welfare legislation. The collaboration of retailers with NGOs and farmers' unions may be interpreted, to some extent, in terms of more direct political participation by citizens and stakeholders. However, given the powerful position of retailers in the European food market (a power that transcends massively that of farmers, consumers and citizens), there is also a clear need to analyse carefully the social, economic and legal consequences of this governance shift, which gives private actors regulative authority without them being bound by the democratic rules that serve as a check on whether state regulation serves the common good.

Introduction

Animal welfare is a significant policy issue, notably in Europe where citizens, governments, producers and traders are making efforts to protect animals from unfriendly farm practices (Buller and Morris, 2003; Bayvel, 2004; Thiermann and Bab-

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cock, 2005). The globalization of animal production and trade has, however, made animal welfare a global issue (Bayvel, 2004; Thiermann and Babcock, 2005; Fraser, 2008). In the context of (inter)national discussions about the regulatory options for animal welfare, the traditional national regulatory tools (such as legislation) are challenged by trade liberalization and governments' international commitments. Stricter national animal legislation may weaken the competitiveness of national production in the world market, as it generally implies extra production costs (Eurogroup for Animal Welfare, 2000; WTO, 2000; Horgan and Gavinelli, 2006). Equally, imposing domestic legislation on imported products may lead governments into trade conflicts since it is unclear how non-trade concerns, such as animal welfare, should be accommodated within the World Trade Organization (WTO) legal framework (Blandford and Fulponi, 1999; Hobbs et al., 2002a).

The case of Europe provides a fruitful platform for exploring the regulatory evolution of animal welfare governance. Animal welfare receives more legislative attention in Europe than in any other region (Van Horne and Achterbosch, 2008). Europe has a comprehensive body of legislation aimed at ensuring the welfare of farm animals during farming, transport and slaughter (Blandford and Fulponi, 1999). But increasingly animal welfare measures are being enacted by non-state actors. Several European supermarkets, non-government organizations (NGOs) and industries are involved in joint initiatives to protect animal welfare (Blandford and Fulponi, 1999; Veissier et al., 2008). The engagement of private actors in developing measures that address societal concerns is not an exclusive feature of animal welfare governance. Non-state actors are involved in a similar fashion in several policy fields: such as forestry (Forest Stewardship Council), fisheries (Marine Stewardship Council), food safety and food quality (GlobalGap, Tesco's Nature, Carrefour's guarantee of origin) and Third World producers (Max Havelaar). Some scholars (e.g. Cashore et al., 2007) suggest that the engagement of private actors with emerging social concerns may well be explained by a frustration with failing (inter)national governments and public policies. However, there are also other explanations. Ransom (2007), for instance, identifies the rise of private animal welfare standards as a case of institutional isomorphism, with standards being adopted as a result of the institutional pressures from other organizations (e.g. WTO, OIE,¹ competing food retailers). In contrast to many studies, which view the emergence of animal welfare standards as a response to the failure of the state or a response to consumer demands, Ransom's analysis (2007) emphasizes how isomorphism, which involves coercive, mimetic and normative processes, may provide a better explanation of the emergence of private (animal welfare) standards. While this approach is relevant to understanding how organizations influence each other, and why some develop private standards, it has a limited value for understanding the political implications of the engagement of non-state actors in animal welfare governance. The latter is what this article focuses on: we want to advance our insights into what the emergence of private standards means for animal welfare politics and how it interrelates with changes in the policymaking process.

The pursuit of improvements on the welfare of farmed animals by means of private standards reflects the on-going reorganization of policy processes that derives from the changing interrelations between state, market and civil society. The emergence of new formal and informal institutional arrangements between state and non-state actors and the emergence of new policy instruments such as private standards has been described in most political science literature as shift from government to

governance. The notion of 'governance shift' draws attention to the new set of self-governance and co-governance mechanisms, involving state and non-state actors, which has been developed alongside traditional government regulation. Among the emerging governance mechanism are the private scheme standards. In legal terms, private scheme standards is conceived as a regulatory instrument known as soft law or private regulation (Boström and Klintman, 2006; Henson, 2008). In political science they are referred to as innovative policy instruments (Arts, 2002; Cashore, 2002; Newell, 2009; Wouters et al., 2009).

To explore the on-going transformation of animal welfare policy in a way that contemplates the new practices of governance we apply the framework of 'political modernization'. Originally developed in studies of environmental policy and ecological modernization (Mol, 1995), the framework of political modernization may also be applied to other domains (Arts et al., 2006), including animal welfare. It is a useful framework to explain the occurrence of new policy practices and development of new arrangements in relation with broader structural changes in politics and society at large. A short introduction to 'governance shift' and political modernization is presented at the beginning of the article. Next, the article brings an overview of the evolution of animal welfare policies in Europe, indicating the most salient periods in terms of governance shift. The next section explores the on-going transformation in animal welfare policymaking in Europe (and especially in the Netherlands) by focusing on the emerging coalition of actors, the rules of the game, the distribution of power and resources, and the discourses surrounding animal welfare. The article then explores the potential consequences of modern governance for the democratic processes of policymaking before concluding by discussing the significance of private governance for international trade.

Governance Shift and the Renewal of Policy Arrangements

Over the last decade, the notion of *governance shift* has become a widely used and popular concept in policy studies. Although used slightly different in every study, it has at its basis some generally accepted core ideas, assumptions and propositions (Van Tatenhove and Leroy, 2003; Walters, 2004; Arnouts and Arts, 2009; Arnouts et al., 2011). According to Rhodes (2007), governance shift refers to a *new* process of governing, a *changed* condition of ordered rule and *new* method of governing society. Walters (2004, p. 31) describes it as a change in the 'mechanics of governing'. In most publications, this change is depicted as a threefold trend that embraces: a move beyond the 'classical/traditional' model of state-led government; the development of formal and informal institutional linkages between governmental and other actors (known as a 'policy network'); and the blurring of boundaries between state, market and civil society (Rhodes, 2007; Arnouts and Arts, 2009). These trends result in the increasing participation and influence of non-state actors – such as NGOs and business – at all levels of policymaking (Arts, 2002). As a consequence, doing politics is no longer the exclusive privilege of the representatives of state institutions.

This is part of a broader process in which a constellation of 'sub-politics' (Beck, 1992) is emerging alongside state-centred politics. Outside the formal political sphere of action, private actors are making use of innovative arrangements to 'sub-politically' rule or alter some policy domains. This gives rise to different modes of governance, such as self-governance and co-governance, which are challenging, transforming and complementing traditional steering mechanisms (Mol, 2003, Van

Tatenhove and Leroy, 2003; Van Leeuwen and Van Tatenhove, 2010). Examples of these new governance tools include public–private partnerships, voluntary agreements, covenants and soft law. These new governance tools are described, with some enthusiasm, as being more effective, more participatory and, hence, more directly democratic than traditional hierarchical government (Swyngedouw, 2005; Arnouts and Arts, 2009). But there are also concerns since these new forms challenge the traditional position and monopoly of the state as the primary source of regulatory authority (Walters, 2004; Pattberg, 2005).

Some scholars have theorized governance – as an arrangement of governing beyond the state – as representing a political shift towards government without the state (Rhodes, 1996; Stoker, 1998). Others conceptualize it in terms of political modernization that creates a new role for the state but does not imply its complete withdrawal (Mol, 2003; Arts et al., 2006; Arnouts et al., 2011). Political modernization refers to processes of ‘structural conditioning’ that renews policy arrangements and implements a new style and practice of governance. The policy arrangement approach is a useful tool for obtaining insights into how these structural processes of change are reflected in new policy practices (Arts et al., 2006; Arnouts et al., 2011). We use this approach to explain the changes in the animal welfare policy domain in Europe in terms of its content and organizations based on four analytical dimensions. The first dimension focuses on the *actors* involved in a policy domain and the *coalition(s)* they form with each other. The second dimension deals with the *power relations* between actors, where power constitutes the ability to mobilize *resources* in order to influence policy outcomes. The next dimension involves the *rules of the game* in terms of formal procedures for establishing policy. Finally, the fourth dimension explores the enacted *discourses* of the actors involved: their views, values, narratives, definitions of problems and approaches to solutions. However, before analysing the changes in each of these dimensions, we present a brief overview of the recent evolution of the animal welfare policy domain in Europe.

The Animal Welfare Policy Domain in Europe

In the early days of animal welfare policy, regulations were predominantly implemented by state agencies. Today, however, the progressive emergence of private standards suggests that animal welfare is changing from a state-centred to a market-centred policy domain. In this section we present a brief overview of the development of European animal welfare policy, highlighting those periods that are most indicative of this transformation.

The establishment of the Brambell Committee in 1965 by the British government marks the beginning of a European animal welfare policy domain (Mench, 1998; Buller and Morris, 2003; Ransom, 2007; Veissier et al., 2008). This committee attempted, for the first time,² to look beyond the prevention of cruelty to animals and elaborated the concept of animal welfare (Woods, 2011). The Committee was established in the wake of the publication of the book *Animal Machine* by the British journalist Ruth Harrison in 1964. This book exposed the poor conditions under which farm animals were raised, and accused producers of placing profitability above animal welfare considerations. The author also questioned the quality of the food derived from animals raised under these conditions. The Brambell report initiated the debate on suffering and the behavioural needs of animals (Mench, 1998) and gave rise to the idea of ‘five freedoms’ for animals. This concept was later refined by the Farm

Animal Welfare Council (FAWC), the United Kingdom government's advisory body on farm animals; today the 'five freedoms' serve as a guideline for governmental and commercial policies for animal welfare (FAWC, 2009).

In the following decades there was an increase in public regulation, with the establishment of specialized public institutions and an increase in national and supranational legislation to implement minimum standards to ensure animal welfare in modern livestock systems (Mench, 1998; Appleby, 2003; Veissier et al., 2008). In several European countries governmental departments were created to work specifically on animal welfare policies. These include the FAWC (Farm Animal Welfare Council) in the United Kingdom and the RDA (Raad voor Dierenaangelegenheden)³ in the Netherlands. In addition, several European governments implemented animal welfare laws: the United Kingdom in 1968, Sweden in 1988, and the Netherlands in 1992. Supranational public policies also emerged including: the 1968 EU Convention for the Protection of Animals during International Transport, the 1976 EU Convention for the Protection of Animals Kept for Farming Purposes, and the 1979 EU Convention for the Protection of Animals for Slaughter. A significant change in European law regarding animals occurred 1997 with the inclusion of an animal welfare protocol in the Treaty of Amsterdam. Notably, this protocol refers to animals as sentient beings, a significant change considering that animals figured as commodities in the previous treaty.

Another important period started with the outbreak of several farm animal epidemics, specifically bovine spongiform encephalopathy (BSE) and the discovery of a variant of Creutzfeldt-Jacob disease (vCJD)⁴ in 1996. The BSE crisis undermined consumer trust in food safety but also in the government and public systems for controlling food safety (Latouche et al., 1998; Guivant, 2002; Oosterveer, 2002, 2005). In an attempt to recover their credibility in these areas, national and European policymakers implemented more stringent policies. The significance of these policies in the context of this article is that they led private actors to become more actively engaged in regulating farm animal welfare (Hobbs et al., 2002b; Maciel, 2009). This move was motivated partly by the inclusion of business responsibility in European legislation of food safety, alongside the UK's notion of the 'due diligence' defence (Hobbs et al., 2002b). The 'due diligence' defence protects actors from liability if they can prove to have done their utmost to avoid causing damage.⁵ This leads food companies to establish systems to demonstrate that they take sufficient measurements and precautions to assure that the food they purchase, handle and sell is safe for human consumption (Vuylsteke et al., 2003; Henson and Humphrey, 2010). They began to introduce various private scheme standards or quality assurance schemes, which have proliferated rapidly ever since. The introduction of these private voluntary production schemes marks the beginning of a gradual and on-going shift towards private governance.

Today, food retailers play a very important role in food governance (Lang and Heasman, 2004) and retailers are constantly expanding the range of animal-friendly products on their shelves, thereby contributing to the diffusion of animal welfare measures throughout the meat production chain (Buller, 2010). Animal welfare concerns have become part of the corporate social responsibility agendas of many food companies, to the extent that corporate brands include animal welfare criteria specifically (Buller and Roe, 2011). Animal welfare appears as a component within the following retail brands: Natural Choice of Tesco (UK), Filiere Qualité of Carrefour (FR), Naturama of Esselunga (IT) and puur&eerlijk of Albert Heijn (NL). All these

examples are private standards schemes that are led by the retailer, acting alone or in cooperation with an NGO. The collaboration between these two private actors reflects another major change in policymaking on animal welfare. In the past, most NGOs tried to influence policymaking by means of educational campaigns about ethical issues in livestock production that were aimed at consumers. Nowadays, the work of many NGOs entails lobbying and awards. For instance, Compassion in World Farming (CIWF) has run the Compassionate Supermarket Award, the Most Improved Supermarket Award and the Best Volume Retailer Award since 2000 (CIWF, 2007). These biennial awards are based on a survey of British supermarkets, which tracks their commitment to improving the lives of farm animals. Some NGOs even engage in regulatory activities and developing private standards. For example, the (British) Royal Society for the Prevention of Cruelty to Animal (RSPCA) created the Freedom Food Scheme, and Dierenbescherming (the (Dutch) Society for the Protection of Animals) has designed the Beter Leven quality scheme. This scheme will be discussed further in the next section alongside an exploration of the extent to which these developments can indeed be interpreted as a shift from government to governance.

Toward a New Animal Welfare Policy Arrangement

The concept of a policy arrangement allows one to distinguish analytically between the content and the organization of a policy domain. The organizational aspect is analysed along three dimensions: 1. the actor coalition involved, 2. their power relations and resources, and 3. the rules of the game that regulate their behaviour. The content of a policy arrangement is analysed as an additional dimension that regards 4. the policy discourse enacted (Arnouts et al., 2011). Applying this analysis to animal welfare politics reveals the following features. In the early years of animal welfare policy, the policy arena was dominated by state agents, the main and most powerful actors and non-state actors could exercise influence through elections and lobbying elected representatives (Arts et al., 2006). Recently, however, the general process of political modernization has allowed for non-state actors to participate directly and be actively involved (e.g. Mol, 2000; Van Tatenhove and Leroy, 2003; Arts et al., 2006). This has offered opportunities for the collaboration of new and sometimes unexpected coalitions. Indeed, in the case of animal welfare, many actors who previously were in conflict now approach each other, and there are a number of examples where NGOs and businesses have turned from confrontation to collaboration.

The awards system run by CIWF, mentioned above, that gives 'good' supermarkets positive publicity (instead of calling out the 'bad' ones) is one example. The collaboration of the Dutch animal protection organization (Dierenbescherming) with major Dutch food enterprises is another. In 1988, Dierenbescherming and VanDrie, the world's largest veal producer, began to work together in developing a new, animal-friendly veal production programme. The production of 'baby beef' is a highly contested animal welfare issue because the animals – veal calves – are kept in conditions that severely restrict their movement and strictly control their diet, to obtain the desired white colour and soft structure of the meat. Together these actors have come up with a programme to enhance the welfare of veal calves. The agreed points include an enriched diet to prevent anaemia, and group housing to allow greater mobility and group interaction. This led to the introduction of a new product on the

market – pink veal meat. This meat was expected to be considered more acceptable by Dutch consumers because of the more animal-friendly production circumstances but still meeting the expectations of a tender meat quality of Italian consumers, who constitute the most important market for Dutch veal. Veal producers were actively involved in establishing these regulations, which ensured their support and commitment to the scheme.

Looking for partners who are willing to work towards change by developing a common definition of problems as well as looking for solutions is a vital step in establishing a stable policy arrangement and a coalition that may be expanded. Here, again, the collaboration between Dierenbescherming and VanDrie provides an interesting example. The partnership, which was initially based on knowledge exchange and advice, has expanded through the years with the inclusion of supermarket chains and the development of a large range of standards for various farm animal products (VanDrie Group, 2013). The scheme is now known as *Beter Leven* (Better Life) (Dierenbescherming, 2013). It is owned by Dierenbescherming and functions in the following way: the NGO compiles a list of criteria for the welfare of a given farm animal species; farmers and meat industries interested in having their product certified as welfare friendly ask to be evaluated against those criteria. The NGO awards producers between one and three stars (according to their performance against the criteria), which are published on the packaging of the products sold in the participating supermarkets.

Another Dutch example of multi-actor collaboration for raising the welfare of farm animals is *Rondeel* (Roundel) (World Poultry, 2010). It is a circle-shaped layer house for chickens that was developed through close cooperation between public and commercial agencies. This type of alternative housing was designed with a view to balancing public acceptance, the well-being of the farmer and the welfare of the birds. The *Rondeel* concept is the result of a government project that was launched in 2003. It involved livestock specialists from Wageningen University Research, farmers, Dierenbescherming, consumer organizations and the Albert Heijn supermarket chain. *Rondeel* eggs are sold in a seven-piece pack made of coconut fibre and are sold exclusively by Albert Heijn. Albert Heijn also launched a new corporate brand in 2009: *AH puur&eerlijk* (AH Pure and Honest). *AH puur&eerlijk* consists of five different categories of products that have been ‘produced, grown or sourced with extra care for people, animals, nature or the environment’ (Ahold, 2010, pp. 18). Compliance with these standards is certified by an external organization, which in the case of animal products is the Dutch NGO Dierenbescherming.

Glasbergen and Groenenberg (2001) suggest several reasons why such coalitions are now emerging. Businesses have an interest in the new economic opportunities that market differentiation (such as private labels) brings. In addition, private labels are also important for building a reputation. Such coalitions are attractive to NGOs as they seem to be more effective in achieving real results than their traditional education and lobbying activities. Each group sees a real benefit from joining forces and exchanging resources within such a policy coalition. The NGOs provide political legitimacy to businesses working with farm animals and their products, while the businesses can develop economic and pragmatic strategies for improving animal welfare (Ingenbleek and Immink, 2010). Returning to the example of *Beter Leven*, we can say that Dierenbescherming depends upon the readiness of other chain actors to put their standards in practice, while the producers and retailers depend upon Dierenbescherming to validate their trustworthiness and create ‘public accept-

ance'. Thus, to some extent, as Arts et al. (2006) state, coalition actors are dependent on each other's resources to achieve policy goals and to strengthen their position in a policy network. The idea of resources is intrinsically linked to the concept of power, which is why, in the operationalization of policy arrangements, power and resources are tied together (Arts et al., 2006). Policymaking is 'a multi-level power game' in which actors need to mobilize resources (e.g. money, knowledge, expertise, reputation, bargaining) to be able to act together to create a desired policy outcome. (Arts and Van Tatenhove, 2004, p. 353).

Ingenbleek and Immink's (2010) study of corporate social responsibility standards in the Netherlands illustrates this aspect well. Drawing upon the concepts of power and urgency⁶ derived from stakeholder identification theory and decision process analysis, their study examined four animal welfare standards in the Netherlands. According to their findings, NGOs can acquire four different positions (shown in Figure 1) that are defined by their relative power and the perceived urgency of their claim.

In a case of low urgency, NGOs with little power will be in a position of *dependency*. Ingenbleek and Immink (2010) use the example of minimum standards for pork sold in supermarkets to illustrate this position. Common standards for pork were established by the Dutch retail association without any significant involvement of the animal protection group. By contrast, the NGO holds a *discretionary position* for veal, because of the contested nature of veal and the resultant high urgency of the claim. Whereas in the first example, the NGO needed to rely on the willingness of businesses to implement animal welfare criteria above the legal requirements, in the second example they could use their legitimacy and credibility among consumers to negotiate for higher production standards for veal calves. In cases where NGOs have considerable power, and the claim is urgent, they can gain a *dominant* position. When a new brand of poultry (Volwaard) was being formulated (Volwaard, 2013), the Dutch NGO held a *dominant* position as poultry welfare was a high-profile public issue. Lastly, when negotiating standards for organic pork the Dutch NGO held a *definitive* position because organic production is of interest to many Dutch citizens.

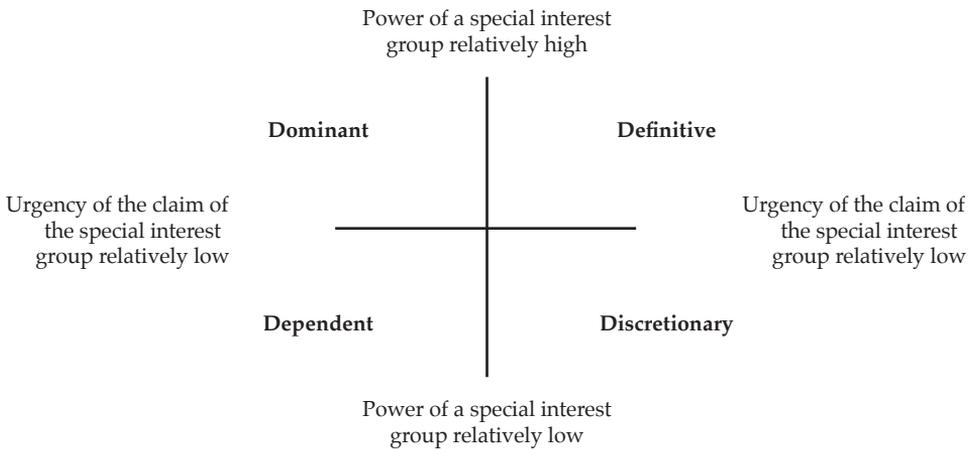


Figure 1. Typology of special interest groups involved in formulating CSR standards.

Being in a powerful position also generates the possibility of effectively influencing the policy discourse (e.g. Arts et al., 2006; Liefferink, 2006).

Policy *discourses* constitute an important dimension of a governance arrangement as they reflect the way in which a policy issue, such as animal welfare and its solution, is framed (Ingenbleek et al., 2007). When entering a policy coalition the actors import their norms and values, which eventually affect the formulation of the agreed policy instrument (Liefferink, 2006; Ingenbleek and Immink, 2010). Private policy instruments, such as scheme standards, contain discourses about animal welfare that range from focusing on the credentials of the end-product to a heuristic concern with the naturalness of animal lives. The Welfare Quality® project analysed various examples of private standards and their discourses about animal welfare (Veissier et al., 2008). It identified three main storylines around animal welfare. First, in a large number of private standards, animal welfare was presented discursively as a quality and/or safety component of the end product. These standards usually include animal welfare as one criteria among many regarding quality and safety in farm assurance schemes, and offered little improvement beyond existing legal regulations. Most of the standards within this discourse are designed by retailer or farm associations (Veissier et al., 2008). The second discourse, presenting animals as sentient beings is mainly found in standards designed by NGOs. Because animal welfare is the main (if not the only) goal of the standard, they tend to surpass legislative (national and European) standards. Examples of this category are Freedom Food in the UK designed by the RSPCA and the Beter Leven standard in the Netherlands designed by Dierenbescherming. Third, animal welfare has also been framed as a component of organic production. Organic standards generally prescribe animal welfare practices that are above the level of existing legislative standards but do not focus exclusively on animal welfare; it is included as one of the pillars of organic production. Examples include KRAV in Sweden, Debio in Norway, Soil Association in the United Kingdom, Agriculture Biologique in France, SKAL in the Netherlands, and AIAB in Italy. Besides these three narratives about animal welfare, these arrangements also include two other major discourses. The first is a discourse about political innovation and the changing relationships between state, market and civil society actors, now acting as partners in a coalition for a shared goal instead of as competitors or opponents (Arts, 2002). Second, all three schemes include a discourse of animal welfare as representing added value: an opportunity for market differentiation and additional quality, rather than as being an additional burden to the meat production economy (e.g. Fearne, 1998; Lindgreen and Hingley, 2003).⁷

Finally, the entrance of non-state actors into the policy field of animal welfare and their shift from a position of confrontation to one of collaboration reflects a change in the *rules of the game*. The rules of the game determine how policy outcomes are achieved, and which procedures are to be followed (Arts et al., 2006). Private standards differ from legally set public national standards in two ways. First, state policies aiming to protect animals are usually set within the framework of administrative or criminal law (Bloom, 2008). Thus, a breach of public animal welfare standards is framed as an animal cruelty offence or a failure to comply with administrative requirements for farm animals. By contrast, private standards frame animal protection in terms of a voluntary agreement between parties, placing it (in legal terms) in the realm of contract law between non-state actors (Van der Meulen and Van der Velde, 2008). Second, private standards diverge from traditional government regulatory structures by employing a different form of authority for assuring compliance.

While the state uses its sovereign authority to ensure conformity with its regulations, non-state actors use their 'market authority' (Cashore, 2002; Mol, 2010). These two distinct characteristics of private governance are often portrayed as giving it an advantage over public standards (e.g. Fulponi, 2006; Garcia Martinez et al., 2007). They presume that a voluntary commitment increases compliance and, hence, assures better results. In addition, it is argued that private scheme standards are more flexible as they can rapidly adapt in response to new socio-economic opportunities or pressures. In contrast, changes in public regulations take a long time as they require lengthy bureaucratic (inter)national negotiations (Arts, 2002).

The analysis of the four dimensions of policy arrangement leads us to conclude that the practice and institutional organization of the political arena for animal welfare in Europe has indeed changed. Private scheme standards for animal welfare are a clear example of modern policy arrangements. The establishment of new coalitions of actors, the mobilization of resources, the redefinition of rules of the game and the enactment of new animal welfare discourses are all, to a varied extent, embodied in every private standard. Since these private policy instruments are gaining more importance as a complement to (or even replacement of) traditional 'command and control' state instruments (Veissier et al., 2008) we can also consider private standards as a manifestation of political modernization: entailing a shift from primarily state-initiated regulatory strategies towards new styles and practices of animal welfare governance (Van Tatenhove and Leroy, 2003). Such a shift offers new opportunities for using the market to achieve animal welfare, as the examples above have demonstrated. But there are also reasons for concern.

The Implications of Market-based Governance of Animal welfare

The emerging European policy arrangement seems a very promising way to deliver improved animal welfare. Modern governance tools have proved effective in changing the behaviour of actors along the chain (Cashore, 2002; Konefal, 2010) and in pushing standards beyond the minimum legal requirements (Codron et al., 2005). A survey carried out by Fulponi (2006) revealed that 33% of retail-driven animal welfare standards in the EU are significantly higher than state regulations and 50% of them are slightly higher. It has also been argued that private standards contribute to reducing transaction costs, as they promote coordination along the chain (Farina et al., 2005; Henson and Reardon, 2005). Furthermore private standards have no jurisdictional boundaries and so can be implemented at any geographical scale. This characteristic is of particular importance as it enables private actors to act where governments generally lack competence for regulating production processes in third countries. With all these features, it is not surprising that market-based governance is gaining prominence over public regulation (Van der Meulen, 2011). However, there are equally important aspects of private governance that give reason for concern.

Opening up the political process to non-state actors enhances democracy, in theory. Nonetheless, given the current imbalance of power among the chain actors and the undemocratic institutional design of most private standards systems, one may question if political modernization benefits all actors equally. One may also question what sort of standards and rules are likely to be generated in such circumstances. One should not forget that the shift from government to governance is taking place in an economic scenario that favours transnational corporations (TNCs). In many countries food retailing corporations are privileged actors when becoming oligopo-

lies through the process of on-going concentration in this sector (Busch and Bain, 2004; Konefal et al., 2005). This is particularly evident in Europe (Henson, 2008). In Norway, for instance, four retail groups account for 82% of the total grocery market. The Swedish market is dominated by three major organizations that control 95% of the market. In the Netherlands 75% of total food sales take place in supermarkets. Similar scenarios are found in the United Kingdom, where four big retailers dominate the market (Roex and Miele, 2005).

This large market share has enabled food retailers to increase their bargaining power in relation to their suppliers (Lang and Heasman, 2004; Konefal et al., 2005; Henson, 2008; Bain, 2010). The unequal power relation between food retailers and suppliers allows the former to arrange governance (of animal welfare) in a way that best serves their interests. Oligopolistic conditions influence the content and the organization of a policy domain, since the actor with the most power (and resources) can influence the three other dimensions of a policy arrangement. Food retailers are more powerful than their suppliers⁸ and are in the privileged position of choosing which actors to include in a coalition, which discourses to enact and the rules of the game. Research on the Chilean fresh fruit export industry illustrates this dynamic where ‘a handful of retail giants’ has the authority to establish and enforce standards and rules and, in doing so, determines who can (and cannot) participate in the export chain (Bain, 2010, p. 17). Equally, the Dutch examples of animal welfare governance (discussed above) revolve around the same group of actors: the biggest Dutch supermarket and a Dutch NGO with a moderate approach. NGOs with ‘fundamentalist or radical’ ideologies are marginalized (Mol, 2000, p. 51).

The prevalence of these groups of actors results in a reformist discourse that defines animal welfare in terms of extra product quality, instead of a discourse that aims to abolish animal exploitation (Francione and Garner, 2010). Rather than viewing animal welfare as a goal in itself the discourse frames it as a tool for market differentiation. As such, animal welfare becomes part of a ‘value-engineering’ strategy of food retailers (Veissier et al., 2008, p. 287) aimed at generating a competitive advantage. Konefal et al. (2005) and Henson (2008) explain how private standards allow food retailers to compete on quality rather than on price. When a retailer introduces a quality standard scheme it strengthens its corporate image by associating its name with ethical products. This is most apparent when these quality schemes are coupled with the retailer’s own brand (such as Albert Heijn’s *puur&eerlijk*, Tesco’s *Natural Choice* and Carrefour’s *Filière Qualité*). These are all ethical product lines owned by food retailers that are part of a quality standards scheme governed by the retailer alone or in cooperation with an NGO. Retailers can use these own-brand ethical product lines to present themselves as responsible enterprises dealing with societal concerns such as animal welfare, and thereby build a ‘charismatic authority’ (Fuchs and Kalgagianni, 2010, p. 22). This again raises concerns about the reallocation of authority resulting from the modernization of politics.

Retailer-led governance (through policy formulation and implementation) of social concerns shows a serious democratic deficit (and a complete absence in some scheme standards). Several scholars (e.g. Konefal et al., 2005; Bain, 2010; Marx, 2012) have identified that private governance regimes do not adequately include the fundamental principles of a democratic regime – such as direct or indirect participation, accountability, rule of law, and transparency. Two other principles also seem to be at stake: political pluralism and a separation of powers. While traditionally formulated policy is based on procedures underpinned by political pluralism – through which

alternative policies and preferences are voiced by elected representatives of citizen – private governance arrangements are led by the interests and preferences of the food retailers that have acquired the ‘dominant voice’ (Fuchs and Kalfagianni, 2010, p. 23) through their oligopoly in the food market. Furthermore, whereas the traditional separation of power between legislative, executive and judicial branches preserves a distinction between the democratic elaboration, application and interpretation of rules, the accumulation of these powers in some quality standard schemes reinforces the power of retailers. Hence, it is important to investigate further to what extent private standards schemes provide a clear separation between the auditing personnel and the standard-setting and decision-making personnel? It is worth noting that only very few quality schemes have a well-developed complaint procedure or dispute settlement mechanism (Marx, 2012). These aspects raise concerns about the transition from government to governance, and suggest that it is not an unequivocal step forward for democracy.

Finally, it is important to note that private retail governance, through quality standard schemes, affects a wide range of actors across the globe (Fuchs et al., 2011, 2012). Some of the implications may be beneficial: better payments for suppliers who enhance the welfare of animals and an expansion of consumer choice in animal-friendly products. However, the authority of food retailers to regulate how food is produced, processed and consumed requires close scrutiny. The authority of governments to regulate production and consumption practices derives from the sovereignty of nations and their ability to follow established democratic procedures. These characteristics confer legitimacy to the regulatory acts of a government within its territory. Private governance is not legitimized similarly, but tends to be justified by its ability to provide effective results. Fuchs et al. (2011, p. 359) argue that it is misleading to assess private governance in terms of ‘output legitimacy’, as effectiveness cannot be measured objectively without prior democratic processes that guarantee that (all) affected stakeholders can participate in the definition of an ‘effective outcome’. Following on from this critique, we add that the ability of food retailers to turn non-legally binding practices into contractually binding obligations relies on a different sort of authority than the regulatory authority of state actors to bind parties to undertake (or refrain from) certain actions. Food retailers depend on the support of ‘socially shared legitimacy belief’ (inspired by Scharpf, 2009) since the rules and standards they create rely on voluntary compliance. To gain such social belief, retailers make use of their ‘market authority’ over suppliers and ‘charismatic authority’ over consumers. The way in which retailers exercise these two forms of authority is of interest, although we will limit ourselves here to discussing ‘market authority’, since this provokes much controversy in the area of international trade.

The role of market forces in assuring contractual performance has been theorized by Klein and Leffler (1981), but has gained relevance since with the evolving role of private governance in addressing domestic societal goals that require actions in foreign territories. Animal welfare is one of these cases where a domestic (in this case European) concern requires measures to be taken beyond Europe’s territory (since meat imported from third countries is also available on the European market). As mentioned in the Introduction, the international trade regime places constraints on the traditional regulatory activities of states. By contrast, food retailers operate in an ‘institutional void’ (inspired by Hajer, 2003): there is, at present, no clarity about the relationship between the voluntary standards implemented by retailers and the legal framework of the WTO. Arguments abound on both sides, but the lack

of case law makes it difficult to determine which argument will prevail (Roberts, 2009). While this issue remains unresolved, the proliferation of private standards continues to affect international trade. One could argue that, in a competitive free market, there is no legal issue with European retailers requiring their foreign meat suppliers to comply with private animal welfare standards, as this requirement is embedded in a voluntary commercial agreement between two parties. However, since the global food market is dominated by an oligopoly, this leaves farmers and slaughterhouses with few choices. Either they accept all the conditions imposed by the retailers or they are out of business (Bock and Van Huik, 2007; Wolff and Scannell, 2008). In short, given the 'market authority' acquired by food retailers as a result of global capital concentration, voluntary arrangements become *de facto* mandatory (Busch and Bain, 2004; Hatanaka et al., 2005; Henson, 2008; Wolff and Scannell, 2008; Hobbs, 2010; Hatanaka et al., 2012; Van der Meulen, 2011). The effect is that private regulatory instruments achieve an almost compulsory status in the global food arena, which strengthens our argument about the ambivalent effects of a shift from government to governance. In effect, transnational food corporations have acquired the capacity to act as 'quasi-states' (Busch, 2011), while their actions lack the democratic legitimacy of state actions.

Conclusion

The article has examined the entry of NGOs and food retailers into the arena of animal welfare politics, and sought to establish the extent to which the changes observed in Europe, and especially in the Netherlands, accord with the modernization of governance practices and styles. Drawing upon political modernization theory, and more specifically the four dimensions of policy arrangement theory, we have analysed the changing roles of state and non-state actors and the emergence of private quality schemes. We conclude that these developments do indeed reflect a modernization of governance arrangements. In addition our analysis showed that this shift towards modernized governance has an ambivalent effect on food policy and actors in the food supply chain.

Although the widening of the political sphere provides new opportunities for non-state actors to actively participate in the formulation and implementation of policies (and thereby potentially increase democratic processes), in reality it has empowered food retailers, elevating them to the status of global food regulators. The application of European private standards in global food markets may bring positive outcomes, such as the diffusion of more stringent animal welfare measures beyond Europe's territory. However, the imbalance of power between food retailers and their suppliers compromises the democratic legitimacy of the way in which private standards are formulated and implemented. As such, we argue, more attention should be paid to the shift from government to governance, especially with regards to the way in which this leads to a reallocation of regulatory authority from sovereign states and towards the power of market dynamics.

Notes

1. Refers to the World Organisation for Animal Health, which is still be known by its French acronym Office International des Epizooties.

2. Concerns for the treatment of animals can be traced back to ancient Greek philosophy and the writings of Aristoteles. However, from a policy perspective, it seems reasonable to say that a European animal welfare policy domain emerged with the establishment of the Brambell Committee, since specific welfare policy measures began from that time onwards.
3. In English: the Council for Animal Affairs.
4. Variant Creutzfeldt-Jakob disease (vCJD) is a rare and fatal human neurodegenerative condition. In contrast to the traditional forms of CJD, vCJD is not related to a gene mutation, but rather to the consumption of meat from cattle infected with bovine spongiform encephalopathy (BSE). This disease in cows — bovine spongiform encephalopathy, popularly called mad cow disease — is thought to have originated from the sheep disease scrapie. This event is linked to animal welfare because, according to some scientific evidence, the animals became infected by BSE through inappropriate feeding.
5. Previous legislation referred to a 'warranty' defence, which required proof of negligence.
6. Power is defined as 'a relationship among social actors in which one social actor, A, can get another social actor, B, to do something that B would not otherwise have done' (Pfeffer in Ingenbleek and Immink, 2010). Urgency is defined as 'the degree to which stakeholder claims call for immediate attention' (Mitchell et al. in Ingenbleek and Immink, 2010).
7. This discourse has its root in a line of thinking that rejects the conflict between economic progress and environmentally responsible firm management. Scholars sympathetic with the tenets of ecological modernization tend to reframe environmental reform by interpreting pollution reduction as a means of enhancing economic competitiveness rather than an extra cost (for more information on ecological modernization see e.g. Mol, 1995; Cohen, 1997; Murphy and Gouldson, 2000).
8. And arguably more powerful than consumers, who may also experience less freedom of choice as a result of retail concentration.

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A New Breed of Tomato Farmers? The Effect of Transnational Supermarket Standards on Domestic Cultures of Production and Trade

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Abstract. Transnational supermarkets are entering and establishing themselves in distinct national contexts, yet their success depends on the effective localization of their operations in each new place. The establishment of local supply chains, vertically coordinated through the implementation of private standards, is a key localization strategy. Supermarket procurement practices introduce a wide array of standards that influence not just product quality, but how the product is produced and by whom as well as how it is procured and traded.

This research compares domestic suppliers of a fresh vegetable (tomato) across two types of retailers (wet markets and supermarkets) in a lower-income developing country (Nicaragua), to better understand the effects of supermarket procurement practices in developing countries. While economic geographers and others propose that in order to be successful in new countries supermarkets must adapt to local cultures of production and consumption, I found that a major transnational supermarket chain, instead of adapting to local cultures of production and trade, sidestepped them completely. Through the introduction of a broad range of novel procurement standards this supermarket chain induced changes not just in product attributes and production practices, but also in the organization of production in time and space and in how products are exchanged, including units of sale, payment methods, and coordination mechanisms. In order to better understand the effects of the transnational supermarket growth in developing countries, we need to expand the lens beyond product grades and standards to procurement practices and standards more generally.

Introduction

Transnational supermarket chains have spread rapidly across the developing world over the past two decades, expanding into new countries and increasing rapidly their store numbers and market share. Since 1990 supermarkets have expanded in developing nations by diversifying formats to serve middle and low-income neighbourhoods and moving beyond capital cities into smaller cities and towns. In doing

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so, supermarkets have increased their share of food retailing in developing countries from an average of 10–20% in 1990 to an average of 50–60% in some regions by 2000 (Reardon and Berdegué, 2002). Much of this growth comes from transnational supermarkets spreading into new countries, with Latin America and Asia leading the way, Africa and Eastern Europe following behind. In higher-income countries such as Argentina and Chile, supermarkets control over 60% of food retail, while in lower-income countries in Africa they control less than 10% (on ‘waves of supermarketization’, see Reardon et al., 2007; Timmer, 2008).¹

As transnational food retailers spread across the developing world transforming the way urban households shop for food, this globalizing process is made possible/ accompanied by strategies of production localization that allow retailers to source some of their wares locally. Transnational supermarkets are entering and establishing themselves in distinct national contexts, yet the literature suggests that their success depends on the effective localization of their operations in each new country (Coe and Lee, 2006). In order for transnational food retailers to establish themselves in a new host economy, researchers have argued that they must implement specific strategies to localize their operation, including the establishment of local networks for sourcing goods from farmers (Reardon et al., 2007).

In this article, I explore the effects of these localization strategies on domestic cultures of production and trade, meaning the way food is produced and marketed locally. This research compares domestic suppliers of a fresh vegetable (tomato) across two kinds of retailers (wet markets and a transnational supermarket chain) in a lower-income developing country (Nicaragua), to understand better the effects of supply chain localization by transnational supermarkets in developing countries. I show how, in establishing local supply for tomatoes in Nicaragua, a particular transnational food retailer sidesteps local cultures of production and trade to produce a wholly new procurement system with important implications for the farmers who supply them.

The article proceeds as follows. I describe the entry and growth of supermarkets in Nicaragua. I compare farmers supplying supermarkets with those producing for wholesale markets to show how the implementation of private procurement standards by supermarkets has radically reconfigured practices for the production and exchange of tomatoes in Nicaragua. I end with a discussion of the implications of these procurement practices for farmers in developing countries, focusing on how private procurement standards remove transactions from the market, make price comparisons difficult, and raise the costs of switching market channels – all affecting market competition.

Supermarkets in Developing Countries

As a phenomenon, this ‘supermarket revolution in developing countries’ has attracted attention within many disciplines – agricultural economics, economic geography, sociology, international business, and development studies as well as within policy circles (Barrientos and Dolan, 2006; Ruben et al., 2006; Burch and Lawrence, 2007; Swinnen, 2007; Vorley et al., 2007; Wrigley and Lowe, 2007; Farnworth et al., 2008; McCullough et al., 2008; World Bank, 2008; Reardon et al., 2009). While a major concern of this literature has been the impacts on or opportunities for farmers of supermarket growth, a sizeable portion of this work has focused on corporate strate-

gies for entering new host economies, i.e. their 'localization strategies'. Yet scholars are divided as to what this process means.

Economic geographers see the localization of transnational retailers as a process of adapting to the cultures of production in the places they do business. They view retailing as an activity that is highly embedded territorially in a particular place, arguing that because supermarkets source the majority of their products domestically, retailing requires connection to local supply chains and production networks (Coe and Lee, 2006; Coe and Wrigley, 2007; Dawson, 2007). Along similar lines, Humphrey argues that whether and how much supermarkets vertically coordinate supply chains (i.e. their localization strategy) depends on the local characteristics of consumers, wholesale markets, and production and the relative local costs of establishing vertically coordinated supply chains vs. other alternatives (Humphrey, 2007). For these scholars, localization is about adapting corporate strategies to the realities of the host economy. The local context, as they see it, shapes how supermarkets must operate in a new place.

In contrast, other scholars studying this phenomenon see the localization of transnational retailers as a process of transforming pre-existing business and production cultures to fit corporate practice. Busch (2007) argues that when supermarkets enter a new country they don't just play on the 'level' playing field they encounter, but attempt to reshape the field to their advantage using a variety of strategies under the umbrella of supply chain management (SCM). Using the imagery of mathematical manifolds, Busch argues that while neoclassical economics sees a level playing field in two dimensions, transnational retailers see it in three, and their strategies are focused on reshaping the field in its third dimension levelling it to their advantage. Similarly, agricultural economists who have studied the growth of transnational retailers in developing countries claim that supermarkets take local conditions not as exogenous conditions to which they must adapt, but as endogenous conditions 'they could alter for their own gain'. They argue that transnational retailers implement 'proactive fast tracking strategies' in order to alter local conditions in their favour and successfully enter new host markets (Reardon et al., 2007; Timmer, 2008). These proactive fast tracking strategies include procurement system modernization and local supply chain development.

Competition between retailers is seen by these authors as competition between supply chains, shifting the unit of analysis from the firm to the supply chain. They argue that retailers increasingly use vertically coordinated supply chains as a way to optimize the supply chain as a whole, from production to consumption (Busch, 2007). While we often see retailers as competing for consumers, focusing on differentiation strategies, particularly the use of private product grades and standards with regards to consumers as the main drivers of retail behaviour, a SCM perspective highlights how retailers also implement strategies in relation to suppliers, not just to differentiate products, but also to attract and retain suppliers to ensure supply, to keep prices low and to keep quality high. They describe the establishment of vertically coordinated supply chains, or 'modern procurement systems', in developing countries as having three main pillars: first, the centralization and integration of procurement across space through the use of distribution centres; second, sourcing from preferred suppliers as opposed to in wholesale markets; third the increasing implementation of private standards for food quality and safety (Reardon and Berdegúe, 2002; Boselie et al., 2003; Reardon et al., 2008; Timmer, 2008).

The SCM perspective highlights further how transnational retailer strategies seek not only to optimize returns relative to other supply chains, but relative to other actors in their supply chain as well (Busch, 2007). Distinct procurement practices distribute costs and benefits differently along a chain, with important implications for farmers. Much attention has been focused on the use of private product grades and standards by supermarkets and the implications for farmers in terms of production costs, investments, and inclusion in the chain (Balsevich, 2003; Neven and Reardon, 2004; Berdegué et al., 2005; Swinnen, 2007). Far less attention has been paid to the implementation of standards related to market transactions and the implications of these for farmers. The transformations brought about by supermarket procurement practices are not just in products and production in response to private product grades and standards. Important changes are occurring as well in how the product is traded, with much deeper implications for markets and competition. I argue here that a SCM lens applied to the growth of supermarkets in developing countries helps bring to the fore a host of practices supermarkets implement with regards to suppliers that have been otherwise overlooked.

Transnational Supermarkets and Supply Chain Localization in Nicaragua

In Nicaragua, the vast majority of food – and of tomatoes in particular – is sold through municipal markets. Around 74% of tomatoes were traded in municipal markets around the country in 2003 (Balsevich et al., 2004).² These open-air markets are run by municipalities and consist of vendor stalls organized by product category. The supply chain leading to municipal markets is comprised of producers, wholesalers and retailers, with occasional participation of intermediaries. Retailers who operate stands in municipal markets most frequently purchase their tomatoes on short-term (1–3 days) credit from wholesalers who buy them outright from farmers. Wholesalers often extend production credit to farmers for 45–120 days or act as investing partners in production. Wholesalers drive this chain, agglomerating supply from farmers in different regions of the country in different seasons and grading the product, by size, before selling it on to retailers.

In 2007, 22% of food was sold in supermarkets in Nicaragua. Over half of this was sold by Wal-Mart, a transnational food retailer (Planet Retail, 2009). While supermarkets have been around in Nicaragua since the 1960s, their growth has taken off since the late 1990s, with a serious spurt after the entry of Royal Ahold, the first transnational food retailer, in 2001. Ahold entered Nicaragua as part of the Central American Retail Holding Company (CARHCO), a regional joint venture with Corporación Supermercados Unidos (CSU) of Costa Rica and La Fragua of Guatemala (Berdegué et al., 2005; Balsevich et al., 2006). Between 2001 and 2003 CARHCO began centralization of procurement (previously done on a store-by-store basis), through the establishment of a distribution centre for imports. During this period CARHCO also initiated the development of private standards applied at their distribution centres (Berdegué et al., 2005). Between 2003 and 2005 CARHCO shifted from the use of wholesale markets towards the use of preferred suppliers to procure domestic produce, with tomatoes leading the way. This shift was accompanied by the implementation of private grades and standards for fresh fruit and vegetable products (Berdegué et al., 2005) and for procurement. In 2005 Wal-Mart bought out Ahold and by 2006 became the majority shareholder in what then became Wal-Mart Centroamérica. Since this time they have begun to harmonize and integrate procure-

ment within Nicaragua and across their stores in Central America (Interviews with procurement personnel, 2008) and since 2009 with operations in Mexico, becoming Wal-Mart Mexico and Central America (Walmart de México y Centroamérica, 2012).

Wal-Mart purchases tomatoes through its procurement arm from farmers' organizations in coordination with local NGOs. These farmers' organizations consolidate product across their members to meet supermarket demand for products, quantity and quality year-round. Farmers and farmers' associations collect, grade and standardize the product and the supermarket picks it up in the community three days per week. In the supermarket channel, retailers are the drivers of the chain, orienting other actors toward their demands.

Methods

This research uses the concept of commodity chain to delimit units for analysis by tracing a commodity from a retailer's shelves back into production as a way to compare across different commodity chains, in this case two domestic commodity chains for the same crop but ending in different retailers – a transnational supermarket chain and municipal markets. I chose tomato for a number of reasons. First, it is a crop that is widely produced and consumed within the country, so there are well-developed domestic market channels. Second, it is a crop for which there is no processing between producer and consumer, so retailers are the main influence on the chain, not processors. Finally, tomato is one of the most important fresh fruit and vegetable products for supermarkets in general, and for this supermarket in particular (Interview with procurement personnel, 2009), so procurement systems for this crop are well developed.

I documented and analysed the tomato commodity chain by conducting interviews with current and previous supermarket procurement personnel, including field buyers and distribution centre staff, wholesalers, retailers, intermediaries, and farmers, as well as NGO and government personnel, and farmers' organizations. Interview data were complemented by data from government and non-governmental organizations, as well as from several other studies of tomato supply chains for this supermarket in Nicaragua (Balsevich et al., 2004; Segur et al., 2004; Wiegel, 2006; Hernández and Reardon, 2012; Michelson et al., 2012).

The farmer data reported here were collected from interviews conducted during 2008, with samples of 20 farmers within each supply chain. Key informant interviews were used to establish the universe of farmers in the supermarket supply chain, from which to select farmers to interview. Agricultural census data (INEC, 2001) were used to establish the universe of farmers producing for wholesale markets. Farmers were selected through a two-stage process: communities were selected first, and then a sample of 10 farmers within each community for interviews. Farmers were asked about the history and current situation of their farm, agriculture, employment, income, and family. Interviews also explored former and current production systems, marketing practices, and perceptions of market options for tomatoes.

Results: A New Breed of Tomato Farmers

The two groups of farmers, those selling to wholesalers and those selling to supermarkets, exhibit important differences in their characteristics, production systems

and marketing practices. They have, in fact, evolved as separate communities of practice (following Wenger, 2000), almost in isolation from each other; hence, the reference to a 'new breed of tomato farmers'.

Different Communities, Different Farmers

In comparing farmers across these two retail channels, important differences at the level of community and farmer characteristics are revealed. At the time the research was conducted the transnational supermarket was sourcing 80–90% of their tomatoes from two communities in northern Nicaragua where they began buying in 2005. Neither of these communities is a traditionally tomato or vegetable producing community, nor are they located in traditional tomato-producing regions.³ For these reasons, tomato buyers do not visit these communities on a regular basis. Most of these farmers had never even grown tomatoes before supplying supermarkets. Farmers in both communities had initiated tomato production one to three years previous to my interviews with strong support from an NGO that also supported the creation of farmer organizations in these communities focused on marketing to supermarkets. In contrast, the communities supplying wholesalers are historically tomato producing communities and the majority of farmers had planted tomatoes regularly over the previous 20 years in one community and 15 in the other. Buyers are ever-present in these communities and actively promote tomato production. NGO presence in agriculture in one of these communities is very low, and in the other is focused on other crops (papaya and eggplant).

Though all farmers producing for both channels classify as small farmers, comparing data on farmers across these groups reveals important differences in farm assets and experience with tomatoes. Wholesaler suppliers are compared to supermarket suppliers at the time they began selling to supermarkets to control for the effects of supermarkets on these factors. Table 1 shows that supermarket suppliers owned on average 20% less land and were much less likely to have irrigation or to have planted tomatoes in the year previous to their first sale to supermarkets. Only 21% of supermarket suppliers had planted tomato in the year prior to supplying supermarkets, and those who did planted much smaller areas than farmers supplying wholesalers. Seventy-five per cent of supermarket suppliers had not planted tomatoes in the previous five years, and 65% had never planted tomatoes at all.

Table 1. Differences in farmer characteristics between wholesaler and supermarket suppliers.

	Wholesaler suppliers (n=22)	Supermarket suppliers (n=20)
Landholdings (mz)*	6.2 (9.8)†	5.3 (7.2)
Own a vehicle	0%	5%
Have irrigation	100%	32%
Grew tomatoes in the previous year	100%	21%
Area planted in tomato previous year (mzs, of those who planted)	2.1 (1.3)	0.5 (0.2)

Notes: * 1 mz = 0.7 hectare; † numbers in parentheses are standard deviations.

Between 2004 and 2008, Wal-Mart went from sourcing 10–90% of its tomatoes year-round from preferred suppliers adhering to private grades and quality standards (Interviews with procurement personnel, 2008). While they had arguably been successful in ‘localizing’ their supply channels, they had done so, not by sourcing from the over 4,000 existing tomato farmers in the country (INEC, 2001), but by working with farmers who, for the most part, were new to tomato production.

Different Production Practices

The production system of supermarket suppliers differs in several ways from that of farmers supplying wholesalers. Farmers supplying wholesalers plant larger tomato areas in a year as well as larger plots at a time (see Table 2). They also plant with a marked seasonality, which varies by region as a function of rains or other priority crops they plant. As a result, wholesalers’ sourcing regions also shift seasonally. Supermarket suppliers, on the other hand, plant half as much area in tomatoes during a year and cultivate much smaller plots at a time.⁴ They also plant throughout the year, with no marked seasonal pattern to production. Supermarkets source in the same places and from the same farmers year-round.

Key production technologies, such as seed variety and seedling production, are also different across these two groups of farmers. Wholesale market suppliers most frequently use Butte, Shanty and Peto seed varieties, and produce their own seedlings on-farm in seedbeds in the ground or in seedling trays in home-made greenhouses. Supermarket suppliers, on the other hand, use overwhelmingly Comanche, then Shanty varieties, and purchase their seedlings in seedling trays from commercial greenhouses (see Table 2). While these results align with other studies of farmers supplying different retail channels showing differences in production practices associated with different quality standards (Flores and Reardon, 2006; Hernández et al., 2007; Berdegué and Reardon, 2008), here I highlight differences in production practices related to the establishment of stable procurement routes, in addition to practices related to quality standards

Different Marketing Practices

The most significant area of difference between these two groups is in marketing relationships and sales transactions, including units of sale, prices, forms of payment, and coordination mechanisms. The units of sale, including the grades and standards

Table 2. Differences in production between wholesaler and supermarket suppliers.

	Wholesaler suppliers (n=22)	Supermarket suppliers (n=20)
Area grown in a year (mz)	2.1 (1.32)	0.98 (0.63)
Field size	1.25 (1)	0.43 (.21)
Seasonality	Marked	None
Seed varieties	Butte (45%) Shanty (40%) Peto (35%)	Comanche (79%) Shanty (47%)
Seedling production	Produced on-farm (100%)	Purchased (100%)

Notes: * 1 mz = 0.7 hectare; † numbers in parentheses are standard deviations.

as well as the units of measurement are different. Prices are different, as is the way they are negotiated. The form of payment, as well as how and where transactions are negotiated and conducted, also varies.

Farmers sell to wholesalers by the *cajilla*, a volume-based measure referring to one full plastic crate. Tomatoes are graded into three size categories, which determine price. The wholesaler generally both grades the product and measures out the number of units. Price is negotiated per crate for each size category. Measurement is visually verified by both parties at the time of sale.⁵

Farmers sell to supermarkets by the *estándar*, a weight-based measure referring to a crate filled with exactly 25 lb of Roma tomatoes meeting specified weight, size, shape and appearance standards. Farmers are responsible for selecting tomatoes which meet the quality standards and standardizing their tomatoes into these units using a scale before the supermarket picks them up. Prices are negotiated by pound (lb) of tomatoes. The buyer verifies measurement by checking the scale used and by weighing a sample of *estándares* (see Table 3).

Average prices and price variability also differ across these two groups. Farmers selling to wholesalers reported a much broader range of prices, with a much higher high price and a much lower low price received for tomatoes as compared to supermarket suppliers (see Table 4). Michelson et al. (2012) analysed weekly price data for 2007 (also in Table 4) from supermarket receipts and prices collected from wholesalers by the Ministry of Agriculture to calculate average prices paid by these two buyers. They found a significant difference in prices between these two channels with average prices paid by wholesalers being higher and more variable than those paid by Wal-Mart, consistent with my own findings.

Wholesalers pay farmers directly, in cash, on delivery, and without deductions. Grading, taxes or fees are paid for separately by the wholesaler. Payments by supermarkets, on the other hand, are paid through farmers' organizations by bank transfer up to 20 days after the transaction has taken place. Deductions are made from the established price for sales tax and product grading (see Table 5).

How farmers coordinate with buyers also differs across these two groups. Farmers supplying wholesale markets generally negotiate sales when the harvest is ready. The wholesaler agrees to buy all tomatoes ready to be picked on a given day at a given price for each quality. Farmers negotiate prices directly with the buyer before harvesting and volumes to be transacted depend on the farmer's yields. Wholesalers drive the chain, spot transactions dominate, and the costs of switching buyers are low (see Table 6).⁶

Farmers supplying supermarkets generally negotiate sales before planting. The supermarket agrees to buy all tomatoes that meet their quality standards, up to their quota for any given day. A representative of the farmers' organization negotiates with the buyer on the farmers' behalf. The price range is known before harvest, but not the exact price. Volumes to be produced are determined by the buyers projected demand, but at the time of sale only those tomatoes that meet the buyer's standards and demand are purchased. Retailers drive the chain, coordinated transactions dominate, and the costs of switching buyers are high.⁷

Farmers who sell to supermarkets, along with their production and marketing practices are very different from farmers selling to wholesale markets. These differences go beyond production techniques needed to meet supermarket product quality standards most often described in the literature. The differences begin with the type of farmer, and include production practices to meet supermarket preferences

Table 3. Units of sale used in transactions by wholesalers and supermarkets.

	Wholesalers	Supermarkets
Unit used to purchase from farmers	<i>Cajilla</i> (full plastic crate)	Lb (crate with 25 lbs of tomatoes)
Kind of unit	Volume	Weight
Grades and standards	Size grades (affects price)	Size, weight, appearance (determines sale)
Who measures / grades	Buyer	Seller
Method of verification	Visual	Instrument
Source of dispute	How full the crates are	Which scale to use
Unit used to sell on	<i>Cajilla</i>	Lb

Table 4. Differences in prices between wholesaler and supermarket suppliers.

	Wholesaler suppliers (n=22)	Supermarket suppliers (n=20)
High price*	4.9	3.3
Low price*	1.5	2.2
Average price (Sébaco)†	5.2	3.4
Average price (Ocotal)†	6.3	4.2

Notes: * Reported by farmers in interviews; † from Michelson et al., 2012.

Table 5. Differences in how payments are made between wholesaler and supermarket suppliers.

	Wholesaler suppliers (n=22)	Supermarket suppliers (n=20)
Payment method	Cash (100%)	Bank transfer (100%)
When payment made	On delivery (86%)	Delayed (100%)
Who is paid	Individual	Collective
Adjustments	No deductions	Deductions for sales tax and grading

Table 6. Differences in coordination mechanisms between wholesaler and supermarket suppliers.

	Wholesaler suppliers (n=22)	Supermarket suppliers (n=20)
When sales agreement made	At harvest	Before planting
Negotiation	Direct	Intermediated
When exact price is known	Before harvest	After harvest
Volume transacted	Everything the farmer harvests	Only what meets buyer's standards and quantity demands
How chain is driven	Wholesaler Spot transactions Costs of switching low	Retailer Coordinated transactions Costs of switching high

for volume and procurement route, in addition to quality standards and marketing practices. Supermarkets elected to work with inexperienced tomato farmers using a particular set of procurement practices. This, in turn, produced a very different kind of tomato farmer.

Discussion

Ahold/Wal-Mart, in this case, did not adapt to existing cultures of production and trade in order to localize their operations in a new host economy. Instead, this transnational food retailer, upon entering Nicaragua, began working with farmers who were not involved in tomato production at all. Through the introduction of a broad range of novel procurement practices, it created a new culture of production and trade, one that fit better with supermarket preferences for procurement.

The findings I present here extend the debate on supermarket localization strategies in two ways. First, I highlight contradictions between my findings and that of other research on supermarket localization, suggesting alternative explanations. Second, I explore how a supply chain management lens helps highlight elements of supermarket localization strategy vis-à-vis suppliers that have important implications for markets and competition.

Supermarket Localization Strategies Revisited

There are several aspects of the supermarket localization debate that this research speaks to, challenging, reaffirming or extending assumptions. In particular, this research raises questions about the assumptions that transnational supermarkets will supply from more capitalized farmers where they exist; that private product quality standards are the main driver of supermarket procurement strategies and impacts on small farmers; and that supermarkets seek to adapt to local cultures of production and trade. These are discussed in turn below.

Supermarkets Will Supply from More Capitalized Farmers

Multiple studies have asked what kind of farmers supermarkets prefer to source from, with overwhelming evidence of a preference for larger, more experienced, and more capitalized farmers (top third of small farmers, per Berdegué and Reardon, 2008). The reason, they explain, has to do with the requirements supermarkets impose on suppliers including volumes, quality, consistent supply, and post-harvest processing. Yet in this case, supermarkets did not establish sourcing relationships with existing larger, more experienced and more capitalized tomato farmers; quite the opposite. Here I find supermarkets choosing smaller, poorer, less experienced tomato farmers to source from. This directly contradicts economic geographers' suggestion that transnational retailers would seek high levels of territorial embeddedness, including in local production and supply networks (Coe and Wrigley, 2007) and findings of others that transnational supermarkets prefer sourcing from larger, more capitalized and more experienced farmers where they exist (Berdegué et al., 2005; Flores and Reardon, 2006; Natawidjaja et al., 2006; Berdegué and Reardon, 2008).

The reason, in this case, is not because these farmers did not exist, but because they were unwilling to comply with supermarket requirements. The supermarket

procurement arm attempted on several occasions between 1998 and 2005 to source from existing tomato farmers, but they were unsuccessful, explaining that farmers were unwilling to comply with supermarket procurement requirements, and/or were too loyal to existing buyers. This suggests not only that a farmers' ability to comply, in terms of resources, experience and farm size are important for selecting suppliers, but that *willingness* to comply with (or ability to impose) supermarket procurement practices is equally important. In understanding supermarket procurement strategies, particularly with regards to farmer selection, I suggest considering willingness to comply as well as capacity to comply with supermarket procurement requirements. In this case, being unable to get existing, experienced, more capitalized tomato farmers to comply with their procurement preferences, supermarkets employed an alternative strategy to find new farmers on whom they could impose these requirements.

Product Quality Standards Are the Main Driver of Supermarket Procurement Strategies

A heavy focus in the supermarkets and small farmers literature has been on product quality standards, with the question being whether or not supermarkets will implement private product quality standards, and what kind they will implement as a way to predict the impacts on small farmers in developing countries. The expectation for poorer developing countries, where public standards are low and poorly enforced and consumers' priorities focus on price not quality, is that supermarkets will not implement private standards or only very basic ones. Humphrey (2007), for example, predicts procurement systems that are not so vertically coordinated, or that supermarkets would simply purchase in wholesale markets, resulting in fewer requirements and challenges for small farmer participation in the chain. In this case, quality standards were predictably basic, focused on appearance, with no expensive tests or certification costs associated. Yet, despite minimal quality standards, radical impacts on practices of suppliers suggests that for developing countries transnational supermarkets procurement preferences related to stable sourcing routes, volumes, and payment mechanisms, for example, may pose much more important challenges to small farmers than portrayed in the literature. While Berdegué and Reardon (2008) mention transactional requirements of supermarkets, more work is needed to detail what this refers to and the implications of these for supermarket suppliers and small farmers in particular.

Supermarkets Seek to Adapt to Local Cultures

In sourcing from farmers who were uninitiated with regard to tomato production, the supermarket shaped their production and marketing practices in ways that conform to supermarket demands. With little competition from other buyers, the farmers from whom supermarkets sourced became tomato farmers under the tutelage of supermarkets and, as a result, became a very different kind of tomato farmer. Drawing on Wenger's (2000) definition of communities of practice as having the following three things in common: a domain of interest, a community where they interact and learn together, and a shared practice; we can understand these groups to be distinct communities of practice. While they may have a common domain of interest, producing tomato, there is little or no interaction between these groups and little shared practice has developed as a result. This 'new breed' of tomato farmer not only organizes production on their farm differently to produce a slightly different tomato, but they have a very different social organization of production. This

includes the social organization of production on the farm including differences in the use of labour and financial resources.

A still more significant difference is the social organization of production within the community requiring coordination with other farmers through a legally constituted organization around production practices, planting dates and areas, harvesting and marketing, and payment practices. While organizing often brings opportunities for greater negotiating power and collaboration, it also brings new costs and risks. Farmers must invest in the establishment and maintenance of the organization, which effectively becomes a new intermediary along the chain. Aside from their high risks of failure (Berdegué and Reardon, 2008), these organizations become primarily marketing organizations, where the business of the organization (selling a product) becomes more closely related to the business of the buyer (buying a product) than that of farmers (improving household incomes). Conflicts of interest can arise particularly as financial operations of the farmer organization become tied up with sales through the cooperative to a buyer, and these organizations struggle to enforce requirements for buyers, and ensure that farmers sell through the cooperative and not independently.

While it might seem strange to suggest that supermarkets promote or require farmers to organize when they are so often portrayed as pitting suppliers against each other, here, supermarkets do not engage with individual farmers but with farmer organizations as suppliers. It is at this level that supermarkets pit suppliers against each other. In the case at hand, supermarkets actively pit farmer organizations against each other, vying for volumes and lowering prices. The farmers' organizations saw themselves in active competition with other farmer organizations.

The Supply Chain Management Lens

Supermarket procurement practices have sought to coordinate supply chains back into production. The objectives of this have been understood as the ability to impose product quality standards on producers in order to differentiate their products to consumers as a key competitive strategy, shifting competition away from price. Yet a supply chain management (SCM) lens broadens that focus to the whole supply chain, and suggests that enrolling suppliers maybe as important as capturing consumers. Supply chain management allows supermarkets to manage many aspects of the supply chain that contribute to profits, including costs and finance, as well as product quality and availability. For this case, I point to three elements of this supermarket's strategy to enrol and retain suppliers: removing transactions from the market, making price comparisons difficult, and increasing the costs of switching buyers.

Removing Transactions from the Market

Goods are procured in the proverbial market where buyers and sellers come together to exchange goods and money. Market transactions are regulated by conventions of product definition and quality, rights and responsibilities of buyers and sellers, and delivery and payment methods. Prices are a function of supply and demand as well as the relative power of buyers and sellers in the market. Supermarket procurement practices, however, have removed transactions from the market, coordinating supply chains back into production.

Tomato farmers who sell in wholesale markets in Nicaragua carry out their sales in the context of a market where there are multiple buyers and sellers with whom they interact in the process. Farmers who sell to transnational supermarkets, however, carry out their transactions outside of markets. Not only are transactions negotiated and carried out far from wholesale markets,⁸ they are carried out in places that are not frequented by buyers as they are not traditionally tomato producing communities. When Ahold/Wal-Mart entered Nicaragua, this strategy allowed them, at least initially, to establish relationships with farmers in a competition-free environment. They were able to establish the terms of trade as farmers not only had no contacts with alternative buyers, but most had no previous experience with tomato markets. This allowed supermarkets to establish their own conventions for quality, negotiate prices with reference to something other than the market price, in this case effecting a lowering and stabilization of procurement prices, and to push tasks and costs down the chain onto suppliers, establishing a new distribution of costs, risks and benefits.

Making Price Comparisons Difficult

The introduction of public standards for products and product qualities, including units of sale, simplify and facilitate market exchanges by controlling for qualities and quantities such that negotiations can focus on price. The introduction of private grades and standards, however, create a multiplicity of standards, complicating market exchanges by making products difficult to compare and shifting the focus from price to product attributes (Busch, 2000). In the case at hand, the different standards for size, quality, and units of sale used by supermarkets made price comparisons across channels practically impossible. By how many pounds (lb) should one multiply the supermarket price to establish a price comparable to that of a crate as sold in the wholesale market where crates weigh between 45 and 70 lb? Size grades for wholesale markets are small, medium and large, while size grades for supermarkets are based on a minimum size that is in between the wholesalers' small and large such that some 'medium' tomatoes fall above the threshold and some below. Additionally, tomatoes sold to wholesale markets include blemished, deformed, and very ripe tomatoes, all of which are rejected by supermarkets, so price comparisons require some estimate of the level of rejects by supermarkets and the price obtained for those in other markets. Differences in what is or is not included in prices and deductions from them, as well as arrangements used for transactions, further complicate direct price comparisons. Farmers selling to supermarkets must deduct the cost of grading and standardizing and tax withholdings from the supermarket price; farmers selling to wholesalers must deduct the cost of transport from the wholesaler price such that, in either case, exact costs per unit of tomato are not known until the time of sale.

With different methods of measuring the product and incomparable grades and standards, the wholesale markets do not serve as a good reference for supermarket suppliers in assessing the terms of trade being offered by the buyer, and vice versa. When considering product sale prices, farmers tended to compare prices received from the same buyer in the past, rather than prices paid by other kinds of buyers at that time. Discontent was expressed not by selling to a different buyer, but by negotiations with the supermarket buyer. For supermarkets, this serves to shift conflict from price to quality standards or other parts of the relationship that are easier for supermarkets to modify.

Increasing the Costs of Switching Market Channels

Insofar as buyers impose chain-specific investments on farmers, they increase the farmers' costs of switching buyers. Supermarket procurement practices impose different requirements on a farmer's production system than wholesalers do. The organization of production for supermarkets (smaller areas throughout the year as opposed to larger areas seasonally for wholesalers) imposes different requirements in terms of irrigation equipment, water and labour needs, and cash flow. Selling to supermarkets requires coordination with other nearby farmers, including investments in organizational strengthening, processing facilities, and accounting systems. Wholesaler suppliers think twice about making these kinds of investments, while supermarket suppliers think twice about letting such investments go to waste once made.

Different production systems also shape how farmers view and are viewed by different kinds of buyers. Farmers who produce for supermarkets plant small areas throughout the year and sell what does not meet supermarket standards or demand to local wholesalers and retailers as small volumes do not merit transport to national wholesale markets. Yet local markets are thin, and because they are selling the rejects from supermarket production they receive a discounted price (Balsevich et al., 2004). Compared to supermarket buyers, local wholesalers and retailers buy small volumes and pay similar or lower prices; therefore, farmers who produce for supermarkets prefer them. From a wholesaler's perspective, these farmers have little to offer in the way of volume, and do not plant preferred varieties.

Farmers who sell primarily to wholesalers, on the other hand, tend to plant larger areas seasonally. They market their tomatoes in the national or regional wholesale markets where they can sell whatever volumes they produce and receive full price for their tomatoes. Compared to supermarket buyers, these buyers require less or no grading, no group arrangement with other farmers, buy unlimited quantities, and pay a similar or higher price, in cash; wholesalers are preferred. From a supermarket's perspective, these farmers cannot offer year-round supply, deferred payment or their preferred variety, and are unwilling to grade the product.

As farmers orient their production system to one kind of buyer, they become more attractive to that buyer and less so to other kinds of buyers. This reinforces the market choice, also making it difficult to switch from one to another. For one group of farmers it took six months to switch between the supermarket and national wholesalers. This helps explain why, in interviews, farmers expressed more interest in other buyers of the same kind than other buyers of a different kind. But for supermarket suppliers, the number of alternative buyers is limited. One group of supermarket suppliers successfully switched to the domestic supermarket chain, but it took six months to establish a relationship and required significant changes to production systems, quality standards, and even units of sale. Supermarket suppliers also explored restaurants and independent supermarkets, but since few buy directly options were limited. For wholesaler suppliers, however, with five wholesale markets around the country there are many alternative buyers.

The creation of vertically coordinated supply chains by transnational supermarkets produces not only a differentiated product, but also a differentiated set of costs and benefits of insertion in the chain, making it difficult to compare across chains, as well as to switch from one to another. This can be understood best as the emergence of a supply chain management strategy where retailers compete to enrol actors into their chains, while promoting coordination between actors within the chain by mak-

ing switching or participation in multiple chains difficult. This reduces competition between farmers in different chains by reducing the competition supermarkets face from other buyers for a suppliers goods. Yet at the same time, supermarkets actively promote competition between suppliers within the chain, in this case farmer organizations, actively enrolling new suppliers, but in a context of multiple sellers to a single buyer. Once within the supply chain, as the ease of switching decreases, incentives for suppliers to cooperate with the retailer within the chain increase. This limits market alternatives for farmers and therefore bargaining power, even within the current context of strong alternative markets in Nicaragua.

Implications for Farmers in Developing Countries

I would like to highlight three clear implications of these findings for farmers in developing countries. First, this research supports the argument that supermarkets are actively seeking to implement vertically coordinated supply chains that provide the level of control and competitive edge supermarkets seek to have as gatekeepers between producers and consumers. For small farmers in developing countries who seek to supply supermarkets, this means being competitive not just in production, but with a series of other supply chain services that supermarkets demand: delayed payment, compliance monitoring, financial services, quality control, supply and price stabilization, among others. This often requires joining a farmer organization, which poses new costs and risks for farmers, as well as new social forms at the community level that require time to mature (Berdegué and Reardon, 2008).

Second, in the same way others have observed that supermarkets work actively to avoid price competition with other retailers for consumers, supermarkets seek the same with suppliers. Supermarkets work to integrate suppliers into their supply chain, promoting competition among suppliers within the chain, and collaboration between actors along the chain. In this process, supermarkets actively seek to stabilize prices paid to farmers and to engage suppliers around issues other than price. This makes it increasingly difficult for farmers to evaluate alternative market options and limits their flexibility with regards to market choices. Chain specific investments also lock farmers into the chain. For farmers accustomed to marketing decisions where price is the key factor, this is a huge transition. Competition for supermarket suppliers, then, is more intense between farmers in the supermarket channel than farmers in a different supply chain. How much competition a given farmer faces depends on how successful buyers are in bringing new farmers into the chain.

Finally, while economic geographers tend to focus on host economies and domestic supermarket operations, I question whether the interest of the transnational retailer is to establish domestic operations, or to expand their transnational operations. While this might be particular to the Central American context where host economies are very small, compatibility and integration of operations across host economies seems to be equally important for transnational retailers. Regional integration of procurement was on the table as soon as Ahold joined the joint venture in 2001, but after Wal-Mart joined in 2005 this process accelerated both expanding volumes for products brought from outside the region, as well as sourcing of FFV and other products more flexibly within the region. How fast this proceeds in any given product will depend on price, logistics, border issues and the level of procurement integration the supermarket achieves. What I hope to suggest is that the current ar-

rangements may not be very stable at all, though further research would be needed to confirm this.

Conclusion

The localization of supply for transnational supermarkets is not just about figuring out how to buy tomatoes and get them on supermarket shelves; it is about establishing coordinated supply chains. Because existing supply chains in Nicaragua are not heavily coordinated, this requires the introduction of a large number of new standards and practices, not just for product quality and production, but for how the product is exchanged: units of sale, prices, payment methods and coordination mechanisms, among others. These practices require radical changes in how most farmers in Nicaragua produce and market their goods, producing a new culture of production and trade.

Participation in supply chains coordinated by transnational supermarkets requires that farmers implement chain-specific procurement standards. In this case they organize their production calendar and practices, as well as how they market their tomatoes, around supermarket procurement practices: stable procurement routes and supply relations year-round, commitment only to purchase a part of the harvest, requirements that farmers do the sorting and measuring of the product, delayed payments using bank transfers, to name a few. For a variety of reasons, these practices differ from those of wholesalers, meaning that these investments only pay off if farmers sell to supermarkets. Collectively, these practices remove transactions from the market, make it difficult for farmers to compare across buyers and make it costly to switch between buyers when one is offering a better deal. This reduces competition between supermarkets and wholesalers for a farmer's product in a way that favours supermarkets in a market context dominated by wholesalers.

Notes

1. In this article I use the term 'supermarket' interchangeably with 'transnational food retailers'. There is a local supermarket chain as well as independent supermarkets in Nicaragua but these implement distinct procurement practices not under discussion here.
2. Many consumers buy their tomatoes from small household grocery stores which, in turn, purchase their tomatoes for the most part from municipal markets.
3. The municipalities where these communities are located placed 81st and 85th in numbers of farmers growing tomatoes out of 141 total municipalities in the 2001 farm census.
4. Comparing supermarket suppliers who did plant tomatoes before selling to supermarkets we can see that areas planted in tomato in the year doubled. I did observe gradual increase in size of plots planted in tomatoes by supermarket suppliers from 0.25 to 0.5 to 0.75 mz over time. But even after a few years, they still only plant half as much on average as wholesaler suppliers.
5. *Plantío* is a less common, though still used, unit of sale referring to a field of tomato ready to harvest. Farmers and the wholesaler will agree on a price for the field. The entire harvest then belongs to the buyer, though the farmer may still be responsible for irrigating, caring for and possibly spraying the field until the harvest is finished.
6. Even in cases where farmers were planting in partnership with wholesalers they reported having sold their harvest, with the wholesaler's consent, to a different buyer who was offering a better price.
7. For two groups of farmers it took six months to shift their production systems to produce for a different buyer after the transnational supermarket decided to stop buying from them.
8. The distance is 119 km to the nearest wholesale market, 222 km to the major wholesale market.

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Negotiated Decision-making: Understanding Farmer and Processor Certification Decisions

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Abstract. The global agri-food system is governed by a variety of standards and certifications that are highly variable in their content, structure, and enforcement. Given this variability, it is crucial to understand how producers choose amongst available standards and certifications. The theory of negotiated decision-making emphasizes the interaction of structural and individual level motivations and constraints on producer decision-making. Producers negotiate multiple, often conflicting, structural motivations and constraints determined by commodity chain location and social network ties along with individual motivations and constraints determined by ideology. Drawing on ethnographic interviews with organic dairy farmers and processors in New Zealand, the theory of negotiated decision-making rejects the binary between financial and ideological motivations for certification and incorporates social network ties and commodity chain position to provide a framework for understanding producer decisions in the context of regulatory variation.

Introduction

Recently the global agri-food system has experienced the proliferation of new standards and certifications that allow producers to choose among a variety of regulations and certifiers. Producers can now ‘shop’ for a standard and certifier amongst standards that are highly variable in their content, structure, and enforcement. Even within the limited scope of organic agriculture, organic standards and certifiers vary widely from food-activist social movement groups to professional audit agencies. This decentralization results in significant variation in interpretation and enforcement of organic standards and a lack of transparency and accountability between consumers, producers, and certifiers (Mutersbaugh, 2002, 2004; Campbell, 2005; Schewe, 2011). In this context of multiple certifications and standards, it is important to understand both motivations and constraints that influence how farmers and processors choose to participate in agri-food certifications and standards. How do producers decide which standards and certifications to pursue? How do they differentiate amongst certifiers and standards?

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I use interviews about certification decisions with organic dairy farmers, processors, and certifiers in New Zealand to answer these questions and propose a theory of *negotiated decision-making*. Negotiated decision-making rejects the binary between financial and ideological motivations for certification and incorporates the structural constraints of social network ties and commodity chain position into understandings of decision-making. Negotiated decision-making is holistic and cyclical, with producers simultaneously moderating and renegotiating a variety of often-conflicting motivations and constraints shaped by their existing practices, ideology, market pressures, social networks, and commodity chain position. The theory of negotiated decision-making emphasizes this interaction and interdependence between structural constraints and individual motivations in determining producer decisions.

By focusing on choosing a specific certifier rather than the general question of why some farmers choose to pursue organic certification and others do not, this study demonstrates the ways in which producers balance multiple and often conflicting motivations and constraints on their certification decisions. Agri-food researchers and activists often assume that producers' certification decisions are significant because they will ultimately determine production practices. My findings and theory of negotiated decision-making suggest that reality is more complex and contradictory: producers frequently base certification decisions on existing production practices and values (individual motivations) as well as their position in the commodity chain and social network pressures (structural constraints). Choosing amongst the array of agri-food standards must be understood in the context of existing ideological commitments, market pressures, social ties, and commodity chain structure.

Choosing to Be an Organic Producer

I examine the ways in which different organic producers – dairy farmers, graziers, and processors – choose their specific organic certifier. Since the question of how producers choose amongst the variety of certifiers is relatively novel, I draw upon literatures examining producer decision-making more broadly, particularly those focused on the adoption of conservation practices or organic and/or alternative agricultural production. The question of why some farmers convert to organic or sustainable agricultural production while most do not has spawned a broad scholarly literature examining this question in different commodity, geographic, and socio-economic contexts. Studies of organic and alternative agricultural conversion draw upon several key literatures: diffusion of innovation models of information transfer, contemporary social network analysis, farm-structure models emphasizing the importance of structural constraints on the diffusion of innovations, and commodity studies stressing the diversity of actors that carry a commodity from production to consumption. This study extends this existing literature in two ways. First, I analyse the process of choosing one specific certifier amongst the variety of private agri-food standards available. Second, I introduce the importance of commodity chain position in motivating and constraining certification decisions by examining actors in different locations along the organic dairy commodity chain.

Diffusion of innovation and Social Networks

Both diffusion of innovation studies and social network analyses highlight the importance of social ties in the spread of knowledge and practices and suggest that

social networks are a primary driver of decision-making. Theories of the 'diffusion of innovations' (Fliegel and Van Es, 1983; Saltiel et al., 1994; Rogers, 2003) argue that the spread of innovation relies on the transfer of information about innovations among personal and organizational networks. This perspective focuses on the transfer of knowledge and norms among individuals and organizations and classifies individuals/organizations based on their willingness to adopt new innovations. Diffusion requires a certain amount of diversity to introduce new innovations, but this diversity can lead to conflicts and miscommunications that inhibit their adoption. Diffusion of innovation studies suggest that the transfer of knowledge amongst networks is the primary driver of producers' decisions to adopt new practices and technologies.

The importance of social networks has returned to prominence broadly in social sciences, and contemporary studies that have examined the role of social networks in the spread of conservation and alternative agricultural practices have found that social networks amongst producers significantly influence their conversion to alternative agricultural practices (Hassanein and Kloppenburg, 1995; Gerber and Hoffman, 1998; Reider, 2007). Contemporary social network analyses echo many of the findings of diffusion of innovation studies: the role of social networks in introducing individuals to innovations (Haythornthwaite, 1996) and opportunities (Granovetter, 1973, 1983; Montgomery, 1992), the importance of diverse network ties (McPherson et al., 2001), and the importance of trust in determining the effect of social network influences (Levin and Cross, 2004). Social network analysts have also demonstrated the tendency of social networks to drive conformity amongst members (House et al., 1988) and to serve as constraints on individual and organizational decision-making (Kaufman and Hall, 1989; Kilduff, 1992; Mizuchi and Stearns, 2001). As with diffusion of innovation theory, contemporary social network analysis has demonstrated the continued importance of social network ties as both motivating and constraining factors in decision-making.

I draw upon both diffusion of innovation and social network theories to examine the importance of social ties in producer and processor decision-making. I expand on this literature in two ways: first, by extending the findings of diffusion of innovation studies beyond the choice of adopting or not adopting practices or certifications and into choices amongst an array of certifiers; second, by incorporating the lessons of social network analysis that social ties can serve not only as providers of opportunities and information but also as significant constraints on the options and decisions of individuals and organizations.

Farm-structure and Commodity Systems

Farm-structure models and commodity studies both emphasize the importance of structural features beyond individual control in constraining producers' decisions; both suggest that structural features such as market pressures and regulation are a primary driver of producer decision-making. Farm-structure models extended theories of diffusion of innovations to address the importance of significant structural variation of farms such as size, capitalization, financial assets, and the presence of commodity programmes that must also be considered when determining whether they will adopt conservation practices (Napier et al., 1986; Napier and Camboni, 1988; Sommers and Napier, 1993; Napier and Tucker, 2001). The farm-structure model incorporated these structural features after early applications of the diffusion

of innovation model were relatively unsuccessful when applied to the adoption of conservation practices (Fliegel and Van Es, 1983; Nowak, 1987; Saltiel et al., 1994; Padel, 2001).

Contemporary commodity studies complement the findings of farm-structure models: individuals and organizations can only be understood fully within their position within larger commodity structures. While farm-structure models emphasized the importance of constraints that were beyond individual control, commodity systems analyses turn the lens towards those structural features within the context of specific commodities. Broadly, commodity studies, including commodity chain analysis (Gereffi and Korzeniewicz, 1994), commodity systems analysis (Friedland, 1984, 2001), and/or global value chain analysis (Gereffi et al., 2005), involves tracing a commodity from production through to consumption. Commodity studies show 'how production, distribution, and consumption are shaped by the social relations (including organizations) that characterize the sequential stages of input acquisition, manufacturing, distribution, marketing, and consumption' of a commodity (Gereffi et al., 1994, p. 2). Commodity systems analysis (Friedland, 1984, 2001) formalized one methodology of commodity studies, highlighting eight central aspects of commodity chains for analysis: 1. production practices, 2. grower organization, 3. labour, 4. science production and application, 5. marketing and distribution, 6. scale, 7. the sector and the state, and 8. commodity culture (Friedland, 2001). While this study is neither a formal commodity chain analysis nor commodity systems analysis, applying the lens of commodity studies allows for an understanding that actors in different positions in the commodity system – farmers versus processors, or cooperatives versus corporations – have unique motivations and constraints on their decisions.

While the majority of studies of alternative agricultural systems and private agri-food standards have focused on the two extreme ends of commodity chains, either farmers (e.g. Best, 2010) or consumers (e.g. Padel and Foster, 2005), a growing literature is exploring the roles and experiences of other actors in alternative or organic agri-food systems. Several studies have focused on the roles of certifiers and/or standards organizations (Rice, 2001; Mutersbaugh, 2004; Raynolds, 2004) as drivers of formalized organic and alternative agri-food systems. There is also an expanding literature examining the increasingly important role of retailers (Dolan and Humphrey, 2000; Burch and Lawrence, 2007; Hendrickson et al., 2008; Campbell, 2009; Tennent and Lockie, 2012). These and other studies of diverse actors within alternative agri-food commodity systems (Tallontire, 2000; Barrientos et al., 2003; Barrientos and Kritzing, 2004; Barrientos and Smith, 2007) demonstrate the need to examine actors at different nodes along the commodity chain, such as the farmers, graziers, and processors I examine in this study.

Drawing from the history of diffusion of innovation and farm-structure models has unfortunately led to a bifurcation of many studies of organic or alternative agricultural conversion that diverges from early theorists' attempts to consider the importance of both structural variation and social network ties. In particular, many scholars have assumed a binary in which farmers are motivated by either ideological commitments (building from the diffusion of innovation theories) (Lockeretz and Madden, 1987; Dubgaard and Sorensen, 1988; Molder et al., 1991; Wilier and Gillmor, 1992; Hong, 1994) or economic incentives (building from farm-structure theories) (Svensson, 1991;¹ Bruckmeier et al., 1994). Schoon and Te Grotenhuis (2000) develop a typology of farmers that furthers this binary, dividing farmers into those

who are motivated by a 'moral commitment' to the environment and those who are 'pragmatically motivated' by financial incentives.

In this study, I attempt to move beyond this binary and return to the holistic focus of early farm-structure and diffusion of innovation models in my theory of negotiated decision-making. I focus on both motivations and constraints for decision-making, treating farmers and processors as experts on their own experiences, allowing me to demonstrate how individuals balance multiple, sometimes conflicting, motivations and constraints in their decisions and how those motivations and constraints are shaped by both structural features and social ties simultaneously.

Data and Methods

Between June 2008 and June 2009, I spent 12 months in New Zealand conducting semi-structured ethnographic interviews with 16 organic dairy farmers; two organic graziers; seven organic dairy processors and five dairy farmers processing and selling their own organic products; executives, staff, and auditors at the three certifiers; and experts in New Zealand's organic industry. I used quota sampling to ensure that my final sample of farmers and processors was stratified to represent all three certifiers and to include several farms and processors who either currently held multiple certifications or had changed certifiers in the past. These individuals provided particularly rich data concerning the motivations and constraints for different certifiers.

I identified farmers to interview in a number of ways: contacting individuals and farms listed in the WWOOF (Worldwide Opportunities on Organic Farms) or Organic Pathways or New Zealand Organic Register directories, attending field days and farm discussion groups, contacting farmers featured in trade publications and promotional materials, and by referral and snowball sampling. The quota sample was purposively selected and I stopped recruiting new participants only after my initial analysis gave me confidence that I had captured a theoretically relevant range of experiences. Processors were more easily contacted through reports available by the organic certifiers and marketing materials, and I was able to interview all of the currently (as of June 2009) certified organic dairy processors in New Zealand and one processor who had stopped organic production.

I analysed these interviews using an adaptation of ethnographic decision tree modelling (Gladwin, 1997; Fairweather, 1999). I coded each transcript for references to 'motivations' or 'constraints' for choosing his/her specific certifier and then created a specific thematic code that reflected the motivation/constraint being described. After I had coded all of my transcripts and notes for motivations and constraints, I then analysed the codes across certifiers to develop broader thematic codes that summarized the motivations and constraints expressed for each certifier. This method is an adaptation of Gladwin's (1997) ethnographic decision tree modelling, which involves coding ethnographic interviews in terms of three basic stages of decision-making: 'elimination criteria', 'motivations', and 'constraints' (e.g. Fairweather, 1999). To avoid limitations of the method, in particular the problematic assumption that each individual moves through the stages of decision-making sequentially, I adapted a more iterative coding technique. My adapted method allows for the possibility of multiple motivations and constraints to exist simultaneously and non-linearly, allowing me to develop the theory of negotiated decision-making.

Case and Commodity Background

New Zealand has a large dairy industry that has experienced a significant boom in both number of farms and production in recent decades (Armentano et al., 2004). New Zealand's dairy industry is pastoral, utilizing intensive rotational grazing methods and seasonal production in which the majority of dairy farms cease milking during the winter months. During this time many dairy farmers 'graze off' their herd, sending cows to a grazier who is contracted at a weekly or monthly rate to provide care and feed for the animals.

Fonterra, a cooperatively owned dairy products company that is currently the largest dairy exporter in the world, dominates the New Zealand industry (Fonterra, 2012). Following the privatization of the state-owned commodity board and the consolidation of several dairy processors during the 1990s (Le Heron and Roche, 1999), Fonterra has risen to prominence in the industry and currently processes over 90% of all milk produced in New Zealand (Fonterra, 2012). From 2005 to 2011, Fonterra actively recruited organic dairy suppliers on New Zealand's North Island with a price premium guaranteed during conversion and following certification.² There are also several small-to-medium competitors within the organic dairy processing sector and some organic dairy farms processing and marketing their own products directly.

This study addresses the three organic certifiers that are active in the New Zealand organic dairy industry: BioGro,ASUREQuality, and DemeterNZ. The three organic certifiers are diverse in their history, institutional structure, costs, and services (Schewe, 2011). Table 1 summarizes the features of the three certifiers.

BioGro and ASUREQuality both certify to the USDA National Organic Program (USDA NOP) and several other national and international organic standards. Both are also recognized within Fonterra's organic premium programme so farms with either certifier can receive a guaranteed premium price for their milk. Despite these similarities, BioGro and ASUREQuality have very different institutional structures and offer different services. Importantly, BioGro identifies as an organic social movement organization and offers only organic certifications and support for organic farming. BioGro has created its own domestic and IFOAM³ accredited organic standards, as well as certifying to external standards such as the USDA NOP. BioGro is a membership-based organization in which certified farms and processors are both 'members' and 'clients', while auditing staff are either direct employees of BioGro or hired contractors.

In contrast, ASUREQuality is an auditing agency that provides a wide range of agri-food audits and certifications including all of the food safety and workplace safety audits required by the New Zealand Food Safety Authority (NZFSA). They are not limited to organics. ASUREQuality is nominally a private corporation, but the New Zealand government is its only shareholder. ASUREQuality's formation was the result of the privatization of some portions of the Ministry of Agriculture and Forestry in 1998 during New Zealand's rapid embrace of neo-liberalism. Certified farms and processors are 'clients' and contractors provide ASUREQuality's auditing services.

DemeterNZ is the certification portion of the New Zealand Bio Dynamic Farming and Gardening Association. It is a formalization of biodynamic farming principles based on Rudolf Steiner's teachings. Biodynamic agriculture is a unique component of a broader organic community (Pfeiffer, 2008) and the Bio Dynamic Association identifies as a social movement organization committed to providing community and support for individuals pursuing sustainability. Like BioGro, DemeterNZ is a

membership-based organization including both certified farms and processors as 'members' and 'clients'. Elected members of the association provide Demeter audits and oversight. Although Demeter certification has low fees, it does not have wide market recognition. Significantly, DemeterNZ is not recognized by Fonterra's organic programme, the USDA NOP, or any other national organic standards and it is not IFOAM accredited.

Results

My theory of negotiated decision-making relies on three key findings: 1. the compatibility of both ideological and economic motivations, 2. the importance of social network connections as both motivations and constraints, and 3. the role of commodity chain location in shaping motivations and constraints for actors in different positions along the commodity chain. The following sections detail these key findings. The first two sections focus largely on the motivations and constraints of dairy farmers, while the final section introduces the distinct motivations and constraints of graziers and dairy processors.

Breaking Away from the Ideological/Economic Binary

Examining the certification histories of interviewees, I was surprised to find that seven of the nine the Demeter-certified farmers had also chosen AsureQuality to provide a secondary organic certification and several of the dairy farmers had chosen to hold multiple organic certifications. This pattern undermines the basic assumption that financial and ideological motivations are incompatible: ideologically motivated farmers were choosing Demeter certification but then also choosing a low-cost, high pay-off AsureQuality certification for financial reasons. Studies of organic farmers or alternative agricultural standards often assume that there is an unbreachable divide between farmers who are ideologically motivated and those who are financially motivated. My analysis of certification decisions by organic dairy farmers, however, demonstrates that the reality of decision-making involves balancing both motivations for each farmer. From most organic farmers' perspectives, these motivations are entirely compatible and they incorporate simultaneously both ideological and financial motivations along with a number of other motivations and constraints.

The interaction between financial and ideological motivations can be seen clearly in the population of farmers who are certified with both Demeter and AsureQuality. Demeter-certified biodynamic farmers are highly committed to the philosophy of organics and highly motivated by ideology when selecting Demeter certification, but they are motivated simultaneously by their desire to secure a price premium and minimize the financial costs of certification when selecting AsureQuality certification. If financial motivations were dominant, then we would expect farmers to abandon Demeter certification and choose only a low-cost organic certification with AsureQuality. If ideological motivations trumped all others, they would be satisfied with Demeter and not seek secondary certification. Instead, this group of farmers has maintained their Demeter certification despite a small, if any, market benefit because of a deep commitment to biodynamic principles, but they have also sought a low-cost organic certification with AsureQuality that offers direct financial incentives.

Demeter-certified farmers emphasized a strong ideological commitment to sustainability and a holistic approach that motivated them to pursue Demeter certification. For Chris,⁴ this holistic focus was apparent in the Demeter audits and provided a powerful motivation for pursuing and continuing Demeter certification:

'The only ones that I know that actually require or would expect to dig holes is Demeter inspectors. He would always wander around with a shovel and dig holes to see what the soil is like and what the earthworms are doing. Whereas other [certifications] are saying "yes, you're using pyrethrum, that's fine. You're doing this, that's fine. This permits the USDA standards, that's fine" ... it's meeting the standards.'

'And this is what sort of drew us to biodynamics... It's thinking, our farm is only a cog in a greater wheel. And the farm next door, and the farm next door... and so it expands out. Whereas see the organic one doesn't appear to have that connection. And what I do on my farm is actually affecting the farm next door.'

For Chris, a holistic and sustainable focus motivated him to pursue Demeter certification in addition to a mainstream organic certification with AsureQuality. Other Demeter farmers echoed the attraction of this holism. One biodynamic farmer who is also an auditor and board member at DemeterNZ said of his peers:

'So it's hard to say whether there is any single motivation, but I guess common to [Demeter certified farmers] is a desire to do something different from conventional, which I suppose is common to organic farmers too... But then there is another aspect, and that is the idea that the farm is an individuality, and that the farmer's task is to become the central guiding spirit of that and tie it all together. And that happens, more or less, on biodynamic farms, and it happens more or less on the organic farms, too, but it is a kind of more explicit, more conscious aim, I guess, on biodynamic farms.'

For Bill, who runs a biodynamic farm that is also USDA NOP certified with AsureQuality, Demeter fulfils his ideological commitment to sustainability better than mainstream organics:

'I guess I'm probably leaning more towards the biodynamic and the Demeter type standards. I believe in a vast amount of diversification for sustainability... I mean nature's multidimensional, if you like, and why do we suddenly turn around and say "yeah, we can just grow cows on this bit of dirt and that's it".'

For these biodynamic farmers, Demeter certification offers a proactive, holistic approach to organic farming that aligns with their ideology.

While biodynamic farmers have a strong ideological commitment to organic farming and environmentalism, seven of the nine Demeter certified farmers have also chosen to pursue a USDA NOP certification to ensure access to Fonterra's organic price premium. Of the seven biodynamic farmers who have chosen to pursue a secondary certification, all have chosen AsureQuality over BioGro as their certifier. All cite financial considerations as their primary motivation for this decision. The financial motivations to certify with AsureQuality encompass both cost and premium incentives. Based on cost estimates provided by both BioGro and AsureQuality, USDA NOP certification through AsureQuality costs dairy farmers, on average,

\$100–600 less for initial certification and \$200–700 less for annual auditing fees than certification with BioGro. With average annual returns of only approximately \$300 per cow (Dexcel, 2003), this difference in certification and auditing costs between BioGro and AsureQuality is substantial, particularly for small farms. Every farmer currently certified or considering certification with AsureQuality cited low certification cost as the primary motivation. Bill, who runs a small Demeter and AsureQuality certified farm, said he chose AsureQuality over BioGro because:

‘BioGro wanted money, more money off you. It was mainly a monetary thing... We’re only a small operation, and [BioGro has] more of those fees, that all comes out of the bottom line basically.’

Others also put it bluntly when I asked why they had chosen AsureQuality as their certifier. John, a biodynamic farmer who runs a medium-sized herd and operates a cooperative cheese company, said: ‘It was cheaper than BioGro.’ His neighbour Kingston, also a biodynamic farmer who chose AsureQuality as their organic certifier, said simply: ‘Why AsureQuality over BioGro? Um, price.’ This straightforward evaluation of the cost of certification motivated these highly committed, ideologically oriented biodynamic farmers to select AsureQuality to provide their organic certification. Financial incentives did not override or eliminate their principles of sustainability and holism; instead, they balanced these different incentives and maintained their Demeter certification while also securing a low-cost organic certification.

A guaranteed price premium offered by Fonterra provided further financial incentives to pursue certification with AsureQuality. In order to secure a contracted premium rate with Fonterra, farms must hold organic certification with either AsureQuality or BioGro. The desire to access the guaranteed price premium motivated many farmers to formalize certification with AsureQuality. Daniel, a Waikato-area biodynamic farmer, told me:

‘It was only when Fonterra started offering premiums for milk that we thought, “well, now it’s worth being certified [with AsureQuality]”... Yeah, it’s just the premiums. If we lost our market it wouldn’t be worth it.’

John said he and his wife June chose to certify with AsureQuality, because ‘We had to, to get the money from Fonterra.’ Kingston, also a biodynamic farmer, said they became certified with AsureQuality:

‘When Fonterra decided that they weren’t going to pick our milk up. I mean because Demeter New Zealand, you cannot market Demeter New Zealand products overseas... So Fonterra won’t pay the premium for Demeter.’

Significantly, the desire to get a premium rate does not directly privilege AsureQuality certification over BioGro certification. Fonterra recognizes both certifiers and both certifications offer the same organic price premium to farms. It is important to understand the two components of financial motivation, cost and premium, in concert with the other motivations and constraints for certification to fully conceptualize the decision of biodynamic farmers’ to certify with AsureQuality.

Financial and ideological motivations for organic certification coexist and can be compatible, and for many farmers both motivations are equally valid and significant. These findings reject the financial/ideological binary and instead echo the findings of diffusion of innovation and farm-structure studies that portrayed farm-

ers as complex individuals with the capacity to balance multiple motivations and constraints on their decisions to adopt conservation practices.

Social Networks

The existing social networks of organic farmers are a primary motivation for their certification decisions. Across all three certifiers, farmers reported that the certification patterns of their friends and colleagues significantly motivated them to select and retain the same certification.

The personal networks of farmers, recommendations from friends and neighbours, and personal relationships with other BioGro-certified farmers were important motivators for seeking BioGro certification. Cooper, one North Island farmer, said:

‘I went to a few field days, and that’s how I started getting into it too. That’s where it really kicked off... Then I got into a group and never looked back really. I had the support of everyone else really, which made a huge difference because we were right outside the picture there... We were all with BioGro together.’

Once Cooper joined a support group of organic farmers, that group became an important motivator in his choice of certifier. All of the members of his support group chose BioGro certification, and so did Cooper. Lachlan, a farmer who did eventually transfer certification to AsureQuality, talked of the pressure from his social network to initially certify with BioGro:

‘I originally went with BioGro because of peer pressure. BioGro was what everyone from my organics class was using, so that’s why I went with them.’

After several years, Lachlan finally felt able to transfer certification to AsureQuality without suffering the scorn of his peers.

Certifiers are also aware of the importance of social networks among farmers in choosing certifications. One BioGro executive said:

‘The other thing that probably influences [farmers’ choices] is who else they talk to. And if they talk to another organic farmer that already has certification, they may decide to go with that agency; if they are saying “Hey I get a good service from this organization”.’

The demonstrated success of their peers as well as social network pressure plays a significant role in motivating many farmers to choose their certifier and simultaneously in constraining their certification choice.

Along with motivating and constraining the initial certification choice, social network ties can also make farmers less willing to transfer certification. These social network constraints must be considered along with financial and other motivations for transferring certification. Nathan, a Waikato-area farmer, said that friendships with other farmers was not only what led him to BioGro certification, but also what kept him from transferring certification to AsureQuality, even under financial stress:

‘And somehow, [my wife] can’t really remember either, we just hooked up with all these other friends at a field day in Te Awamutu. And before we knew it, we were filling out forms and signing up with BioGro... Some of

those people going back to 1998 have just become dear friends... So that's just something else that organics has given us. And it's a thrill, it's an absolute thrill. I feel quite privileged, in fact.'

Even in the face of serious financial problems that made Nathan consider transferring certification to AsureQuality because it was lower in cost, Nathan's close friendships with other BioGro farmers have kept him from transferring certification. Lachlan, who did eventually transfer certification from BioGro to AsureQuality, said that his relationships with other BioGro farmers kept him from transferring certification for many years. Eventually, financial stress became too powerful to ignore, and Lachlan and his wife transferred certification to AsureQuality to reduce costs. Even for those farmers who did eventually transfer certification, personal networks were crucial as both motivations and constraints for initial certification decisions and constraints against transferring certification.

Personal network connections with friends, family, colleagues, and neighbours who were Demeter certified also provided a significant motivation for farmers to pursue Demeter certification. Kingston said that he first became interested in Demeter farming at a large agricultural fair:

'I first heard about Demeter at Mystery Creek Field Days, at the national field days one year. And we were sort of wandering around and saw the Association there and went up and talked to the bloke that was there. And we said, we've come from Auckland, and they said there's another chap from Auckland that's doing it. And we had known him but hadn't seen him for a few years... So that was a face we could relate to... Yeah, we could sort of relate to it, I guess.'

John was also strongly motivated to pursue Demeter certification by his friendship with a neighbour who was a Demeter auditor and farmer. He said that they relied heavily on their neighbours for help and support:

'If it wasn't for the Smiths we probably wouldn't be in it... During our first certification the Smiths came out and did a farm walk and assessed the farm. And the report they put in sort of saying how everything was I think helped us – the quickness of [certification].'

Every year the Smiths help John and June with their audit and they are also a source of practical and emotional support for the farmers.

Organic farmers and processors are heavily influenced by their social networks to select and maintain the same organic certification. As argued by both diffusion of innovation and social network frameworks, individuals' social ties, particularly with trusted peers, provide avenues for transferring information and practices, but homophily can hinder this transfer and pressures from social ties can also serve to constrain the choices of individuals.

Commodity Chain Location

Focusing solely on production, there are three major actors in the New Zealand organic dairy commodity chain: 1. farmers who intensively graze dairy cattle for milk production; 2. graziers who provide off-farm grazing for dairy cattle that are not currently producing milk (either young stock, dry stock, or during the off sea-

son); and 3. dairy processing companies who consolidate, process, and market dairy products. This section introduces the role of commodity chain location in shaping motivations and constraints on decision-making by focusing on the certification decisions of the other key actors in the commodity chain: graziers and processors. The position of organic dairy processors' and graziers' in the organic dairy commodity chain, distinct from that of farmers, provide different motivations and constraints for choosing amongst private agri-food standards. The need for market access and regulatory ease by processors leads them to be motivated by previous auditing relationships with certifiers, professionalism, and a perceived government affiliation as they choose their certification, while the smaller profit margins of graziers make it difficult to balance both financial and ideological motivations.

The mid to large organic dairy processing companies in New Zealand have overwhelmingly chosen AsureQuality to certify their facilities. While several of the companies previously held certification with BioGro prior to AsureQuality's entrance into organic certification, only two are currently using BioGro to certify their processing facilities. One of those is also certified with AsureQuality. As previously discussed, AsureQuality also provides multiple auditing services beyond organic certification. They are an auditor for the New Zealand Food Safety Authority (NZFSA) and they certify to a large number of private standards. For processors, this ability to provide multiple audits and their previous relationships with AsureQuality are invaluable motivators to pursue organic certification with AsureQuality. One processor said that after transferring organic certification from BioGro to AsureQuality,

'We had the same auditor even, the same auditor who does our NZFSA checks. So we've been working with him for years and when we've expanded we've basically built ourselves to his specs.'

Their previous relationship with this auditor was a powerful motivator, as was AsureQuality's ability to provide multiple audits at once:

'Having BioGro schedule their audits became too demanding, creating two business plans to receive the same result... It was a big juggling act. The actual audits themselves were fine, it was nothing major. We never had any problems. It was just easier when AsureQuality could do it all at once. All our NZFSA checks, I mean.'

This familiarity with AsureQuality and their ability to provide multiple audits was, according to Fonterra organic executives, their primary motivator for selecting AsureQuality as their organic certifier:

'All Fonterra ingredients are finally certified by AsureQuality. That has been a decision since 2002, and it was largely a commercial decision. Not that BioGro came in with a higher price or a lower price, but because AsureQuality offices were already sitting in our plants doing the other 99.5% of sanitary requirements on behalf of the government. So it just made so much sense.'

This ability to provide multiple audits and the existing professional relationships between AsureQuality and processors is a significant motivator for selecting AsureQuality organic certification for processors because of their position in the organic dairy commodity chain.

For processors, professionalism – defined by them as consistency in application of standards, responsiveness to questions, and adhering to scheduled audit appointments – was also a powerful motivator for choosing AsureQuality certification. One processor who had transferred certification from BioGro to AsureQuality said:

‘[BioGro] were disorganized and inconsistent... They were never the same about the audits and what we needed, and they never gave enough notice about when they were coming and when we were expected to do things or requirements... AsureQuality, they were professional. They were consistent and organized. They had one book, one requirement. They kept their appointments. And they had the bureaucracy and the organization.’

Processors emphasized repeatedly the importance of planning and scheduling as evidence of AsureQuality’s professionalism. Dairy processing companies face a constant stream of food safety, workplace safety, environmental, and accounting audits in addition to their organic audits. For processors, AsureQuality’s reliability was a motivation for certification. The opposite was true for BioGro: processors reported BioGro staff changing appointments and schedules as a significant constraint against selecting them for organic certification. A manager at one large processor summarized the difference: ‘AsureQuality is a little easier to work with usually... They let us know the plans quite early.’ For busy processors, there was a clear perception that AsureQuality was more professional and reliable than BioGro, and this was a significant motivator for selecting AsureQuality certification.

AsureQuality’s perceived government affiliation also served as a significant motivator for processors to select their organic certification. Because of their more direct concern with market and consumer access, processors placed a stronger emphasis than farmers on this perceived government affiliation as a motivator. One processor argued that AsureQuality’s close ties to the government were important for international market access:

‘Well, they’re with government aren’t they? And so I believe that AsureQuality is more recognized outside of New Zealand. And so for that reason, we have it in terms of international access.’

Another executive echoed this belief that AsureQuality’s quasi-government affiliation provided market access. From his perspective government standards were clearly becoming the norm in organic regulation and AsureQuality’s loose government affiliation put them in line with an international trend. This belief that AsureQuality’s government affiliation lent them market credibility and international recognition was a higher priority motivation for processors than farmers because of processors’ position in the commodity chain concerned directly with consumer and market access.

Two organic graziers⁵ I interviewed seem, on initial examination, to be the exception to the rule of coexisting ideological and financial motivations. However, I argue that in fact their decision-making illustrates the influence of commodity chain position on certification decisions and how commodity chain location structures motivations and constraints. Cooper and Hamish have both let their organic certification lapse because they perceived an incompatibility between their financial and ideological motivations. Both were previously certified with BioGro and said that they decided they would rather have no mainstream organic certification than to transfer their certifications to AsureQuality. To understand Cooper and Hamish’s decisions,

we must first delve into the decisions of organic farmers who have chosen BioGro to provide their organic certification. Findings show that BioGro's institutional identity as an 'organics only' organization is a significant motivator for farmers selecting BioGro certification. One farmer expressed the importance of BioGro's commitment to organics to his certification decision:

'Well, at least they are passionate about what they're doing, BioGro are passionate about what they're doing... At least people in BioGro, you know, they have a genuine interest in it.

Several farmers referenced explicitly a philosophical or ideological commitment to organics as one significant motivator for selecting BioGro. For farmers, their BioGro certification decision satisfies both these ideological commitments and their desire for financial premiums from Fonterra.

In contrast, because of their position as graziers in the dairy commodity chain, Hamish and Cooper both found that BioGro certification could not reconcile their financial and ideological motivations. Recall that, based on cost estimates provided to me by both certifiers, BioGro's certification costs on average \$100–600 more for initial certification and \$200–700 more for annual auditing fees than AsureQuality certification. This is a clear and significant constraint against choosing BioGro certification for graziers, whose position in the dairy commodity chain provides a much smaller profit margin, making them unable to sustainably bear these costs. Ultimately, both Hamish and Cooper believed that they could not afford the financial cost of BioGro certification but that AsureQuality did not satisfy their ideological commitment. Cooper was assertive when asked whether he'd ever considered AsureQuality certification:

'No, we only believed in BioGro and in their certification. It is the best standard that – this is in my opinion of course – that New Zealand has. As far as I'm concerned AsureQuality – or AgQuality as it was then – just doesn't even compare.'

But this strong ideological motivation for BioGro certification ultimately could not overcome financial concerns about the high cost of BioGro certification. Because he would not transfer to AsureQuality, Cooper was forced to let his certification lapse due to economic distress, but he fervently argued that it was better to let his certification lapse temporarily than to transfer certification to the less expensive AsureQuality.

Hamish, another organic grazer, also decided to let his certification lapse because he could no longer afford the BioGro fees but does not believe in the ideological commitment of AsureQuality. Hamish tells the story of his decision-making process as an inability to balance the financial and ideological motivations for certification:

'But you know, our [BioGro certification] fee started off at about \$500 and then, you know, changed to well over two grand. It was just ridiculous in the end... But we've been fallow for the last three years, just basically because BioGro sent us broke.'

'And dairy grazing is an important part of dairy, so they put us in the organic bracket so we had to pay, although we only had 30 odd dry stock, we had to pay the same amount of fees as a 500 cow dairy farm down the road. And that just totally killed us.'

Hamish was passionate about organic farming and believed that BioGro was important to New Zealand's organic farming sector; however, the high cost of BioGro fees eventually pushed him out of organic certification.

Both Hamish and Cooper were unable to reconcile their financial and ideological motivations for organic certification. However, rather than reflecting the oft-assumed incompatibility between ideological and financial motivations, their inability to negotiate these different motivations was related to their unique position as graziers in the dairy commodity chain. As graziers, their businesses provided a much smaller profit margin than milking dairy farmers or processors, but the flat-fee structure of organic certification did not take this into account. Where dairy farmers were able to reconcile their financial and ideological commitments through BioGro certification or simultaneous Demeter and AsureQuality certification, the commodity chain position of graziers did not allow those negotiations. Instead, these graziers chose a different way to reconcile their philosophical and financial motivations: lapsing certification.

Examining the certification decisions of processors and graziers as well as farmers shows the important role that commodity chain position plays in structuring the motivations and constraints on the decisions of individuals and organizations. Confirming the arguments of both farm-structure models and commodity studies, these findings show that structural features of the commodity chain beyond the control of individual actors shape their motivations and constraints when selecting amongst private agri-food standards. My theory of negotiated decision-making argues that commodity chain location and structure must be accounted for to understand the motivations and constraints for producer decisions.

Discussion

The proliferation of private agri-food standards and market-based certifications of our current agri-food system has created a marketplace of regulation in which agricultural producers can choose among a variety of voluntary or semi-voluntary standards. Further, the widespread reliance on third-party auditing means that even within the same regulation or standard, producers have a variety of certifiers to choose amongst. Developing a clear theory of producer decision-making, therefore, has empirical significance for the environmental and social outcomes of private agri-food standards and significant theoretical implications for understanding the role of the state and market in governing environmental and social goods. The theory of negotiated decision-making provides a framework for understanding producer decisions in this context of regulatory uncertainty: producers' decisions are holistic and cyclical, balancing a variety of often conflicting motivations and constraints determined by ideology, financial demands, social ties, and commodity chain structure.

In this study I have presented three arguments about producers' motivations and constraints for choosing organic certifiers. First, the binary between financial and ideological motivations for certification is false. Instead, these motivations coexist and are balanced with other motivations and constraints. Second, social network connections with peers and colleagues provide significant motivation and constraints during certification decisions. Third, the motivations and constraints for certification decisions are structured by different positions along the commodity chain.

While this case study focuses on the experiences of producers within New Zealand's organic dairy industry, these findings hold relevance for the agri-food system

and private agri-food standards more broadly. Organic dairy production in New Zealand is heavily export dependent, with over 95% of dairy product exported (Armentano et al., 2004). This makes internationally recognized agri-food standards of incredible importance and makes New Zealand dairy an exemplary case in which to examine the variety of agri-food standards. While there are some features of New Zealand's dairy industry that are unique, such as seasonal production and the reliance on rotational grazing, the issues at the core of this case study – financial and ideological pressures, social networks amongst producers and certifiers, and the diversity of commodity chain locations – are not unique to New Zealand or to organic dairy production. Most importantly, neither is the variety of agri-food standards and certifiers. The current agri-food system is governed by an increasingly diverse array of standards and certifiers that cover virtually all commodity systems and nations. In this context, the experiences of New Zealand organic dairy producers choosing amongst the variety of certifiers hold insight for other agri-food producers as they also 'shop' amongst the private and governmental, voluntary or semi-voluntary standards and certifications available.

Together, these findings inform the theory of negotiated decision-making: decision-making is a complex process in which individuals and organizations balance multiple, often conflicting, motivations and constraints at both the structural and individual level. In this case, the certification decisions of organic producers are shaped simultaneously by ideological commitments to sustainability, financial imperatives to survive in a market economy, information and demands from social network connections, and the unique pressures of their position within the organic dairy commodity chain. This understanding of the complexity of decision-making builds on the findings of a wide variety of literatures to offer insight into how producers make decisions within a neo-liberal agri-food system in which the boundaries between state and market, regulation and standards, are increasingly blurred. The theory of negotiated decision-making should serve as a lens for future researchers as they approach producer decision-making to help researchers conceptualize the ways in which both individual-level and structural-level motivations and constraints shape producer decisions.

Many studies that have addressed the question of what motivates farmers to pursue organic or sustainable agriculture have assumed a fundamental incompatibility between financial and ideological motivations. Whether implicit or explicit, this assumption severely limits our understanding of producer decision-making. Instead, producers are negotiating and renegotiating these motivations constantly, seeking balance and compatibility amongst multiple motivations and constraints. The financial/ideological binary is both limiting and inaccurate for understanding the complex motivations and constraints on decisions about alternative agricultural production and private agri-food standards. Recognizing that producers balance both financial and ideological motivations and constraints, along with a number of others, returns to the more holistic focus of early diffusion of innovation and farm-structure models that recognized the complexity of decisions about the adoption of conservation practices and shows that these lessons still hold truth in a neo-liberal agri-food system.

The certification decisions of both farmers and processors are also significantly motivated and constrained by their social network ties. Connections with friends, neighbours, and peers are a key motivation across all of the private agri-food standards and certifiers. The continued importance of social ties echoes the findings of

diffusion of innovation and social network theories. Social networks amongst producers could become a powerful tool in the expansion of organic and sustainable agriculture if certifiers, standards organizations, and/or social movement groups are able to mobilize the pull of friends, neighbours, and peers. The importance of their social networks to choosing and sustaining an organic certification underscores the importance of farmer-to-farmer mentoring and discussion groups in spreading organic farming and extending the reach of private agri-food standards. More studies are needed to understand the role of networks in sustainable agriculture and private agri-food standards and to extend existing social network theories and methodologies into agri-food systems.

Many studies of organic certification and alternative agricultural systems have focused on the experiences and motivations of farmers to the exclusion of actors elsewhere along commodity chains. In reality, diverse positions in the production system lead to diverse motivations and constraints. The current agri-food system is increasingly dominated by processed and prepared foods and it is crucial that we continue to develop a better understanding of the unique motivations and constraints for decisions by food processors and other actors in agri-food commodity chains. In this case, market access motivates processors because they are responsible for finding consumer markets and processors are likely to choose organic certification with a certifier with whom they have a pre-existing relationship. This is of concern because it could mean less stringent enforcement if personal friendships between auditors and processors interfere with consistent application of standards. More studies of actors along organic and alternative agri-food commodity chains are needed to better understand their unique motivations and constraints and their implications for the environmental and social outcomes of private agri-food standards.

Decisions about organic certification and private agri-food standards involve the complex negotiating and balancing of multiple motivations and constraints at both the structural and individual level. Concerns for the future of sustainable agriculture and the consistency of private agri-food standards and certification mean that we need many more studies that examine the certification decisions of farmers and especially processors and other actors in agri-food commodity chains. These findings and the theory of negotiated decision-making have implications for decisions not just about organic certification, but also other agri-food standards and practices. If we do not first understand the complexity of producers' motivations and constraints, we cannot successfully address many of the social and environmental problems at the core of our agri-food system and agri-food standards.

Notes

1. For an English-language discussion, see Lohr and Salomonsson, 2000.
2. In August 2011, Fonterra announced that they would be restructuring significantly their organic programme, reducing the amount of organic milk they would buy at a premium. It is unclear what impact this will have on existing and future organic dairy producers and processors.
3. IFOAM is the International Federation of Organic Agriculture Movements. It is an international umbrella organization for organic agriculture, with 750 member organizations from 108 countries. IFOAM has an influential (non-governmental) international organic standard and offers accreditation for independent organic standards through an equivalency programme (Bowen, 2004).
4. The names used here are all pseudonyms.
5. Recall that most New Zealand dairy farms cease milking during winter, sending cattle to graziers for contracted care. Graziers have much smaller profit margins than milking dairy farmers; their land is often marginal and most of them also receive income from off-farm.

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Private Food Standards as Responsive Regulation: The Role of National Legislation in the Implementation and Evolution of GLOBALG.A.P.

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Abstract. This article uses a responsive regulation perspective to explore relationships between standards organizations and state agencies in ostensibly private sector regulation of food quality and safety. First we will trace some of the history of the GLOBALG.A.P. private agri-food standard and then, using empirical case studies, highlight how this particular form of responsive regulation has played out in three distinct national contexts: Australia, the Philippines and Vietnam. In each case, the interplay between public and private sector regulation was pivotal in shaping the influence of private standards on social relations of production and on the subsequent evolution of regulation in both spheres. While there is an emphasis within GLOBALG.A.P. on benchmarking and harmonization, the interdependency between standards and national regulatory contexts means that neither the standards themselves nor the products that are certified against them are internationally uniform. Private–public sector interdependence creates competing imperatives at the international and national levels that are obscured by the language of harmonization but that nevertheless challenge the legitimacy and effectiveness of standards as a particular governance strategy.

Introduction

Amongst sociologists of food and agriculture the regulatory context for private food standards has been seen, for the most part, as one in which the capacity of nation states to regulate has increasingly been usurped or passed on to multilateral and private sector organizations (Bonanno et al., 1994; Campbell, 2005; Hatanaka and Busch, 2008; Bain et al., 2013). The growth of private standards such as GLOBALG.A.P. has been interpreted as evidence both of the emergence of new risks to capital accumula-

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tion associated with trade liberalization, such as food safety scares emanating from supply chains dispersed across multiple nation states with differing degrees of food safety regulation and enforcement, and of the increasing power of retailers to pass on responsibility to deal with these risks through their supply chains. Concentration within the retail sector, combined with a strategy of replacing generic with own-brand products has left retailers increasingly exposed to the risk of being blamed for lapses in food safety and quality (Hatanaka and Busch, 2008). At the same time, others argue, a rapid increase in product differentiation has left governments unable to keep pace with the rate of innovation across the food sector (Sporleder and Goldsmith, 2001; Reardon and Farina, 2002) and retailers seeking alternative strategies to ensure food quality and safety (Konefal et al., 2005; Hatanaka and Busch, 2008).

While there is an acknowledgement within this literature that ostensibly private standards often draw on, or are incorporated within, state legislative frameworks (Bain et al., 2013), the overriding assumption is that private standards fill a regulatory void created by the retreat and/or limitations of the state (see Renard and Loconto, 2013). Alternative perspectives are offered by proponents of what have variously been termed responsive, hybrid, collaborative, networked, smart and co-regulation (see Braithwaite, 2006; Baldwin and Black, 2008; Gunningham, 2009a, 2009b; Dorbeck-Jung et al., 2010; Taylor et al., 2012; Connor and Haines, 2013). From these perspectives, private standards are seen not as evidence that the state is retreating from regulation but, instead, as examples of the adoption by government agencies of more diverse, flexible and risk-based regulatory architectures (Gunningham, 2009b; Black and Baldwin, 2010). Standards may assume a number of forms and roles within regulatory architectures, it is argued, which develop recursively through the interaction of public and private institutions and in the context of particular risks to legitimacy faced by both. In the case of private food standards, these risks may be seen to include food safety scares, allegations of labour abuses throughout supply chains, environmental concerns, and so on.

This article will articulate in more detail the concept of 'responsive regulation' before applying this to case studies of GLOBALG.A.P. and the interaction of state and private regulation in three national contexts: Australia, Vietnam and the Philippines. In doing so, the article will both use responsive regulation as an analytical device to explore the varying interdependencies of public and private regulation in these differing national contexts, and reflect briefly on the concept of responsive regulation and its potential to contribute further to critical scholarship in the agri-food sector.

Responsive Regulation

The concept of responsive regulation may be characterized in two broad ways. First, as an inductively derived theory of contemporary governance based on empirical studies in regulation and criminology. Second, and drawing on this theory, as a set of propositions concerning how regulation in a variety of contexts might be improved. With respect to this latter dimension of responsive regulation, it is assumed that the effectiveness, efficiency and legitimacy of attempts to coordinate 'collective action can be enhanced by cooperation between public and private actors' (Dorbeck-Jung et al., 2010, p. 156). Utilizing both multiple policy instruments and a broader array of regulatory actors, it is asserted, will allow, in most circumstances, for more flexible, efficient and effective approaches to regulation (Gunningham, 2009b). Moreover, the involvement of multiple regulatory actors is seen to create opportunities

for democratization and capacity building in developing states with comparatively weak regulatory institutions (Braithwaite, 2006), and to resolve some of the regulatory problems associated with transborder global value chains (Graham and Woods, 2006; Connor and Haines, 2013).

Importantly, while the normative impulse in responsive regulation draws on principles of deliberative democracy and restorative justice (Braithwaite, 2006), the theoretical veracity of responsive regulation depends ultimately on its ability to account for and to inform actual regulatory practices and outcomes (Black and Baldwin, 2010). Setting aside, therefore, normative questions of how states *ought* to govern, responsive regulation theorists argue that contemporary states are compelled to respond to perceived needs for regulation and that they play a critical role, directly and indirectly, in the implementation of ostensibly private or hybrid forms of regulation (Ayres and Braithwaite, 1992). Power is diffuse and multiple institutional orders – including markets, business networks and communities – interact to challenge and reproduce the power of the other. Consequently, states cannot ignore other actors and maintain legitimate rule. At the same time, the legal apparatus of the state system provides the basic framework for regulatory measures implemented by both state and non-state actors (Ayres and Braithwaite, 1992). The point here is not that the state remains always at the centre of regulation but that, as necessary actors within any given attempt at regulation, state agencies act in response to needs, agendas, strategies etc articulated and attempted in other institutional arenas.

The responsive regulation perspective thus problematizes the separation of public from private forms of regulation. To illustrate the variety of, and interaction between, regulatory approaches available within networked governance systems comprising both state and non-state actors, Ayres and Braithwaite (1992) propose a ‘pyramid of enforcement’. At the base of this pyramid are regulatory approaches based on persuasion and, at the apex, approaches based on command-and-control instruments and punishment for non-compliance (e.g. criminal or civil penalties, licence or accreditation suspension, etc.). Self-monitoring and regulation, industry codes of conduct, etc. lie somewhere in between. These latter mechanisms may represent attempts by private-sector actors to head off more direct regulatory controls, and/or they may be implemented with the support of state agencies seeking to influence business behaviour ‘at a distance’ (Braithwaite, 2006). Either way, it is held that punitive approaches to regulation are generally more expensive than self-regulation and that a crucial dimension of responsive regulation thus includes the monitoring of regulatory effectiveness and willingness to move, as appropriate, between different levels within the pyramid of enforcement (Braithwaite, 2006). Environmental standards offer a useful case in point with Western governments moving, in broad terms, from 1. prescriptive standards requiring businesses to maintain emissions below approved levels and/or to adopt specific management practices, to 2. performance standards requiring businesses to meet particular environmental outcomes, and thence to 3. process or meta-standards requiring businesses to implement approved environmental and quality management systems (Gunningham, 2009b).

Braithwaite (2006) acknowledges that networked or hybrid governance does not always lead to democratic or other desirable outcomes, and argues that multiple levels of accountability are required alongside the distribution of responsibilities and authorities among multiple stakeholders. Attempts at responsive regulation, in other words, create opportunities for concentrations and abuses of authority among non-state regulators wherever state regulatory capacity is low, non-government and

civil society groups struggle to mobilize, and/or businesses do not have a strong culture of corporate social responsibility. Critics of responsive regulation also point to practical and conceptual difficulties in deciding what level of enforcement is appropriate for any given sector or entity (Baldwin and Black, 2008). Further, they point to the need to think beyond enforcement and to consider both how 'multiple actors reinforce rule compliance' and how 'the balance within the whole regulatory system is maintained' (Dorbeck-Jung et al., 2010, p. 156). Baldwin and Black (2008; see also Black and Baldwin, 2010) thus argue that for regulatory systems to be both responsive and effective they must address multiple criteria in addition to compliance, including attitudes towards regulation, the broader institutional environment for regulation, interactions between regulatory tools and strategies, performance of the regulatory regime, and changes in each of these elements. The regulatory regime must also be able to perform a number of basic tasks including monitoring, enforcement, review, and so on.

For our purposes here, Baldwin and Black's criteria are integrated with those proposed by Dorbeck-Jung et al. (2010) to assess the effectiveness of hybrid public-private regulation. Specifically, this article will examine:

1. institutional arrangements for the implementation of GLOBALG.A.P. and related standards and regulations in the case-study countries;
2. stakeholder attitudes towards and engagement in regulatory practices, including certification against GLOBALG.A.P. standards;
3. evidence for compliance (including monitoring and enforcement) of relevant regulatory instruments;
4. interactions between regulatory tools and strategies, consistency of those tools and strategies, and regulatory gaps relevant to policy objectives; and
5. regulatory reflexivity with respect to corrective responses and changes in the operating environment.

GLOBALG.A.P. as Responsive Regulation

Traditionally, national governments have assumed primary responsibility for food safety within their own borders (Hatanaka and Busch, 2008). Nevertheless, firm-specific quality assurance schemes covering food safety as well as cosmetic quality attributes became common amongst major supermarket chains during the 1990s (McKenna and Campbell, 2002). This coincided with the development of 'integrated management systems' designed to ensure tighter control of farm-based chemical and fertilizer use, the increasing imposition by governments of requirements to implement food safety programmes based on Hazard Analysis and Critical Control Point (HACCP) principles in 'high risk' food sectors (e.g. meat processing), and the development of various industry-based quality assurance schemes encouraged or mandated by governments and retailers (Lockie, 1998; Campbell, 2005). Business-to-business standards such as GLOBALG.A.P. are not advertised to consumers and, as such, confer no direct competitive advantage on those producing or supplying certified produce. The Euro-Retailer Produce Working Group was thus formed in 1997 with the aim of harmonizing multiple quality assurance schemes while creating an 'environmentally virtuous' audit system for mainstream farming systems (Campbell, 2005). The concept of 'good agricultural practice' was developed and, in 1999, the initial EurepGAP audit system was implemented. The EurepGAP standard

was developed by a series of technical committees with a broad, though not necessarily representative, membership base, a secretariat and an audit agency called FoodPLUS GmbH. In 2007, EurepGAP was renamed GLOBALG.A.P. to reflect its growing reach outside Europe (Tennent and Lockie, 2012). GLOBALG.A.P. currently comprises a series of on-farm standards for a range of products, including crops, aquaculture and coffee, that involve detailed assessment of the end-to-end farm process. GLOBALG.A.P. has also developed modules for on-farm practices, such as the Risk Assessment on Social Practice (GRASP), and Animal Welfare Add-On. These are either voluntarily adopted by producers and/or incorporated by retailers/buyers into their contractual relations with producers.

GLOBALG.A.P. emerged then both *in response to* state failures with respect to food safety (particularly the BSE food scare of the late 1980s) and *in response to* state interventions designed to increase private-sector attention to food safety. The UK Food Safety Act 1990, for example, establishes financial and custodial penalties for acts that render food injurious to health, mislead consumers, etc. (see Aasprong, 2013). However, the Act also allows a number of defences, the most important of which is 'due diligence': a defence that relies on businesses showing that on the balance of probabilities they took 'all reasonable care' to avoid committing an offence (Food Standards Agency, 2009). Establishing the parameters of 'all reasonable care' is delegated to the courts. In practice, however, it is common in the field of risk regulation more generally to defer to standards and codes of conduct when considering what is 'reasonably practicable' in order to reduce and manage risks associated with well-established activities such as those common in the food industry (e.g. Standards Australia, 2004). Even in the absence, therefore, of legal requirements to adopt HACCP-based safety systems such as those imposed in 'high risk' food sectors, the adoption of such systems has, in fact, become more-or-less mandatory for businesses seeking to reduce their legal liability for food safety breaches.

Further, since its inception, GLOBALG.A.P. (and EurepGAP before it) has self-consciously sought to work within the legal frameworks of the countries in which its members and producers are situated. This is evidenced not only by comments made on the GLOBALG.A.P. website but also by public presentations and the regular stakeholder consultations conducted by GLOBALG.A.P. In some instances, GLOBALG.A.P. standards explicitly defer to and draw on relevant legislative frameworks, positioning GLOBALG.A.P. as subordinate to and dependent on sovereign states. This is particularly evident in GLOBALG.A.P. modules dealing with environmental protection and occupational health and safety, which integrate the environmental and social regulations of the countries in which production is located alongside GLOBALG.A.P.'s own specifications for occupational health and safety and production techniques. GLOBALG.A.P.'s Integrated Farm Assurance Version 4, for example, states:

'Legislation overrides GLOBALG.A.P. where relevant legislation is more demanding. Where there is no legislation (or legislation is not so strict), GLOBALG.A.P. provides a minimum acceptable level of compliance. Legal compliance of all applicable legislation per se is not a condition for certification. The audit carried out by the GLOBALG.A.P. Certification Body is not replacing the responsibilities of public compliance agencies to enforce legislation' (GLOBALG.A.P., 2012).

While GLOBALG.A.P.'s own compliance criteria relevant to environmental protection and occupational health and safety are arguably weak (being mostly 'recommended' or 'minor musts'), certified producers are *expected* to comply with relevant national legislation on these matters. However, as the above quote makes clear, they are not required to *demonstrate* this compliance in order to secure GLOBALG.A.P. certification. This raises an obvious question in relation to states with limited capacity for monitoring and enforcement. Even in such cases, however, elements of responsive regulation remain. Nation states, having created markets through laws of contract and competition, have also, in effect, created conditions for the introduction of private standards. Whether or not individual states have purposely supported the development of private quality standards they must, nevertheless, take account of those standards in shaping future regulatory initiatives.

This interdependence of public and private regulation raises several concerns in relation to the potential for a private standard to influence national regulatory frameworks, particularly where regulatory capacity among state agencies is weak (Braithwaite, 2006). First, regulatory frameworks may be configured in such a way as to benefit members of the standard to the detriment of other actors in the food production network. Second, regulatory frameworks may embed activities and targets in a national regulatory framework that are – for cultural, social, economic, agricultural and/or environmental reasons – incompatible with, or inappropriate to, said regulatory framework (see also Campbell, 2005). Third, regulatory frameworks that defer to standards that are not themselves regulated may give rise to unintended consequences as, conversely, may standards that defer to unenforced regulatory frameworks. The sharing of accountability gives rise to the possibility of circularity – that is, of no one agency, public or private, bearing ultimate responsibility to ensure desirable outcomes are achieved (Braithwaite, 2006).

Methods

The three case studies in this article were selected on the basis of their distinct national sociopolitical environments and equally distinct experiences of private standards development and adoption, as evident in the case studies below. GLOBALG.A.P. was selected as a particular focal point due to its international influence – for example, in the development of ASEAN GAP, VietGAP, PhilGAP-VF and a range of other national and international food standards. Indeed, as this article will go on to show, the influence of GLOBALG.A.P. on the evolution of national regulatory regimes has, in some cases, far exceeded its uptake among producers. For the Vietnam case study, a global value chain framework was used to guide data collection in Binh Thuan Province. Semi-structured interviews and participant observation were conducted with around 40 participants in 2011. Interviews were conducted with donor agencies, government departments, research institutions, farmers, packers and post-harvest businesses. In the Philippines, semi-structured interviews were conducted in Mindanao with approximately 30 representatives of export fruit plantations and cooperatives, government agencies, non-government organizations and private research foundations. Data for the Australian study were drawn from a qualitative social network analysis of vegetable supply chains in the Burnie-Devonport Region of Tasmania, undertaken in late 2010. Semi-structured interviews were conducted with 22 people, including vegetable growers, quality assurance consultants, food processors, farm supply firms and researchers.

Vietnam

Vietnam commenced a process of economic renovation, or Doi Moi, in the mid-1980s to take the country from a centrally planned, closed economy to the market-based, socialist-oriented model of today. In the pre-Doi Moi era, regulations required that all foods were registered with the Ministry of Health by producers and/or traders, and detailed information was retained on: produce attributes; processing, transport, storage and delivery details; labelling data; and produce testing results. However, enforcement capacity was low and, with little ownership over production decisions due to either the organization of labour into agriculture cooperatives (primarily in the north) or the establishment of quotas filled through agreements with production brigades (primarily in the south), little regard existed at the farm level for the quality or safety of agriculture products. Today, development in this area entails redefining the nature of regulation, rather than establishing regulatory capacity as is occurring in many developing countries.

Institutional Arrangements

The Government of Vietnam retains a relatively strong role in regulating national food safety to protect consumer health and underwrite the competitiveness of Vietnamese exports. A series of laws were passed in the late 1990s to provide uniform systems to control the safety of goods, although these laws state that international treaties prevail where applicable (for example, ASEAN GAP). Responsibility is divided among a number of departments, with the Ministry of Science and Technology responsible for food quality, and food safety the domain of the Ministry of Health, the Ministry of Agriculture and Rural Development (MARD) and the Ministry of Industry and Trade. (An FAO project is currently underway to assign responsibilities more clearly and facilitate effective working relationships between these Ministries.)

While the Government of Vietnam does focus on food safety, recent attention on food quality has been largely the result of donor activity. GLOBALG.A.P., the focus of this study, was initially promoted in 2000 by a Swiss programme for developing agricultural exports. However, there was no support from government authorities, research institutes or other supply chain actors and the programme failed in its objective of promoting GLOBALG.A.P. as a basis for export growth (UNCTAD, 2007). The next attempt to bring GLOBALG.A.P. to Vietnam exemplifies responsive regulation: the Government of Vietnam played a key role in the implementation of GLOBALG.A.P., both directly and indirectly, in collaboration with a number of actors. The institutional arena was populated by multiple international institutions with various roles, and their presence was facilitated by the Government with the express intent of promulgating GLOBALG.A.P. Key actors included the United States Agency for International Development (USAID) and the Australian Agency for International Development (AusAID), which were, between 2004 and 2009, instrumental in establishing technical, bureaucratic, regulatory and financial capacity among various stakeholders as the result of multiple donor projects. For example, a USAID project provided technical assistance to provincial Department of Agriculture and Rural Development (DARD) officials and extension officers in sanitary and phytosanitary standards awareness, market analysis, phytosanitary requirements, packhouse sanitation, and small farmer linkages to multinational supermarkets. A number of other institutions were involved in various aspects of the project, includ-

ing the Japan International Cooperation Agency, the retailer METROGROUP and the World Bank. The Government of Vietnam facilitated in multiple respects: providing bureaucratic support, such as access to industry expertise through DARD, MARD and various research institutes; coordinating the influx of resources to the province/industry; and facilitating efficient information sharing, policy development and resource coordination between stakeholders operating in the region. Concurrently, these institutions relied on the state system to provide the basic framework for implementation, such as technical expertise on local farming practices provided through key Vietnamese research institutes and DARD.

Stakeholder Attitudes and Engagement

Export-oriented producers and exporters were particularly concerned about the safety of all export-bound Vietnamese produce. They feared that without a good reputation for safe and hygienic produce, there would be difficulty competing with other Asian export nations, such as Thailand. By many accounts their concern is valid. The opening up of the economy in the 1990s availed the country of agrochemicals that previously had been inaccessible, and uptake was rapid, resulting in 354 deaths in 1995 in the Mekong River Delta alone (Shepherd, 2005). While the situation is slowly improving, 25 deaths and more than 3,560 hospitalizations were officially linked to 142 food poisoning incidents in 2011, and the real number is likely to be much higher (*Viet Nam News*, 2012). Indeed, relatively recent data show Vietnam as having one of the highest produce rejection rates in the EU and US between 2002 and 2008 (UNIDO, 2011). The focus was not only on high value markets; most exporters and producers interviewed highlighted that Chinese markets were beginning to request food safety certification, such as VietGAP. It is believed that this will become a market-entry requirement for China from 2013 although no further detail was available at the time of writing. For this reason, while producers and exporters alike viewed GLOBALG.A.P. certification as a production hurdle, many believed it would prove useful for reputational aspects of Vietnamese produce.

Compliance and Enforcement

Inspection and certification for food safety is subsidized by the Government of Vietnam and is undertaken by authorized local agencies, the responsibility for which varies between provinces. The outcomes of this process are varied, and a number of constraints exist in determining the relative safety of food produced, including budgetary restrictions, inconsistent results of analyses, narrow testing capabilities and 'subjective' sampling procedures. The sheer number of food poisoning cases per year underscores the lack of effectiveness in monitoring and enforcement of these regulations. As a research officer pointed out, many of Vietnam's problems around food safety stem from a lack of resources to ensure enforcement rather than lack of regulations or legal apparatus on food safety. As a result of the lack of enforceability of food safety standards and regulations, one major exporter had implemented a memorandum of understanding with producers in a form of self-regulation, to ensure that chemicals prohibited for use by the Government of Vietnam (which were nonetheless commonly used) were not used by producer/suppliers.

Conversely, GLOBALG.A.P. provides an opportunity for independent auditing and enforcement. In Vietnam, at the time of research, the main GLOBALG.A.P. auditing company was SGS, a large, international auditor. By all reports, audits by SGS were conducted stringently against the required criteria. However, a Vietnamese research officer explained that an audit company had existed previously with a reputation for failing to conduct audits in accordance with requirements. This auditor has ceased to exist in Vietnam. The leader of a key donor project also suggested that ensuring producers were certified by a reputable auditor was of key importance for project success. This highlights that, although independent compliance and enforcement is designed to ensure the standardization of food safety and quality along and between supply chains, there may be instances when the legitimacy of this form of standardization is called into question.

Regulatory Interactions and Gaps

There has been significant interplay between the food governance system in Vietnam and GLOBALG.A.P. For example, Binh Thuan DARD introduced procedures supporting Integrated Pest Management (IPM) for farmers in that province to reduce pesticide use and align production practices with those of GLOBALG.A.P. This was put into place as a result of the pervasiveness of development support for export-ready produce (specifically dragon fruit). This process has been successful in mobilizing a number of horticultural producers to certify to GLOBALG.A.P., including seven hectares of star apple and 12 hectares of mango in 2008, followed by further horticultural certifications across the country for pomelo, pineapple, longan and oranges. Nonetheless, despite the interest in GLOBALG.A.P., in Vietnam the number of certified producers is small, and is concentrated in specific industries where substantial technical and financial support has been forthcoming. This is largely the result of the existence of substantial gaps between the Vietnamese regulatory environment – or its enforceability – and the regulatory environment of export produce.

Regulatory Reflexivity

With GLOBALG.A.P. a success and national level regulations lacking, the Vietnamese government has included objectives specifically relating to international certification schemes for agriculture in strategic planning for the industry at the national level. The previous five-year plan for agriculture (2005–2010) included actions to promote granting of product certification and trademarks in line with regional and international standards (MARD, 2005), while the ‘2020 Vision’ for the Ministry of Agriculture and Rural Development places higher priority and allocates more administrative resources to managing international trade rules and standards (MARD, 2008). This could be seen as an effort by the Government of Vietnam to focus limited resources on where they are likely to have the greatest impact, in an environment where they have been compelled effectively, through a number of food safety scares, to play an indirect role in the establishment of regulation. As Ayres and Braithwaite (1992) suggest, the state is acting in response to strategies articulated in the international development arena.

Philippines

Field research for this case study was undertaken on the southern island of Mindanao, an island known both as the centre of the Philippine export fruit industry and as a hotspot of extreme poverty and sectarian violence (Vallema et al., 2011). While bananas are exported from Mindanao under global brands such as Dole, Del Monte, Chiquita and Sumitomo, these companies act, in the main, only as buyers. The vast majority of export bananas are produced under license to multinational fruit companies either on plantations operated by Filipino companies or on grower cooperatives.

Institutional Arrangements

The Philippine Bureau of Agricultural and Fisheries Product Standards (BAFPS) was established in 1997 with responsibility for 'formulating and enforcing standards of quality in the processing, preservation, packaging, labeling, importation, exportation, distribution and advertising of fresh and primary agricultural and fisheries products' (BAFPS, 2013, p. 1). BAFPS has developed over 100 product standards in addition to a small number of cross-product standards including the 2003 Specification for Organic Agriculture and the 2007 Code of Good Agricultural Practices for Fresh Fruits and Vegetable Farming (PhilGAP-VF). The agency is also involved in attempts to harmonize standards such as the ASEAN GAP project. Product standards address matters such as cosmetic attributes, varieties and maximum pesticide residues. The GAP-VF addresses a broader range of issues associated with food safety, the farm environment and traceability. While BAFPS has been directed to benchmark PhilGAP-VF against GLOBALG.A.P. (Revision of Administrative Order 25), PhilGAP-VF is comparatively limited in both scope and detail. For example, occupational health and safety and environmental guidelines are included in PhilGAP-VF only to the extent that they contribute directly to food safety (e.g. contaminated run-off should not be stored for use in irrigation).

To encourage certification to PhilGAP-VF, BAFPS is mandated to meet most costs of inspection and testing on behalf of applicants. Despite this, by 2012, only five businesses had been certified (including one export fruit company, Tagum Agricultural Development Company). By contrast, virtually all businesses involved in the export fruit industry were certified to a variety of other food quality standards including, most commonly, the International Organization for Standardization's series on the development of quality systems (ISO 9000). As a signatory to the International Plant Protection Convention, the Philippines requires that all export fruit meet stringent chemical residue limits, that exporters be accredited by the Bureau of Plant Industry, and that exporters employ quality assurance officers. Residues are monitored at the port of export by the Plant Quarantine Office and again by importing countries. Buyers make frequent visits to plantations and grower cooperatives to communicate requirements and to audit chemical use practices. In the case of bananas, these buyers are predominantly based in Japan, China and the Middle East.

Stakeholder Attitudes and Engagement

There was a general feeling among respondents from both Philippine government agencies and the private sector that the vast majority of fruit buyers had limited

interest in matters other than product quality and safety. With two notable exceptions, buyers were not demanding certification to any standard other than ISO 9000. The two exceptions to this rule were buyers seeking certified organic bananas and the multinational company Chiquita, which required its suppliers to certify to a standard developed by Rainforest Alliance. Other multinational buyers, however, were asking producers increasingly to begin 'alignment' to GLOBALG.A.P. standards. One plantation operator, Davao Agricultural Ventures Corporation, undertook GLOBALG.A.P. certification in 2009 and at least two other plantations certified parts of their operations. On the whole, producers and buyers appeared to be monitoring the development of GAP standards and to be incorporating their requirements within existing quality systems in order to pre-empt any future market or government demands to certify against them. According to third-party certifiers active in Mindanao, exporters were more actively pursuing accreditation to ISO 22 000 food safety requirements than against GLOBALG.A.P.

Compliance and Enforcement

Alignment with GLOBALG.A.P. standards did require changes in plantation management. As in the Australian case outlined below, many of these changes were arguably minor (more latrines were installed, field practices were recorded in a slightly different format, etc.) reflecting the sophisticated quality systems that exporters had in place before buyers began to request alignment with GLOBALG.A.P. Nevertheless, the particular impact of reliance on domestic legislation and regulation as a baseline for certain aspects of environmental performance under GLOBALG.A.P. is important to consider here given accusations of environmental pollution and other abuses routinely levelled at the Philippine export fruit industry (Borras and Franco, 2012). Plantations are required under Philippine law, for example, to secure an Environmental Compliance Certificate (ECC), which is monitored by a regulatory office within the Department of Agriculture. ECCs require, among other things, that treed buffer zones be maintained between banana plants, waterways and populated areas such as houses and public roads. As an NGO representative pointed out, the *only* plantations on Mindanao compliant with this requirement were those audited and certified independently by Rainforest Alliance. Elsewhere, bananas are planted visibly to the very limit of plantation boundaries. The inability or unwillingness of Philippine regulators to enforce compliance with buffer zone regulations is not likely to be redressed by GLOBALG.A.P. due to the proviso within this standard that, while operators are expected to comply with national legislation as a condition of certification, they are not required to demonstrate that compliance.

Regulatory Interactions and Gaps

Following from the above is a parallel failure to ensure compliance with relevant legislation pertaining to the property and human rights of communities affected by plantation agriculture on Mindanao. Many of the corporate plantations offer what are, by local standards, highly favourable employment conditions for rural workers. Critically, the voluntary GLOBALG.A.P. Risk Assessment on Social Practice (or GRASP) module (for which national interpretations are not yet available for the Philippines) deals exclusively with the rights of workers. The rights of stakehold-

ers not employed by the certified operation lie outside the standard. Of particular concern here are neighbouring villagers and stakeholders with competing claims to land titles. In a country in which landownership on a scale necessary for plantation agriculture is legally restricted, allegations are widespread that the establishment of many plantations has relied on manipulation of the Comprehensive Agrarian Reform Program (CARP) and/or Indigenous People's Rights Act (IPRA), financial coercion, violence, and various other forms of state-sanctioned dispossession (see Borrás and Franco, 2005, 2012; Vallema et al., 2011). This is a complex matter that cannot be dealt with adequately here. The point is that GLOBALG.A.P. certification implies a high level of 'social performance'. However, social performance as defined operationally within GLOBALG.A.P. standards (including GRASP) does not consider the relationship between commodity production and regulatory instruments such as CARP and IPRA, which deal with the broader social and environmental context for that production. Neither does it acknowledge gaps in the regulatory landscape such as, in this case, willingness or capacity to protect the legislative rights of non-employees.

Regulatory Reflexivity

The nascent state of GLOBALG.A.P. certification in the Philippines makes assessment of regulatory reflexivity difficult. Nevertheless, it can be observed that the absence of enforcement by government agencies of environmental regulations does appear to represent a concrete example of the risk of mutual accountabilities creating a kind of regulatory circularity referred to above; that is, a situation in which no one regulatory agency actually takes responsibility for ensuring desired outcomes are achieved. Deference within the GLOBALG.A.P. standard to state legislation has proven, in this case, effectively meaningless while reference, moreover, to broader environmental regulations within the domestic PhilGAP-VF standard is simply absent.

Australia

Institutional Arrangements

Food safety is regulated by Food Standards Australia New Zealand (FSANZ), which is an independent statutory agency established by the Food Standards Australia New Zealand Act 1991. This agency has responsibilities that cover food standards and labelling, and policy is set by the Legislative and Governance Forum on Food Regulation. Each of the states and territories is responsible for food safety sampling domestically, while the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF) has responsibility for the inspection and sampling of imported food. The HACCP approach has been adopted by HACCP Australia so that standards are compliant with Codex Alimentarius and international food safety management systems (HACCP Australia, 2011). There are a number of quality assurance and food safety standards applicable to fruit and vegetable growing in Australia. Certification through GLOBALG.A.P. standards among fruit and vegetable producers is limited (but growing) and at least one non-profit extension agency provides training for this and other private and public standards. Domestic private standards include Freshcare, Woolworths Quality Assurance (WQA) and Coles Supermarket

Supplier Management Program. The latter two are supermarket-developed standards. Freshcare, conversely, was developed in 2004 as an 'industry owned, not for profit on-farm assurance program' developed by public and industry experts for quality assurance and safety management (Freshcare, 2013).

Stakeholder Attitudes and Engagement

Interviews with growers revealed considerable concern over the relationships between private standards and state-based regulatory frameworks (see also Tennent and Lockie, 2012; Thompson and Lockie, 2012). Key areas of interaction between public and private regulation, according to growers, include: occupational health and safety; chemical application and regulation; labelling of food (specifically, country of origin); environmental and ethical/social performance standards; branded versus generic standards; and auditing for private standards. Occupational health and safety practices mandated by GLOBALG.A.P., they claimed, differ from standards established by Australian legislation for farm workplaces in relation to signage requirements, visitor farm-entry processes, hiring processes and the banning of children from farm work areas. This could be interpreted private regulation imposing additional requirements in response to perceived gaps in the minimum standards already in place. However, this was contested by growers who argued that some GLOBALG.A.P. requirements were simply different to existing legislative requirements (adding redundant safeguards to those already in place) while others were unnecessary and insensitive to the local social and cultural context for agricultural production (equating family farming, for example, with the use of child labour).

The issue of redundancy was particularly difficult to manage at the farm level in relation to chemical use and storage. While the GLOBALG.A.P. standard specifications for allowable chemicals are subordinate to state chemical legislation (except for chemicals banned in the EU perhaps), the standards do specify the way in which chemicals are to be stored on farms and in this way add to state legislation. Further, GLOBALG.A.P. requirements are prescriptive (specifying how chemicals are to be stored) while government requirements are competency based (accrediting operators on their ability to demonstrate safe handling and storage practices). Growers who are accredited by the state argue that the prescriptive approach embedded in private standards does not add value to mandatory accreditation and that unnecessary costs are incurred in complying with prescriptive standards. This is the case particularly in the certification of multiple private standards (particularly international standards such as GLOBALG.A.P. and Marks and Spencer's Field to Fork) as each requires different in-shed storage arrangements. Growers maintained that areas such as chemical storage and handling should be generic and competency based rather than branded – particularly if safety is the primary concern.

Compliance and Enforcement

Despite frustration over perceived regulatory overlaps, the farmers interviewed were all fully compliant with GLOBALG.A.P. and participated regularly in audits. A number of farmers in the region had been compliant with EurepGAP and GLOBALG.A.P. since its inception (see Thompson and Lockie, 2012); they thus had a view of the standard as being a legitimate private regulatory instrument that al-

lowed access to an important international market. They were well aware of the consequences of non-compliance with auditing, and a private consultancy company exists in Tasmania that focuses specifically on training farmers to comply with various private food standards.

Regulatory Interactions and Gaps

Concerns over regulatory interactions and gaps have influenced both farmer and state engagement with private standards. In 2002, for example, an Environmental Assurance Workshop was held to look at the possibility of developing AusGAP (Foodlink Management Services, 2002). However, the workshop concluded that EurepGAP was not an environmental assurance system and that the existing Australian systems should remain in place and be developed independently. Subsequently, and in response to farmer concerns over the impact of EurepGAP on food export markets, the Australian Government examined the impact and implementation of EurepGAP. *Guidelines for Implementing EurepGAP for Australian Fresh Fruit and Vegetable Producers* were then produced to 'assist businesses to make an objective decision about the implications and impacts of EurepGAP' (McBride, 2004, p. v).

Tasmanian growers participating in this research perceived inadequate regulation of food labelling. As a business-to-business standard, GLOBALG.A.P. is unlikely to come to the attention of consumers. Nonetheless, growers were concerned that consumers and government regulators would regard imported vegetables that were certified against GLOBALG.A.P., or some other standard, as being equivalent to Australian grown vegetables in terms of their quality and the measures to which they had been subjected to ensure produce is fit for consumption. As indicated above, however, the majority of the GLOBALG.A.P. chemical requirements are subordinate to state regulation. Therefore, not all products certified under the GLOBALG.A.P. brand have been grown under the same chemical standards, with the result that growers perceived that chemicals banned in one country may have been used in another to produce the same GLOBALG.A.P. accredited product.

Regulatory Reflexivity

The concern noted above about food labelling resulted in a farmer-driven 'country of origin' labelling campaign in Australia that has involved a review of food labelling law and policy (Blewett et al., 2011) at the national level and a directive from the Australian government for FSANZ to investigate extending country of origin labelling to fruit and vegetables (Food Standards Australia New Zealand, 2006). Outcomes include new labelling requirements for fresh and processed foods, enforced under the Australia New Zealand Food Standards Code – Standard 1.2.11 – Country of Origin Requirements (Australia Only) – F2011C00565 (FSANZ, 2011) as well as the Competition and Consumer Act 2010. This is an example of public regulation being responsive to markets and the perceived need for monitoring and enforcement by the state. An emerging area of regulatory reflexivity in Australia is likely to involve chemical regulation (see Thompson and Lockie, 2012).

Farmers have also been active in developing their own industry-based private standards (e.g. Freshcare) in response both to concerns about retailer-led standards and to the opportunities for market access that certification may afford. These ex-

amples of producer self-regulation differ specifically from retailer-led standards in that they are competency based and apply to the whole farm, rather than being crop specific, as is the GLOBALG.A.P. standard. Private standards are thus interacting with the food governance system in Australia in a variety of ways and generating a range of reflexive responses.

Conclusion

Seen from the perspective of responsive regulation, the three case studies presented here demonstrate that private food standards such as GLOBALG.A.P. are better understood as part of a governance structure rather than as governmental strategies that sit outside the state. All three case studies demonstrated that the GLOBALG.A.P. standard was accepted by the respective state agencies and governments. In some instances, government agencies were instrumental in the implementation of GLOBALG.A.P. standards. In Vietnam, in particular, a collaborative approach between government agencies and development agencies such as AusAID and USAID worked to embed GLOBALG.A.P. standards within the state food safety regulatory framework. In Australia, by contrast, where local regulatory measures were comparatively well developed, producers certifying to the standard reported a degree of redundancy between competing regulatory frameworks (including competing private standards). At the same time, the implementation of private standards in Australia has sparked debate around perceived regulatory gaps in relation to fertilizer use and food labelling. This debate highlights competing regulatory imperatives at the international and national levels that are obscured by the language of harmonization but that, for GLOBALG.A.P. certified producers, challenged the legitimacy and effectiveness of standards as a particular governance strategy.

As a voluntary, private standard, GLOBALG.A.P. is inevitably subject to state regulatory measures. Where domestic measures are highly developed, as demonstrated in the case of Australia, greater attention may need to be given to benchmarking the GLOBALG.A.P. standard against those measures to ensure a high level of equivalence and a minimum of duplication and regulatory burden. Where a state's capacity to regulate is weak, as demonstrated in the case of the Philippines, insisting on adherence to certain private standards can, in part, introduce standards in what may otherwise be a regulatory vacuum; and where state capacity is weak but developing with the engagement of non-state actors such as civil society and aid and development organizations, as demonstrated in the case of Vietnam, the private standard can be a source for improved state regulation. Responsive regulation may be useful primarily as a theory of changes in actual governance practices. Indirectly, however, it may also be useful in providing a clearer understanding of the reality of regulation and governance so that normative approaches to reform are better informed and, ideally, more effective.

Where state regulation of food-related risk is inadequate, insufficient or puts the burden of that risk on the retailer/buyer, the GLOBALG.A.P. standard provides the retailer/buyer with an instrument to manage their risk. Where state regulatory measures concerning environmental protection, working conditions and human rights are similarly lacking, some measures developed by GLOBALG.A.P. may also be useful in raising the standard above the status quo delivered by state measures. Included in the GLOBALG.A.P. standards are 'soft' recommendations relating to the environment, worker conditions and animal welfare. Producers may also im-

plement the GRASP module on social practices. Where a buyer's market power is sufficiently strong, they can exercise that power to include such standards in their contracts with producers. As long as contracting in this way is lawful, the producer can be held to this standard even in the absence of state measures dealing with such social practices. However, as demonstrated in the Philippine case study, where the buyer is not inclined to contract on this basis, state legislative provisions remain the minimum standard. Further, where state capacity to monitor and enforce legislation is limited, GLOBALG.A.P. places no requirements on its own auditors to assume this responsibility.

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