European retailers as agents of change towards sustainability: The case of fruit production in Brazil

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European retailers as agents of change towards sustainability: The case of fruit production in Brazil

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Abstract
As multinational food producers and large retailers are increasingly adopting programmes for safe and sustainable agriculture, they could play a role as ‘agents of change’ in the transition process towards socially and environmentally responsible production methods. This article argues that the present private-sector programmes indeed provide an impetus for farmers to change their production methods, but are at the same time a second-best option, because their scope is limited, they may suffer from a weak environmental and social content, they may have discriminating effects on market access, and they may lack democratic procedures. Therefore, it seems necessary that competing initiatives will be developed using a multi-stakeholder approach, because competition between certification programmes may give an impetus to raise their ambition level in terms of content and good governance. At the same time, governments could play a more active role by using regulatory intervention. Governments could work, for example, on minimum definitions of sustainable agricultural production methods, the restriction of concentrated buyer power and the assistance of smaller producers in coping with the new quality and safety requirements. The empirical focus of this article is on the retailer-led EUREPGAP programme for fruit and vegetables in combination with three fruit producing companies in Brazil.

Keywords: Retailers, developing countries, fruit production, governance, sustainability

1. Introduction
The international trade in food products has become increasingly competitive and globalized under the influence of trade liberalization (Atkins & Bowler 2001, Reardon et al. 2001). One of the decisive factors in this process is the ever-growing market share of large retailers in combination with their increased global sourcing practices. Consequently, food products travel much more and further than they used to do. This observation also accounts for the international trade in fresh fruit and vegetables, which was worth about 50 billion dollars in
2000/2001 (European Commission 2003). In this period, the USA was the world’s leading exporter with a share of 17%, followed by the EU (11%), China (8%), and Mexico (7%), whereas the EU was the leading importer with 25% of the total, followed by the USA (20%), Japan (12%) and Canada (6%). When taking a closer look at the EU, an overall steady growth can be observed of both the intra-EU and external trade volumes and the trade balance is such that the EU is a net exporter of vegetables and a net importer of fruits (European Commission 2004).

Simultaneously, and partly related to the growth of international trade, the food and retailing industry is increasingly paying attention to food quality and safety issues by actively managing its supply chains of food products. One of the relevant issues in fruit and vegetable production concerns the use of pesticides, since several serious environmental and worker health impacts are associated with their use and there is a risk that consumers may be exposed to critical levels of pesticide residues in food. The pioneers in the industry already started in the early 1990s by taking initiatives to promote the use of safe and sustainable agricultural production methods (van der Grijp & den Hond 1999). Among these companies were several powerful multinational food companies and major European retailers that have developed programmes for integrated production. Some of them have also launched organic product lines. As these multinational companies and retailers can be considered important shapers of both supply and demand, they could play a role as ‘agents of change’ in the process towards safe and sustainable agriculture (see Browne et al. 2000).

Considering the present trends in corporate behaviour, the question may be raised to what extent such private initiatives indeed offer a contribution to safe and sustainable agriculture, what effects they have on retailer-producer relationships, and more specifically inclusion and exclusion of farmers, and what impacts they have on the governance of food and agriculture. This paper aims to answer these questions, analysing one of the larger private efforts in the field, which is the retailer-led EUREPGAP programme for fruit and vegetables. It uses the case of export fruit production in Brazil to explore several key dimensions of the changed and globalized relationships between retailers and producers.

The outline of this paper is as follows. Section 2 makes some introductory remarks about the concepts of governance and value chains from a regulatory point of view. Section 3 describes the EUREPGAP programme for fruit and vegetables, covering its development, membership, evolution of standards, organizational structure, implementation in practice, and participation and compliance mechanisms. Section 4 elaborates the Brazilian case study, analysing the impacts of programmes such as EUREPGAP. It deals with inclusion and exclusion of farmers, counter and accommodation struggles, enterprise adaptation, growing external surveillance and monitoring of the whole production process, new qualification of (gendered) worker tasks, and impacts on nature and environment. Section 5 makes some concluding remarks about the impact of private programmes on the governance system for food and agriculture. Questions are raised here about the efficacy of such private forms of regulation, their role in encouraging environmental sustainability, and to what extent they may be transitional solutions in providing systems of food governance which encourage more effective participation and accountability in food supply chains.

2. Governance and value chains

The concept of governance can be understood as the rules, processes and practices that affect how powers are exercised (European Commission 2001). A specific characteristic of this concept is that it highlights the involvement of governmental as well as non-governmental actors in policy-making, as it is grounded in ideas of interdependence and
interaction between various powers at multiple levels. Another specific feature of
governance is that it can be applied at various levels (from international to local) and
in various contexts (e.g. issues, organizations, product chains).

At the international and transnational level, the concept has *inter alia* pointed the attention to
the emergence of new sites of governance, or *loci*, where regulatory or regulatory-like activities
take place. Such new sites include international standards bodies, transnational companies,
non-governmental organizations, and numerous partnerships and coalitions. The emergence
of these new sites is being accompanied by the creation, implementation and enforcement of
new forms of governance, such as co-regulation, industry self-regulation and multi-stakeholder
regulation (Haufler 2003). These new forms typically include codes of conduct, standards for
public reporting, and certification programmes. Most of them are based on non-hierarchical
models of steering, and have a market orientation (Lipschutz, 2005).

The question arises as to why the new sites and forms of governance have emerged in the
first place. It has been argued that an important reason for private actors to start developing
new forms of governance has been the weakness of governance at the international and
national government levels in relation to environmental, social and safety issues. In this
respect, some put the emphasis on so-called ‘regulatory’ gaps, others on ‘compliance’ gaps,
and a third group points to the occurrence of both (see e.g. Haufler 2001, Leipziger 2003,
Meidinger 2003).

However, the rise of private actors in governance arrangements can also be explained
from the viewpoint of economic interests, since regulatory initiatives may be used as a
strategic instrument of competition (Reardon et al. 2001). The latter argument touches
upon the issue of power in economic relationships, an issue that is being studied in the
context of global commodity chain analysis (GCCA) (see, for example, Gereffi 1999) and
global value chain analysis (GVCA) (see, for example, Kaplinsky 2000). These approaches
put the emphasis on the governance structures of product chains and the dynamics of rent
distribution along the chains, respectively. More specifically, they stress the importance of
global buyers, particularly retailers and brand-name companies, as shapers of production,
distribution and marketing systems, and pay attention to the factors that determine global
sourcing relationships with producers, especially in developing countries. In this respect,
Gereffi introduced the term ‘buyer-driven commodity chain’ as distinct from ‘producer-
driven commodity chain’.

The approaches of GCCA and GVCA have proven to be useful when explaining
restructuring and transition processes in specific sectors of the economy. Especially relevant
in the context of this paper is the work of Dolan and Humphrey (2004) who have been looking
at changing governance patterns in the trade of fresh vegetables between Africa and the UK,
mainly caused by the behaviour of large retailers that have adopted competitive strategies
based on quality, year-round supply, and product differentiation, and have implemented risk
control approaches. Interestingly, their research shows that the regulatory environment
created during the 1990s by the UK government and the EU played a crucial role in the
creation of the new governance structures in the supply chains for fruit and vegetables.

In this respect, Garcia Martinez and Poole (2004) speak of ‘a new paradigm for stakeholder
relationships characterized by complex interactions between public and private modes of
regulation’. Buller and Morris (2004) also recognize a critical interplay and interrelationship
of public policy and market forces in achieving environmentally sustainable forms of
agriculture. They argue that market-oriented approaches do not constitute a regulation-free
alternative to public policy and that the traditional division of responsibilities is being reversed
to a new situation in which public policy increasingly plays the role of facilitator and the
market that of regulator.
In this context, this article will put the emphasis on the regulatory aspects of private forms of governance and will also pay attention to the interactions with the public regulatory domain.

3. The EUREPGAP programme for fruit and vegetables

3.1. Development

One of the larger private regulatory efforts in the horticultural sector concerns the EUREPGAP programme for fruit and vegetables. In 1996, a group of 13 large European retailers founded the Euro-Retailer Produce Working Group (EUREP) with the aim of making a first step towards European-wide harmonization of minimum standards for integrated production (EUREP 1998). EUREP’s retailer membership currently amounts to 23 retailers from 10 European countries, plus McDonalds Europe and its aspirations have become global instead of European. EUREP now calls itself the ‘Global Partnership for Safe and Sustainable Agriculture’.

The basic idea of establishing EUREP came from the UK (EUREP 1998). British retailers participating in the Assured Produce Scheme in the UK have taken the lead in the EUREP initiative because they aimed to impose similar standards on overseas suppliers as they already did on national suppliers. Their interest in doing so was strongly linked to the entry into force of the Food Safety Act of 1990, which placed an increased liability on British retailers and food producers for the activities of other participants in food supply chains through its ‘due-diligence provisions’.

EUREP aims to publish sector-oriented protocols of standards for good agricultural practice (GAP) that cover food safety, environmental protection and worker welfare. The first of these EUREPGAP protocols contained the basic requirements for the production of fruit and vegetables, and was introduced in 2001. This protocol provided a basic standard that should be elaborated on a crop-by-crop basis at the national or regional level by public authorities or private certification bodies. In September 2003, EUREP published a new version of the EUREPGAP programme that entered into force in January 2004.

The EUREPGAP programme for fruit and vegetables currently consists of three main documents that regulate and facilitate the approval procedure of certification bodies, the certification process of producers and producers’ organizations, and the benchmarking of national certification schemes. They include: general regulations; control points and compliance criteria; and a benchmarking procedure.

The standards in the EUREPGAP programme have a varying status as a distinction is being made between major musts, minor musts and ‘shoulds’. For major musts 100% compliance is compulsory, whereas for minor musts this is 95%. ‘Shoulds’ have only the status of recommendations that must be inspected by certification bodies, but are not a prerequisite for the granting of a EUREPGAP certificate. The status of the standards is especially relevant in relation to the sanctions available in case of non-compliance.

It is a precondition for starting the certification process in a certain country that the basic standards in the EUREPGAP programme are elaborated by public authorities or private certification bodies to adjust them to local circumstances and climatic conditions. This means that countries that already have standards for food safety, environment and worker welfare in place will need to evaluate whether their systems comply with the bottom line set by EUREP; and that countries where such standards do not exist need to create compatible systems.

If the appropriate national standards are in place, individual farmers and farmer groups can apply for EUREPGAP certification in the country concerned. The certification of a farmer
can only be achieved through an independent verification by a national inspection or certification body that has received accreditation to perform such activities. Once a positive decision in such a procedure is made, the EUREPGAP certificate will be issued with a validity of 1 year. Farmers of fruit and vegetables that have obtained EUREPGAP certification have the right to use the EUREPGAP logo that is a registered trademark. This trademark is only meant for communication in the business-to-business area.

3.2. Membership

EUREP’s membership consists of three groups, including retailers, suppliers, and associate members. The total has grown from 20 in 1999, to more than 200 in 2003. Since its inception, the retailer membership of EUREP has been in constant flux, with members joining and leaving, but, overall, has quickly expanded. The UK is especially strongly represented. Some countries, however, are not involved at all, such as France and several Scandinavian countries.

Among the supplier members are farmers and producers organizations from all continents. The majority of them are major players in the field. The group of associate members is of a varied composition, including certification bodies, consulting firms, software companies, and the crop protection and nutrients industry. Table I presents the membership of EUREP, divided by continent and member group, and clearly shows the European dominance in the initiative.

3.3. Evolution of standards

In September 2003, EUREP published the new version of the EUREPGAP standards for 2004. When comparing the 2001 and 2004 versions, the conclusion is that a thorough restructuring has taken place, related to form as well as content. Whereas the 2001 version stated that ‘EUREP supports the principles of and encourages the use of HACCP (Hazard Analysis Critical Control Points)’, the new version reinforces this statement and declares that the EUREPGAP standards are based on food safety criteria, derived from the application of generic HACCP principles. In short, HACCP has turned from a mere recommendation into a basic principle incorporated within the standards. At the same time, Integrated Pest Management (IPM) and Integrated Crop Management (ICM) are no longer explicitly mentioned as an essential part of good agricultural practice. Whereas in the previous version, it was a minor must for farmers to apply recognized IPM techniques, the status of this criterion has now been reduced to a recommendation, consequently losing nearly all its force. Instead, the 2004 version states, in rather vague terms, that the negative impacts of

<table>
<thead>
<tr>
<th>Continent</th>
<th>Retailer members</th>
<th>Supplier members</th>
<th>Associate members</th>
<th>Total</th>
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</tr>
<tr>
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<td>6</td>
<td>3</td>
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</tr>
<tr>
<td>Australia and New Zealand</td>
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<td>North America</td>
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<td>4</td>
<td>6</td>
<td>10</td>
</tr>
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<td>Latin America</td>
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<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>92</td>
<td>75</td>
<td>191</td>
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</table>
agricultural production on the environment need to be minimized but does not prescribe a specific agricultural production method.

Thus, the focus in the EUREPGAP programme has been put more strongly on food safety and hygiene at the expense of environment and worker welfare. The most obvious explanation for this shift in focus is the high priority for food safety issues at EU and national governmental level and the need for retailers to cope with their new regulatory environment as is being established in the new EU food law. Strikingly, the EUREP membership has strongly increased since the food safety focus has been strengthened. This suggests that food safety is a better vehicle for generating industry-wide support than environment and worker welfare.

The shifts in the standards are reflected in the number and status of the compliance criteria – or control points in EUREP language – dealing with the various safety and sustainability issues. Among the issues that have gained importance in the new protocol are the testing of pesticide residues, and hygiene during harvesting and produce handling. Table II gives an overview of the changes in the control points. When applying a more dynamic point of view to the same revision process, it becomes clear that even more changes have taken place than is apparent from the table. Two major musts, for example, have lost their ‘major’ status, which means that there are in fact eight new major musts instead of six.

The overall conclusion is that the EUREP initiative has turned, within a 7-year period, from a broad initiative dealing with various sustainability issues, into a programme that is primarily focused on food safety and hygiene. It strongly urges for rationalization of production through record keeping and obliges suppliers to have strict traceability systems in place.

### 3.4. Organizational structure

The organizational structure of EUREP consists of a Steering Committee, a Technical and Standards Committee, and a Secretariat. The Steering Committee is the decision making body of EUREP. Its 14 members include representatives from five retailers, seven suppliers of fruit and vegetables, the British standard setting and certification organization Assured Produce, and an independent chairman.

The Technical and Standards Committee (TSC) fulfils a crucial role in the standard setting process of EUREP. It was established in the first months of 2001. The scope, remit and composition of the TSC are laid down in Terms of Reference (ToR). According to this ToR, the TSC is constituted of three retailer members and three supplier members. In case of necessity the TSC may draw on the expertise of external experts to provide advice on specific scientific and technical matters. The role of the TSC is to review, evaluate and approve normative and procedural documents. The private company FoodPlus performs the secretarial functions for EUREP.

EUREP is further encouraging national technical working groups to be put in place so as to assist the implementation process of standards and give input to the TSC. Their scope is

| Major musts | 41 | 47 |
| Minor musts | 122 | 98 |
| Total musts | 163 | 145 |
| Recommendeds | 91 | 65 |
| Total control points | 254 | 210 |
solely to report to the TSC in the form of proposals on regional or national interpretation in relation to the implementation process. Thus far, 11 of such national working groups have been established. They do not belong to the official EUREP structure.

3.5. Implementation in practice

At the beginning of 2004, there were 40 certification bodies, with offices in 49 different countries on a global scale, approved to carry out EUREPGAP certification. Nine other certification bodies were in the process of getting accreditation, but these companies would not bring new countries on board. Most of the EUREPGAP approved certification bodies are private undertakings and claim independency. In addition, five national schemes from three countries had been positively benchmarked against the EUREPGAP standards. This concerned schemes from the Netherlands, Spain and the UK.

Since the publication of the first EUREPGAP protocol in 2001, the retailer members could start with the implementation of the standards in their own supply chains. Practice shows that the time schedule for implementation differs per retailer and that some are explicit about their deadlines and others are not. Concerning the implementation by producers, the state-of-affairs was such that on 1 December 2002, 3889 producers in 19 countries had obtained EUREPGAP certification, corresponding with 61 425 ha. One year later, the number of certified producers had increased to 13 040 in 41 countries, corresponding with more than 445 000 ha. Table III shows the number of certified growers in 2002 and 2003 by continent, reflecting again the European dominance in the initiative.

3.6. Participation and compliance mechanisms

Certification programmes commonly use the incentives of increased market access and premium prices to convince producers to meet certification standards and to become certified. Certification programmes, however, may also deliver other benefits to participating producers, so-called secondary benefits (van der Grijp et al. 2004b). These benefits may include: the transfer of technical advice and support, for example on sustainable production techniques; information on the demands of the international market; improved access to credit; and reduced costs in the operation of production facilities. These secondary benefits may provide an extra impetus for participation in a certification scheme. In the case of the EUREPGAP programme, the crucial incentive for farmers is to obtain (and maintain) their license-to-supply to the European supermarkets. Premium prices are generally not being paid

<table>
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<td>Australia and New Zealand</td>
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</tr>
<tr>
<td>Europe</td>
<td>3530</td>
<td>11088</td>
</tr>
<tr>
<td>North America</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Latin America</td>
<td>40</td>
<td>187</td>
</tr>
<tr>
<td>Total</td>
<td>3892</td>
<td>13 040</td>
</tr>
</tbody>
</table>
for EUREPGAP certified products, although the producers concerned have to make additional costs to adapt their production operation to the EUREPGAP requirements and to pay for the certification process.

Once participating in the EUREPGAP programme, there are rights and obligations for the producers concerned. The key obligations for the farmers include the responsibility for compliance of the certified products to the EUREPGAP protocol. Farmers must also take responsibility for any subcontractors employed. When a certification body detects non-compliance with the standards or other contractual obligations, it has the disposition of three types of sanction: warning, suspension of the certificate, and its cancellation. Non-compliance with a minor must lead to a warning and the obligation to take corrective action within 28 days. However, non-compliance with a major must lead to the immediate complete or partial suspension of the certificate. In case of re-occurrence, the certificate is cancelled. Hence, the ultimate consequence of non-compliance is exclusion from the supply chain. Moreover, such incidents may even result in severe damage done to the reputation of the horticultural sector in a particular country (see García-Martínez & Poole 2004).

In response to accusations of non-compliance to EUREPGAP standards, farmers may appeal to the certification body involved, and in case this body does not respond satisfactorily, the complaint can be addressed to the EUREPGAP secretariat. As may be expected in such sensitive matters, information about actual non-compliance by farmers is not publicly available and it is therefore difficult to assess how strictly the system is being operated in practice.

4. The case of fruit production in Brazil

The new systems of retailer-led regulation and integration are having significant impacts upon the globalized fruiticultural sector. Empirical research has been conducted over a period of 10 years in one of the largest and most dynamic irrigated fruiticultural regions in Latin America: the Sao Francisco Valley in North-east Brazil. Examining data on these production chains, we witness significant changes in the operation of the globalized relationships inside the production arena, including enterprise and labour relationships; and in the distribution arena, involving external distribution and corporate retailer firms. The onset of private systems, such as EUREPGAP, is further controlling farm production systems ‘at a distance’. Over the period, the rules and protocols led by the retailers have become much stronger and far more recognized by all the actors at the local level. There is now a much stricter control of all those participating in the process of producing ‘quality fruits’ for the external markets. These are being seen as set by the leading European retailers, even though it is often private intermediary organizations, such as certification bodies, which undertake the monitoring and carry out the checks.

4.1. Case study 1

One such producing firm is Brasiluvas. This is a grape farm owned by Sea Containers, which commenced business in 1996. The farm is 340 ha of which 100 are farmed for table grapes (60% seeded and 40% seedless – mainly the UK market) and 70 ha are now dedicated to ‘environmental protection’. Climatic conditions allow year round production with two harvests each year. Abundant water for irrigation is available from the Sao Francisco river. Grape production is targeted at the European market. There are two market ‘windows’, in May/June and November/December, when grapes from other areas are in short supply. The production cycle is 120 days, after which packing and cooling occurs.
In 1998, the firm embarked on a major expansion into seedless grapes, employing ‘state of the art Californian methods of production’ which is seen as improving labour productivity. A recently built packing house was designed to offer more comfort and better working conditions for more than 100 employees, and allowing rapid pre-cooling of the grapes with adequate cold storage. Containers are sealed at the farm and only opened at their final European destination, ensuring a constant temperature during transit. Over the past 5 years (and pre-dating the implementation of EUREPGAP) the firm has implemented a policy of environmental protection. Seventy hectares has been set aside for this and a general programme of re-afforestation has been developed. Systems of fertilizer/irrigation – where local drip and sprinkler irrigation is targeted to leaf and plant growth by mixing fertilizer with water dressings – minimize fertilizer wastage and evaporation of water. The farm also recycles its garbage and wastes and the firm was planning to gain ISO 14000 certification in 2003.

The farm employs around 400 (50% female, all above 18 years of age and registered according to national labour laws). The firm puts a strong emphasis upon improving the quality of life of its rural workers, and is attempting to take more workers on a permanent basis. This is seen as increasing the overall productivity of the workers, with three workers needed per hectare rather than 3.5 (using temporary staff). Here there has been a new alignment created between the development of seedless grapes, horizontal rather than vertical techniques of harvesting, and permanent working capable of generating two harvests periods a year.

This is a super-productivist system built upon worker bonus schemes, prizes and incentives for the best workers. A food basket is given to every worker each month and illiterate workers are educated in basic writing and reading skills on the farm; some assistance is given with housing, child education and medicine. The aim is to have up to 80% of labour working on a permanent basis.

4.2. Case study 2

The second case study firm is a Japanese owned and run export enterprise, producing both mangoes and grapes for the European market and especially supplying British retailers with seedless grapes. This firm was coming to terms with implementing the EUREPGAP standards. This was being led by a team of in-house agronomists, with some bought-in consultancy from Chile. The main argument was that regulations had become much tighter over the past 2 years (2001 – 2003). This had taken the form of much more monitoring of field work and the workers. This came on top of greater specification of the quality of the grapes themselves (by the retailers and the distributors). For instance, the Belgian market preferred slightly heavier and larger grapes, while the British specified a size of 15 mm with 16 ‘breaks of fruit’ per bunch. Different types of wrapping were also required.

More funding and investment was needed to meet and support EUREPGAP at a time when the general direction of farm gate prices was downwards. The agronomists saw the new standards as leading to more registration and bureaucratic activity; and ‘proof of what has to be done’. There was an urgent requirement to train people to deal with this, and the firm had recently hired seven more staff so as to meet the registration procedures. The standards were seen as having moved into the social and safety area more recently; and they were becoming more complicated with the Brazilian Ministry of Agriculture (EMBRAPA) also intending to introduce its own independent integrated crop management system.

It was necessary now to train workers concerning hygiene standards, and to be able to read the pesticide and fertilizer records and standards; as well as the specific client specifications. There was thus a problem of worker skills, with some tractor drivers unable to record all their
activities. The firm employed up to 700 during the peak harvest periods and 500 normally. It was difficult to police this process with the effective ‘paper-trails’.

In addition the firm processed 20% of its grapes from independent producers; usually smaller producers who had difficulty in meeting the standards. The firm was providing partnership arrangements and technical assistance to these producers. Overall, actual production levels were being reduced so as to put more emphasis upon quality and process. The two annual harvests of seedless grapes could produce 30 tonnes per hectare, but this was being held to 20, with the harvests more attuned to the changes in the market.

The major problem for the firm was seen to be the new regulatory conditions, coming both from the private firms and the Brazilian government. Pesticide legislation was seen to be different between the EU and Brazil, whilst registration and standards were becoming far more complex. This was seen to be even more difficult for the smaller producers, who increasingly have little alternative but to sell through the larger enterprises.

4.3. Case study 3

Fruitexport’s primary crop is mango production for export to the European market. Here a more diversified strategy was developing with the core business still exporting conventional crops to Europe, but with some land set aside for environmental management (which was experimenting with EMBRAPA’s integrated crop management scheme) and another area which was converting to certified organic mango production, again for export. Products were sold through German and UK distributor firms, and then on to retailers.

Organic conversion was adopted because of the decline in conventional prices. Also there had been problems with growth hormones sprayed onto the conventional crops over the years. Organic productivity, however, was much lower (12 tonnes per hectare, compared to 28 for conventional crops), but this gap was being reduced. The main problem with organic mangoes was seen to be the consistent process of flower induction. While this had been solved for a time in the conventional system by growth regulator hormones, this was no longer the case.

Hence, both decreases in farm gate prices and environmental externalities were influencing the decision to convert more land over to organic production. However, this was still seen very much as a ‘learning process’; and there were problems in the distribution and marketing of the organic products, where there was seen to be a lack of marketing and selling experience, and more generally a lack of trust. Even in the conventional system, however, things were changing radically. There had, overall, been a reduction of 34% in the use of pesticides for grapes, and 69% for mangoes over the past 3 years. This was the result of external regulation and the need to give more importance to ‘quality production’. Moreover the EMBRAPA integrated crop management scheme was seen as making these reductions much more the norm.

In order to conclude this section, Table IV summarizes the main features of the three case study companies.

4.4. Impacts on producers

The development of these different forms of regulation are tending to create more specific forms of (‘quality’) product as well as potentially to differentiate (as our last case study shows) production systems both on existing enterprises as well as between enterprises. In particular, it is only the large and integrated enterprises that can afford to install and invest in these new systems of monitoring, both of labour and the production and processing activities. This is
creating more dependencies for small independent producers on engaging with the large export-oriented businesses. In addition, the new regulatory conditions are re-creating two other forms of social and economic cleavage in the region. First, with regard to the usage of different types of labour; and second, with regard to much more distinguishable quality differences between export qualities of products and those which travel through internal markets both at national and local levels.

The major exporting and producing firms in the Valley are changing their labour practices as a result of the new conditions. More emphasis is being placed upon quality production per se, and this is reflected in bonus and competitive incentive packages for the ‘best’ and more ‘loyal’ workers, both in the fields and in the packing houses. This represents a new form of ‘Fordist’ or ‘Taylorist’ working whereby selected groups of workers take more responsibility for monitoring the process of production and in the application of more selective doses of pesticides and fertilizers. Less temporary and part-time/casual work is required in these large enterprises; and those that remain are subject to both external and internal checks on a daily basis. Work also becomes more gendered, with women seen to be more suited to the careful picking and pruning activities in the fields. Fruits have to conform to different size and quality specifications based on national retailers tastes.

Furthermore, the heightened degree of private regulation, in addition to the intense market competition for export markets, is creating shifts and strains in the uneven and unequal development of the region. Small independent producers are likely to find it more difficult to maintain their export markets outlets, and the necessary relationships with the export and packing house firms, as the new and re-arranged regulations and certification procedures are

<table>
<thead>
<tr>
<th>Table IV. Main features of three Brazilian fruit producers.</th>
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<td><strong>Type of fruit</strong></td>
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<td><strong>Main customers</strong></td>
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<td><strong>Number of employees</strong></td>
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<td><strong>Main challenge/strategy</strong></td>
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<td><strong>Major innovations in the past 5 years</strong></td>
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<td><strong>Major opportunities</strong></td>
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| **Major bottlenecks** | Meeting different retailer and distributor quality criteria; potential water shortages. | Uncertainty in farm gate prices. Lack of worker skills | Decrease in farm gate prices and uncertainty about prices for organic European retailers and sustainability 455
implemented. Many are turning to the secondary domestic market – the national fruit market which distributes fruits and vegetables to national supermarkets and grocers from the enormous outdoor wholesale market in Jauzero. These markets are free from such controls and the prices are set lower. This is an issue of concern by state agencies like EMBRAPA and the development agency, who are attempting to provide support for the smaller producers to enter and stay in the export markets, through improvements in the consistency of their quality production systems. They see hygiene control as an issue for small producers as well; but there are growing problems of integrating the smaller producers, both in coordinating their marketing and in ensuring their consistency of quality supply.

4.5. Shifts in governance

The private systems of regulation now being implemented in the dominant export sector in the Valley are having the effect of further embedding a particular type of globalization logic into the daily lives of local workers, producers and agronomists. This is one where the effects of the State, either in the north, in the form of the EU, or in the south, in the form of regional or national governments, has relatively little control or influence. The global fruiticulture system in many ways epitomizes the goals of the WTO and other trading institutions in that it represents a commodity trading system, which is largely free from conventional state intervention in trade and production support. However, we see with the development of this ‘liberalized’ and privately regulated system, the emergence of anything but a truly liberal market based upon equal access. The development of private systems of quality regulation (such as EUREPGAP) is reinforcing the exclusivity of key supply chains and their participation by key export firms. This is occurring in at least two ways. First, entry to export markets is becoming more exclusive in that it becomes more conditional upon compliance to protocol standards. Second, such standards tend to further differentiate the globally sourcing retailers (i.e. those associated with EUREPGAP) and the rest; for instance, nationally-based retailers such as BOMPRECO in Brazil. This has been achieved through the development of more collaboration between highly competitive corporate retailers, and the plethora of distribution firms and intermediary certification bodies. The EUREP retailers have realized that such standards as imposed through EUREPGAP are essentially ‘non-competitive’ in the sense that they can collectively agree with these quality specifications and at the same time maintain their independent marketing and selling strategies. At the same time, however, they place the burden of competition with the upstream suppliers and producers. As we saw in the first part of the paper, the protocols are also subject to modification; modifications which the upstream suppliers have to adapt to after they have been agreed and put in place.

It is important to recognize that the operation of these newly emerging private-interest models of food quality regulation are built upon a new ideology of (at least European) consumer sovereignty; one which articulates the ‘quality’ needs of the consumer in particular ways. This ideology is a particular social and institutional construction of the consumer interest. It assumes the need for standardized products, of consistency of supply, and in the particular aesthetics (colour, shape) of the products. These constructions of the consumer interest, however detached from reality they may actually be, become materially grounded in the production practices of export regions like the Sao Francisco Valley. They are transformed into stringent regulations in the production process, and as such play an important part in shaping and connecting producers to global markets. For the retailers, such systems both keep the problems of super-intensive standardized production (such as pesticide problems, disease of plants, pollution of soils and water resources, contamination of fruits, and the exploitation
of labour) conveniently distanced from their consumers. At the same time they allow them to privately trace responsibility for those problems ever more closely to individual farm and field practices. Hence they are seen to be duly diligent in regulatory and accountability terms.

5. Consequences for the governance system of food: private regulation and good governance

We can see here that, more broadly, the notion that only governmental actors are authorized to participate in governance of environmental, social and safety issues is left behind in the present era of increased economic globalization. It is nowadays recognized that private actors from the business community and civil society organizations are also making a contribution to the shaping of the governance system, individually, or in partnerships and coalitions (e.g. Bendell 2001, Haufler 2001, Gupta 2003). Major private stakeholders are indeed developing and operating voluntary regulatory and regulatory-like initiatives to enhance corporate commitment to safe and sustainable agriculture. Consequently, new forms of governance involving private actors are being created. The EUREPGAP protocol can be considered one of those new forms.

In this respect, it is interesting to notice how the regulatory activities of the private sector are being perceived by different stakeholders. The European Commission, for example, is following the EUREP developments by attending EUREPGAP conferences and giving moral support. At the last global EUREP conference, the Health and Consumer Protection Commissioner David Byrne addressed the audience with a video message and applauded the EUREP approach which he considers complementing and reinforcing the Commission’s own food safety initiatives. Moreover, he stressed that quality production underpinned by high standards of food safety is the way forward for European producers in the face of increased competition due to trade liberalization.

From the retailer point of view, a top manager of Royal Ahold and Chairman of the Global Food Safety Initiative remarked at the same conference that ‘although governments always have to maintain their role as police-officers, inspecting vulnerable parts in the food chain, the main focus for the future of successful worldwide agri-food business has to be a closer cooperation between public and private players in the food chain, stimulating efficiency, transparency, food safety, environmental protection, animal health and quality and eliminating barriers to trade.’ Hence, taking into account the broad range of agricultural sectors that EUREP presently covers, it seems that the near future of food governance in Europe will be largely in the hands of the large retailers, with support from the EU, while both use a discourse based on quality and safety.

As the empirical material in this article shows, the emergence of private-sector programmes can indeed be considered a positive step forward to stimulate the implementation of food safety and sustainable development in practice and may help to create a favourable climate for such a transition. The cases of the three Brazilian companies demonstrate that these programmes are indeed an impetus for farmers to change their agricultural production methods in various, positive, ways. However, these programmes are not the most favourable option from a long-term point of view. In the first place, the scope of these programmes is limited because they are only targeted at a selected group of suppliers. In the case of the EUREPGAP programme the target group are the suppliers that already have a relationship with the European retailers, or are in the race to capture such a position. The programme will not reach those suppliers who use other distribution channels to sell their produce. In the second place, retailer programmes may suffer from a weak environmental and social content, or, as is the case of the EUREPGAP programme...
for fruit and vegetables, an erosion of their content, as the sustainability standards lost much of their prominence during the last standard revision process in favour of food safety requirements. In the third place, retailer programmes, as previous research shows and our research confirms, may have discriminating effects on market access, especially for small producers (Henson & Loader 2001, Reardon et al. 2001, Gibbon 2003, Dolan & Humphrey 2004, García Martinez & Poole 2004). These programmes typically seem to favour large-scale producers in developed as well as developing countries, because of the considerable investments in capital and human resources that are required for adaptation of the production operation.

In the fourth place, private regulatory initiatives may lack democratic content, as the principles of good governance, including transparency, participation, coherency, flexibility and accountability may be at play (see de Boer et al. 2004). In relation to certification programmes such principles may be interpreted as criteria that should be adhered to in the key decision making processes, including standard setting, certification and accreditation. These procedures should at least: provide sufficient transparency concerning decision-making including the availability of all relevant information; guarantee meaningful participation to all stakeholders concerned; increase coherency by drawing on international standards and agreements where they exist, and taking into account the aim of international harmonization; stimulate flexibility by allowing for the adjustment of standards to local conditions and prescribing regular revisions of standards; and foster accountability by avoiding conflicts of interests and to provide for an appeal procedure against decisions taken during the certification process (van der Grijp et al. 2004a). The example of the EUREPGAP programme for fruit and vegetables shows that stakeholder involvement in the initiative is not very well balanced. Significantly, the governing structure of EUREP is such that retailers and large growers have the strongest positions in the standard setting process. Small growers and environmental and social non-governmental organizations (NGOs) have no voice in the core procedures, but only have the right to comment to draft versions of normative and procedural documents. It is, however, unclear to what extent their comments are taken into account. Moreover, earlier intentions of EUREP to set up a consultative body representing a broad range of actors seem to have been cancelled.

Considering these shortcomings of private regulatory initiatives, government intervention may appear a more preferable option in the long run. As an instrument, private programmes may fulfil several positive functions in the transitional period before more permanent legal and policy solutions are found. It gives stakeholders, for example, the chance to experiment with the setting of environmental and social standards and it can serve as an interim solution for dealing with some of the most pressing problems at stake. However, the present situation in fruit and vegetable production, with the retailer-dominated private initiative of EUREPGAP, is far from ideal. It seems necessary that new competing initiatives will be developed by the sector using a multi-stakeholder approach, for example based on a stewardship council model such as already exists in the fisheries and forestry sectors. Competition between schemes may at least give an impetus to raise their ambition level in terms of content and good governance. At the same time, governments should work on minimum definitions of sustainable agricultural production methods, restrain concentrated buyer power, and assist smaller producers in coping with the new quality requirements.

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Notes
1. This section is largely based on recent EUREP documents that can be found at http://www.eurep.org. The same documents, and also older versions, are available from the secretariat EUREPGAP c/o FoodPLUS in Cologne, Germany. The standard setting documents currently in force include: General Regulations Fruit and Vegetables, version 2.1-Jan04; EUREPGAP Control Points & Compliance Criteria Fruit and Vegetables, versions 2.0-Jan04 and 2.1-Oct04. This section further uses EUREP press releases and conference proceedings as information sources.

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