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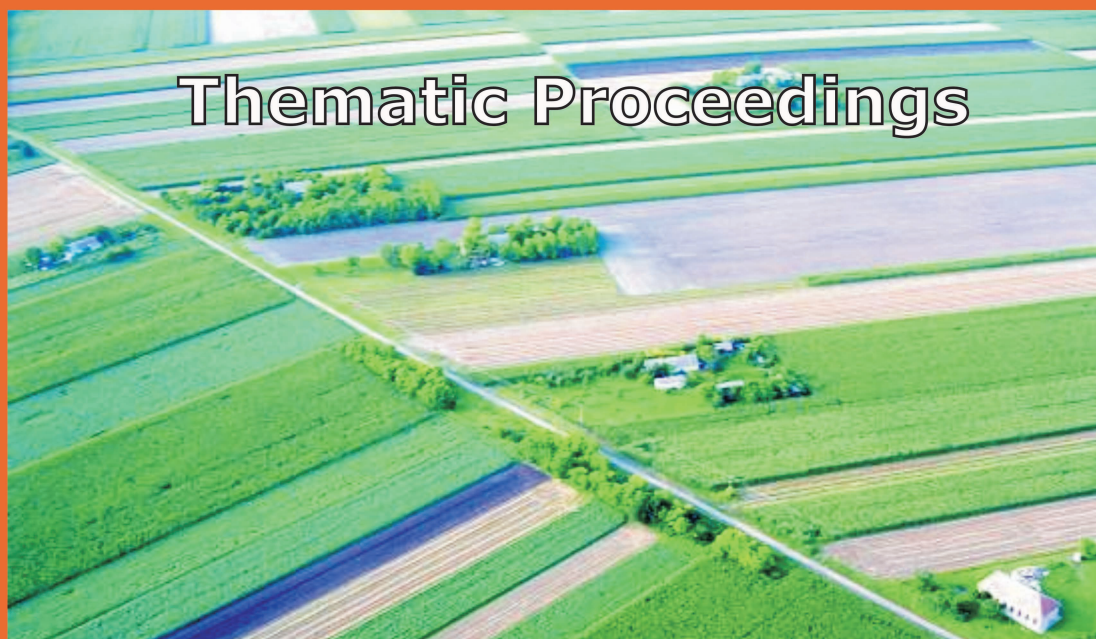
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THE IMPLEMENTATION OF PUBLIC ENVIRONMENTAL REGULATIONS AND PRIVATE STANDARDS IN THE SERBIAN FRESH FRUIT AND VEGETABLE SECTOR: IMPLICATIONS FOR TRADE AND FUTURE EU MEMBERSHIP

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INTRODUCTION

The agri-food sector plays important role in the Serbian economy (Zarić and Topisirović, 2004), contributing at least with a quarter of total employment and the value of exports. Fruit and vegetables alone contribute approximately one third of the value of agri-food exports. Fresh fruit and vegetables are perceived to be one of the few areas where Serbia could significantly increase its agri-food exports and the country has a longstanding reputation for certain products such as raspberries. However to exploit these possibilities Serbian farmers have to meet international public standards and the private standards of buyers (Zarić, 2005). Both international public and private sector regulation has grown significantly in recent years. This is particularly important as Serbia seeks to better integrate with the EU and obtain full membership.

INTERNATIONAL PUBLIC SECTOR AND PRIVATE STANDARDS AND THEIR IMPORTANCE FOR SERBIA

Agricultural standards can be defined as rules governing the outcome or processes of the primary production of food and fibre. Agricultural standards may pertain to: (a) quality (e.g. organoleptic, cosmetic), (b) safety (e.g. freedom from contaminants or use of approved pesticides), (c) authenticity (e.g. guarantee of particular origin or production method) and (d) production process (e.g. organic) (Reardon, 2006). Such standards may be initiated and enforced by public sector agencies (hereafter referred to as public standards) or non-state actors (private standards). Both public and private standards governing Fresh Fruit and Vegetables (FFV) have developed remarkably since the early 1990s which has had a profound effect on the governance of FFV supply chains.

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Public regulation has grown at the international level through the World Trade Organisation's Sanitary and Phytosanitary (SPS) agreement which expects Members to base their own SPS measures on the standards and recommendations of international bodies, most notably Codex Alimentarius, the International Office of Epizootics and, of particular relevance to FFV, the International Plant Protection Convention (IPPC). While members are entitled to adopt standards above those of international bodies this must be justified scientifically and can be challenged by others. At the EU level new institutions, such as the European Food agency, and regulations have been introduced. At the centre of EU regulation is the General Food Law (EC 178/2002) which enshrines the principle of traceability of fresh produce and requires both upstream and downstream identification of supply. Developments at the supranational level have followed the UK's landmark Food Safety Act (1990) which extended the legal liability to food retailers for the safety of the food they market. Rather than relying purely on suppliers' warranties in the event of a food safety incident caused by a particular supplier, retailers under the Food Safety Act are required to show due diligence in the adequate monitoring of supplies (Hobbs, 2006). This has led retailers to demand much greater transparency in the production processes of their suppliers, necessitating closer relationships.

Private standards have developed in response to public initiatives but also as a strategy for product differentiation, supply chain management and brand protection. Private standards are typically third party arrangements, such as the Good Agricultural Practices of the Euro-Retailer Produce Working Group (EurepGAP) or the British Retail Consortium (BRC), or buyer specific (controlled independently by, for example, a single retailer). Buyer specific standards are often 'bolted on' to public standards and EurepGAP / BRC regulations. For example in 2007, the German retailer Metro announced that it would only stock FFV produce with less than 70% of the legal maximum pesticide residues, with suppliers failing to keep the standard delisted (Planet Retail, 2007). For FFV, private standards typically cover pesticide use and application rates, adoption of Integrated Crop Management systems, record keeping, hygiene, packing and transportation practices. These private standards were initially developed in response to food safety concerns surrounding the potential contamination of FFV with food poisoning bacteria (such as E coli 0157 or salmonella) and attempts to reduce pesticide residues. However private standards have developed from a narrow focus on specific food safety concerns to embrace wider ethical and environmental regulations. This has prompted two trends. First, to meet the challenge of more complex governance requirements, FFV supply chains in Western Europe have been restructured, with the emergence of 'super middlemen' who co-ordinate procurement of FFV for retailers on an international basis (Hingley, 2005). Second, as the costs of compliance grow, there is some, but far from universal evidence,

that small-scale FFV producers are being excluded (Dries *et al.* 2004; Reardon *et al.*, 2003).

This growth of international public and private agricultural standards is important for the Serbian FFV sector on three grounds:

- It affects Serbia's ability to access the main value-added markets of Western Europe and other parts of Central and Eastern Europe, much of which joined the EU in 2004 or is scheduled to join immanently (Croatia). Accessing European markets requires both compliance with international public standards and the private regulations of the main buyers.
- Serbia itself seeks to join the EU and as part of the pre-accession process it will have to implement the *acquis communautaire*, the EU legislative corpus. EU regulations will effectively be downloaded to Serbia and national laws will have to be harmonised with European ones. The ease with which producers are able to comply with this adjustment will have a major bearing on Serbia's fortunes in an enlarged Single Market.
- Even ignoring the impact of Europeanisation, foreign direct investment at the retail and processing level has the potential to change the standards governing solely *domestic* food supply chains. The Republic of Moldova, a renowned FFV producer, for example, lies outside of the EU accession process but like most of CEE is witnessing the rapid development of retail chains. Metro Cash & Carry entered the Moldovan market in 2004 and announced that it was willing to procure agricultural products from local producers. However by 2006 all local suppliers were deemed unable to meet its quality and quantity requirements and therefore the company was importing all of its FFV (Gorton and White, 2007). Moldovan FFV producers thus increasingly sidelined into low-value added outlets, further depressing rural incomes and stimulating out-migration.

The fortunes of the Serbian FFV sector therefore depend considerably on the extent to which public regulations are credibly enforced and producers can meet private standards. Meeting the latter represents an opportunity to develop higher value added export markets but a failure to do so could confine Serbian farmers to dwindling lower value added market outlets.

METHODOLOGY

As the part of the WATERWEB project on agricultural water management in the Western Balkans a representative survey of commercial FFV producers was conducted. The survey was organised in the municipality of Grocka with control groups in other regions of Serbia. Grocka was chosen as a region with significant

FFV production, organised mainly on small, private commercial family farms. All surveyed farms practice very intensive FFV production and sell almost all products as fresh. The main income of these commercial farms comes from selling FFV. The majority of producers sell their products on the greenmarket in Belgrade. In the municipality there is also a wholesale market for FFV. Since commercial farms completely depend on the market, current and further regulation is of greater significance for them.

Very small, part-time farmers who mostly produce for their own consumption were not considered for the study (defined as those with less than 0.5 hectares) because their activities lie outside of the market place, so that regulation has little impact, and the majority of their income comes from outside of agriculture.

Before the survey was conducted several visits were organised to key persons in the area and leading producers. Information on the project and the goals of the interview was disseminated at the local level. This approach was of great importance for the success of the survey. In the preparatory stages useful data and contacts were also established so that in collecting survey data the research team was welcomed by participants and were able to complete the defined tasks.

Data from a total of 165 farms were collected. The survey consisted of several sections which collectively sought to obtain a complete picture of commercial FFV producers. The first two parts obtained data on the current problems faced by farmers and their knowledge of standards and regulations, followed by data on structure and resource use. While farmers were able to understand all questions, some were unable to answer them because of a lack of evidence or precise data about their farm.

RESULTS

The complete results can be summarised into the three main findings, namely, the first, there is poor implementation of current public environment standards, second, contracting is almost completely absent and buyers usually do not provide any support to commercial farmers, and finally, there is lack of detailed monitoring and implementation of private environmental standards.

Poor implementation of public environment standards is occurring. Out of the total number of interviewed farms, about half of them are using water for irrigation. Bearing in mind that there is a difference between the farms that have access to the Danube and the others that are in the countryside, it can be concluded that all farms that physically have access to water, use it for irrigation. However, different sources of water are utilised. River or stream extraction is used by 26 farmers of which only 6 have a permit or licence (Table 1). Bore holes are used by

24 farmers but with only 7 licensees. Natural springs are used by 16 farmers, but only one had a permit to use it. Farmers have little faith in the regulatory system in Serbia: only 5.4% of respondents agreed with the statement that ‘water use is effectively controlled by the state’.

Table 1 Water use by farmers and permit / license for extraction

| | Number of farmers reporting use | Number with permit / license for extraction |
|----------------------------|---------------------------------|---|
| River or stream extraction | 26 | 6 |
| Bore hold | 26 | 7 |
| Natural spring | 16 | 1 |
| Mains water | 4 | n.a. |
| Irrigation canal | 8 | n.a. |
| Total | 78 | |

There is almost no contracting and buyers usually do not provide any support to commercial farmers. Private commercial farmers as a rule do not have contracts with buyers (some 96%), and buyers do not provide any credit, physical inputs, training, transportation, loan guarantees, machinery, specialist on farm storage or investment to farmers. Moreover, prompt payments from buyers are absent and there are no guaranteed prices. FFV in Serbia is still dominated by spot markets with buyers having rudimentary control over product quality.

Detailed monitoring and enforcement of private environmental standards are not occurring in practice. Regarding the implementation of private environment standards, farmers were asked about the behaviour of buyers and any regulations enforced concerning the use of pesticides and water testing (Table 2). Results are provided to compare those selling to domestic and foreign buyers. In less than 5% of cases is the main buyer foreign owned.

In only just over 10% of cases are buyers testing for contaminants or insisting that a pesticide log is kept. Even less frequent are tests on the water used or restrictions on the agri-chemicals that may be used. In less than 10 per cent of cases do buyers reject produce with contaminants or residues above threshold levels. Little produce is rejected for any quality control reason. However, while foreign buyers are uncommon they are much more likely to implement private environmental standards (Table 2). To conclude, for most Serbian farmers there is little incentive to meet higher private environmental standards, as buyers do not insist on them and as buyers do not pay a premium for FFV produced under such conditions, their behaviour is rational.

Table 2 Comparison of private environmental standards by domestic and foreign owned buyers

| Private environmental standard employed by main buyer | % for whom main buyer is domestically owned (n=157) | % for whom main buyer is foreign owned (n=8) | % of Total Sample (n=165) |
|---|---|--|---------------------------|
| Tests for contaminants | 6.4 | 87.5 | 10.3 |
| Insists that pesticide log is kept | 7.0 | 87.5 | 10.9 |
| Specifies what agri-chemicals can be used | 1.3 | 87.5 | 5.5 |
| Tests quality of water used | 0.6 | 87.5 | 4.8 |
| Rejects output with contaminants / residues above threshold level | 5.7 | 87.5 | 9.7 |
| Rejects produce in poor condition | 12.1 | 100.0 | 16.4 |

Overall, Serbian FFV products are currently competitive on the basis of price and this is their main appeal to buyers. The lack of effective public and private environmental standards helps this cost driven approach. However, this strategy is not sustainable in the long term, especially if the target market becomes an enlarged EU.

CONCLUSIONS

The weak regulatory system, both public and private, limits Serbian producers' ability to sell on EU markets. As a result trade is oriented to low value-added commodities with sales predominately to other Balkan countries and the Former Soviet Union. At present this is not viewed as a major problem by Serbian producers as the domestic market remains fairly protected. However, this will be threatened by accession to EU. At present, producers are price competitive and use the possibility to sell their products on less demanding markets. However, in the future with the opening of Serbian borders to freer trade, the Serbian FFV sector will face increasing competition from producers from other countries and more demanding consumers. As soon as producers accept the advance of environment regulation and private standards the greater will be their prospects to adapt and compete on restructured European markets.

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