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DEVELOPMENT IN THE EUROPEAN AGRIFOOD MARKETS: IMPACT ON PRODUCERS AND CONSUMERS AND PERSPECTIVES

1. While the debate on the relationship between food and agricultural policy and the welfare of farmers has a long and well trodden history, the impact of changing supply chains on the well-being of farmers and other players along the supply chain, including consumers, has only recently been acknowledged. Despite its comparatively recent recognition, an essential aspect of understanding the future prospects of European farmers and for crafting food and agricultural policy is an understanding of the various supplier-buyer relationships at various stages of the supply chain. This document seeks to illustrate why the nature of food supply relationships matter for food and agricultural policy-makers, how the linkages between farmers and the buyers of their output are changing in Western Europe, Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS) and what are the implications of this restructuring for domestic policy-makers and international agencies, such as FAO. Attention is drawn to how much of the infrastructure developed to support the transition in agriculture in the 1990s was geared to commodity spot markets, which are being superseded by supply chain restructuring. The main arguments are illustrated with recent examples from CEE and CIS.

I. Why do farm - processor – retailer - consumer relationships matter?

2. The structure of supply chains impacts the welfare of both consumers and producers. For farmers, who deal with them and on what terms changing procurement practices are important determinants of their livelihoods. Significant changes have occurred in the last decade in Western and Eastern Europe as food manufacturing and retailing have become more concentrated and concerns have been raised surrounding farmers' access to markets and the dangers of monopsonies (markets with a single buyer) occurring. The share of consumers' expenditure on food which gets back to farmers has steadily fallen in Western Europe, most notably in the meat sector, and this has prompted a number of investigations by competition authorities on whether

the present concentrated structure of food retailing acts against the interests of consumers and suppliers.

3. Particular concern surrounds the future for small farmers, who it is often argued are likely to be excluded from restructured supply chains due to a variety of reasons including their inability to:

- offer competitive prices in the absence of economies of scale
- produce less erratic flows of the required volumes
- invest in the production of products that are more standardized (a demand also reinforced by EU-wide food standards) and therefore better suited to bulk management
- invest in packaging, quality assurance and total quality management systems that are often demanded by buyers

The future of small farms in an era of more concentrated supply chains matters greatly for CEE and the CIS because of their number and contribution to welfare. For example, in Moldova, a radical land reform programme created a mass of small farms and 73 percent of the income of rural households comes from agriculture (World Bank, 2005). While the incomes generated from small-scale agriculture are low, approximately €40 per month, in an environment of impoverished social security and a weak Non-Farm Rural Economy (NFRE), such small farms provide a vital lifeline (Gorton *et al.* 2006). If their market access was severely curtailed, leading to a sharp fall in prices, the welfare implications for those farmers would be momentous. In developing and transitional economies, restructured supply chains may present a serious threat to the traditional outlets of small-scale producers.

4. The question of the international competitiveness of a country's agriculture should also be considered from a supply chain perspective, as the competitiveness of one stage will affect the opportunities available to up or downstream actors. For example, in the mid-1990s the prices received by Ukrainian farmers for wheat and sunflower seeds were significantly below international levels. Despite this exports were modest. This apparent paradox was principally caused by inefficiencies in the downstream sector (excessive costs and poor reliability in the transport, storage and distribution of crops). Opportunities to develop arable export markets were therefore not so much limited by problems at the farm level but by downstream inefficiencies (Striewe, 1999).

5. The structure of supply chains also matters for consumer policy. To give an example, in the early 1990s Bulgaria introduced a policy of fixing a very low price for wheat on the domestic market with the objective of keeping bread prices down to help ensure food security in a time of painful macroeconomic transition. However, low farmgate prices were not passed on to final consumers as any advantages for the latter were eroded by high mark ups at the processing and retail level (Ivanova *et al.* 1995). The impact of agricultural policy on consumers cannot therefore be separated from an understanding of how food supply chains operate.

II. A Brief overview of farm – processor - retailer relationships

6. Having established that the structure of supply chains matters, it is useful to briefly consider how the relationships between farmers and the buyers of their output may be governed. Relationships, broadly, may take three main possible forms, which are summarized, together with their advantages and disadvantages for buyers, in Table 1. Spot markets, such as livestock auctions and commodity exchanges, are characterized by immediate market transactions with no prior and post-purchase commitments by buyers or suppliers. Buyers have no prior involvement in terms of what is produced, when it is available for sale and the means of production. At the other extreme, is the vertical integration where at least two stages of the same supply chain are owned by the same actor, for example a milk processor that also owns a dairy farm. In between these two extremes, are various forms of vertical coordination, of which contracting is the most common, where buyers and suppliers remain as distinct, separate actors but agricultural production is supervised to meet pre-arranged terms. Contracting is therefore an intermediate

institutional arrangement which gives buyers the ability to influence and partially control the production process without owning or managing farms directly. Contracts may take a number of forms, with the most widespread being: *market specification* (an agreement by a buyer to purchase a seller's output), *production-management* (in addition to agreeing to purchase a seller's output meeting established quality standards, the buyer also participates in production decisions, such as specifying input use) and *resource providing*. In the latter case, the buyer provides goods and/or services to the farmer, such as credit, physical inputs and technical advice. These goods and services are known as *contract support measures* and in return for their provision buyers typically specify minimum output quantities required and quality thresholds.

Table 1: Evaluation of Possible Relationships between Farmers and their Buyers

	Spot Markets	Contracting	Vertical ownership integration
Advantages for buyer	• Lack of prior financial commitments on the part of the buyer	• Reduce uncertainty over product availability and quality compared to spot markets	• Greater control over product quality and guaranteed supply • Limit opportunistic behaviour by other actors
Disadvantages for buyer	• Lack of secure supply • Difficult to pre-specify and control quality • High transaction costs	• Dependence on other actors and potential for hold up problems • Often high start-up and monitoring costs • Difficulty of contracting for every possible outcome	• Dissipation of managerial resources • High demand on capital • Rigidity of organizational structures

7. Contracting seeks to solve the problem of securing reliable supplies at a pre-defined quality without making an organization too rigid. While ownership integration is likely to give the greatest degree of control, it often places too high a demand on the firm's capital, dissipates managerial resources and dulls incentives if one part of the supply chain knows it has a captive, guaranteed buyer. The objective of contracting is therefore to gain some of the advantages of vertical integration without incurring these risks.

8. While contracting has several advantages over sourcing supplies via spot markets or ownership integration, its practical implementation can be complex.[1] Contracts can rarely specify obligations for each potential eventuality and will usually involve each party making relationship specific investments. However, the cost of these investments and the degree to which the relationship is valued is unlikely to be shared equally. As a result, one actor may be vulnerable to another's opportunistic behaviour. To deter opportunistic behaviour, contracts may incorporate private enforcement capital – whereby the returns resulting from ethical conduct outweigh the expected potential benefits from opportunistic behaviour. For example the availability of physical assets (such as seeds) as part of a contract relationship may induce a farmer to remain loyal to a particular processor, even if he is offered a higher price for his output, because a breach in the contract would lead to him being denied access to such assets, which may be difficult to obtain in poorly developed markets, in the future. For example the provision of working capital as part of contract arrangements has aided contract adherence in an FAO project to stimulate production of tomatoes and peppers in the FYR of Macedonia (FAO, 2005a). However breaches, on both the buyer and producer side, are still common. Calculating how much private enforcement capital is

[1] A more detailed guide to different types of farm contracting and the costs and benefits associated with each is provided in Eaton and Shepherd (2001).

required to prevent opportunistic behaviour is often difficult, particularly in volatile markets, and additional, costly measures for monitoring compliance are often required.

III. The restructuring of supply chain linkages between farmers - processors - retailers in Western Europe

9. While precise figures are often difficult to obtain, a broad switch from spot markets to contracting is apparent in the relationships between Western European farmers and the buyers of their output. The degree to which contracting has grown varies from sector to sector – in pork and poultry and centres of the European horticultural industry (The Netherlands) and vegetable packing and processing (East Anglia in the UK, Belgium and The Netherlands) it is now standard. These agreements have clearly defined quality standards: for example contracts for peas and beans typically specify tenderness thresholds, the maximum number of defects permitted on delivery, size at the time of harvesting and whether cleaning and chilling is required. In some cases, larger farmers deal directly with multiple retailers[2] and in other instances pre-packers and processors act as intermediaries between farmers and supermarkets. As part of their contracts with farmers, there have been some instances of retailers providing contract support measures (as evidenced for Croatia by Reardon *et al.* 2003) but they are usually provided by processors or as part of a wholesaler's out-grower scheme. Such contract support measures are well established in the sugar industry but less common for other crops.

10. In the case of beef, despite the decline in throughput of live auction marts, contracting has grown more slowly. For example, in the UK only around 15 percent of farmers have a written contract either with a single buyer or a collective agreement as part of a cooperative marketing arrangement. Similarly, in the French wine industry, the majority of grapes are still sold through cooperatives without the aid of contracts. However, in both the beef and wine cases, contracting and greater vertical coordination is occurring. In Bordeaux, for example, instead of relying on the spot market for bulk purchases, a greater proportion of wineries are now backwardly integrated or use contracting (Swann, 2002)[3].

11. This shift to greater vertical coordination has been stimulated by a number of factors but the most important has been a desire on the part of processors and retailers to have greater control over the quality and availability of farm level output and improve their competitive position by cutting costs. Greater control requires much closer relationships and within the food industry such practices are commonly known as Efficient Consumer Response (ECR), the main premise of which is that through cooperation, supply chain actors can more effectively respond to changes in demand and identify cost savings. While the outcomes of ECR are controversial, it has become critical to the fresh fruit, vegetables and meat sectors, where large retail chains dominate.

12. To become a supplier of produce in much of continental Western Europe producers and/or processors are required to demonstrate compliance with quality assurance programmes, such as good agricultural practices, good hygienic practices and HACCP based systems at relevant points in the food chain. More precise requirements may need to be met where retailers request compliance with certification schemes. These precise requirements may vary depending on the importing country and/or the food commodity concerned. For example EUREPGAP standards for

[2] A multiple retailer is typically defined as an individual retailing concern which operates more than ten branch premises (Morelli, 2004).

[3] These trends are not restricted to Western Europe: the USA and Canada led the switch to contracting particularly in the poultry, pork and cattle industry and Australia led this trend in the wine industry. For example in the 1990s, 90 percent of broilers, measured by volume, in the USA were produced under contract (Hobbs and Young, 2001). In the Californian wine industry between 75 and 85 percent of grapes are grown on contract and wine experts have noted a global shift to the 'Australian' model of either per hectare agreements for mature vineyards or open-ended contracts, where certainty of sale is guaranteed but price is negotiated each year (Swann, 2002).

fresh produce are commonly used as a precondition by retailers in France, Germany, Italy and the Benelux countries.[4] In contrast, most UK and Scandinavian retailers insist that firms have gained British Retail Consortium (BRC) accreditation. BRC is the main trade association for multiple retailers in the UK, and its Food Technical Standards are applied to suppliers.[5] The application of such private standards results in retailers having a far greater say in upstream activities and the level of detail should be appreciated: for example, BRC standards for fruit and vegetable packing specify the types of hats, gloves and clothes workers should wear. While industry wide standards should reduce the need for each retailer to conduct their own audits, many have additional company specific requirements and implement their own inspections.

13. Producers operating to standards such as EUREPGAP face, in general, higher production costs and the expense of certification and training. These costs can be prohibitive for small producers particularly when certification may not be accompanied by a price premium. Certification may also lead to disappointing returns as it is unlikely to be the only requirement of buyers and purchasers may already be able to procure sufficient certified supplies from other sources. However to ignore the growing importance of private standards would also be a mistake in that those left uncertified are in danger of only being able to market their products to less demanding destinations sometimes, at significantly lower prices.

14. As the degree of vertical coordination increases, the traceability of produce from a retailer back to individual farmers also becomes a possibility. This not only gives retailers greater ability to monitor the performance of its suppliers but also aids them in meeting their obligations under food safety laws and standards, which often mandate them to demonstrate due diligence in that the produce that they market is fit for human consumption. As the market share of multiple retailers in Western and Eastern Europe has risen and their sourcing strategies become internationalised, so their impact on farmers has grown.

IV. The restructuring of food supply chains in the CEECs and CIS

15. A striking characteristic of restructuring in CEE, and to a lesser extent the CIS, is the degree of innovation that has occurred in the last decade. Beginning in the mid-1990s processors began experimenting with new contractual relationships with farmers and the first foreign owned retail chains entered the region. These twin drivers of change - the growth of contracting and foreign owned multiple retailers - are considered below.

A. CONTRACTING

16. By the mid-1990s, supply chains in much of CEE and the CIS were in a state of collapse. Problems concerning the quality of output and the reliability of supplies, which were manifest during the socialist era, were exacerbated by the dislocation caused by privatization and macroeconomic instability. Food processing kombinats, which were previously guaranteed supplies from designated state and collective farms, under a system of vertical coordination orchestrated by the state, were forced to implement their own procurement practices in a new environment of poor public enforcement of business relationships. Private enforcement of relationships was hampered by sharp falls in real incomes, rampant inflation and the loss of real government support. Agricultural output plummeted and much of the food processing industry became insolvent. As a result, late payment plagued food supply chains leading to a further deterioration in the quality and quantity of agricultural output. It was in this particular historical context that contracting as a supply chain management tool emerged.

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[4] EUREPGAP is an initiative of retailers belonging to the Euro-Retailer Produce Working Group (EUREP) which establishes production practices to meet food safety and environmental concerns but not quality standards which are separately determined by buyers.

[5] The BRC standard has also been adopted by certification bodies in 23 countries spread across Europe, Africa, the Middle East, Asia, the Far East, Australasia and North and South America.

17. From the mid-1990s onwards, processors in CEE sought to rebuild relationships with farmers to improve the quality and quantity of supplies. These initiatives often, but not in all cases, followed Foreign Direct Investment (FDI). Based on case study evidence drawn from across the CEE region, Gow and Swinnen (2001) note how relationships were reformed with processors incorporating contract support measures, typically the provision of physical inputs and prompt payments, into contracts with farmers. Processor financed agricultural extension and training became relatively common. The impact of these innovations was highly variable. In some cases, such as Juhocukor in Slovakia (Gow *et al.* 2000), the impact was spectacular: contracting and support programmes led to a doubling of contracted hectares for sugar beet and a sharp rise in farm yields. To protect their supply base other sugar processors in Slovakia had to match the terms offered by Juhocukor so that an industry-wide spillover effect occurred. However in other cases reforms failed as credit or inputs were diverted to alternative uses or farmers reneged on contractual agreements when offered a higher price by competitors. While such failures offer an important cautionary note, nonetheless the use of contracting and contracting support measures has risen throughout CEE. In fact, as it was developed in CEE to overcome some transition specific problems, in some supply chains contracting is more developed and complex than in North America and Western Europe (Swinnen, 2005).

18. The growth in contracting has been documented in a study of food processors in five CIS countries (Armenia, Georgia, Moldova, Russia and Ukraine), which found that in 1997 around 40 percent of firms contracted with at least some of the farms that supplied them but by 2003 the respective figure was 77.4 percent (White and Gorton, 2004). The study, which collected data via face-to-face interviews with senior managers with leading food processors, also found the use of contract support measures grew over the same time period and by 2003 over 43 percent of processors in the sample offered credit to at least some of the farms that supplied them. Significant numbers also offer physical inputs and prompt payments (see Table 2). The growth of contracting has been biased to industries with higher levels of FDI and value added production. The worst terms and conditions offered to farmers are where FDI and restructuring have been absent, for example in the provinces of the Russian Federation, where not a single processor reported that they offered prompt payments or guaranteed prices to any of the farms that supplied them.

19. Policy-makers need to understand the impacts of this growth in contracting, particularly the relationships with agricultural productivity, quality and opportunities for small farms. In the White and Gorton (2004) study, processors were asked to estimate for each of the contract support measures they have introduced the impact of the measure on agricultural yields and product quality. The mean impact for each contract support measure was a rise in farm yields by 9.6 percent and an average increase of 10 percent in the amount of farm level output reaching higher (extra class/ premium class) standards. However, the impact of support measures varied considerably (Table 2). The measures with the greatest impact on yields were specialist storage (especially cooling equipment in the dairy sector), veterinary support and physical inputs followed by a set of market measures (prompt payments, guaranteed prices and market access). The impact of credit has been erratic, reflecting how credit can easily be diverted to alternative uses and contract compliance is difficult to monitor. Investment loans face similar problems.

Table 2: Distribution and Impact of Contract Support Measures in 5 CIS countries (Armenia, Georgia, Moldova, Russia and Ukraine)

Measure	% of sample offering a particular support measure	% of firms offering measures that specify a minimum farm size for measure	Ave. % change in farm yields due to measure
Credit	43.4	60.8	9.3
Prompt payments	41.5	0.0	11.1
Transportation	39.6	45.0	6.3
Physical inputs	36.0	61.1	12.5
Quality control	34.0	16.7	8.1
Guaranteed prices	24.5	14.3	11.6
Agronomic Support	20.8	10.0	6.1
Farm loan guarantees	20.8	27.3	6.8
Machinery	16.9	66.6	3.4
Specialist storage	13.2	28.6	24.3
Business / financial management	11.3	50.0	6.2
Market access	11.3	0.0	11.2
Veterinary support	9.4	40.0	17.0
Harvest / handling	9.4	60.0	8.0
Investment loans	5.7	66.7	5.7
Average		34.0	9.6

Source: White and Gorton (2004)

20. These findings are important for policy-makers for two reasons. First, low yields and insufficient product quality have been identified as major barriers to improving the international competitiveness of CIS agriculture. While not successful in all cases, the introduction of contracting and contract support measures, overall, has made a positive contribution to improving yields and quality. Second, credit and loans remain the mainstays of most private and publicly funded development projects in the region. However, credit and loans have not been the most successful measures in improving farm performance and both public and private sector support in the region have suffered from resources being diverted from the intended use. Programmes that improve market access and the dissemination of veterinary and quality control advice are likely to have beneficial effects on yields and quality, and offer an additional advantage in that they should be easier to monitor and thus less likely to suffer from diversion of resources.

21. Concern has often been expressed that the spread of contracting can lead to the marginalization of small farms. This argument can be considered in terms of (a) an exclusion of small farms from formal food supply chains and (b) small farms being offered significantly worse terms and conditions. The evidence on the first of these questions is mixed but on the latter is more conclusive. In a study on South America and Asia, Reardon *et al.* (2005) found that processors prefer to contract with larger firms, and that smaller firms are often excluded because they cannot fulfil the terms offered. However, for the CIS, White and Gorton (2004) found that food processors were dealing with more small farms in 2003 than 1997.[6] In part this was due to

[6] Small farms were defined as those of less than 1 hectare in size or five milking cows in the dairy sector.

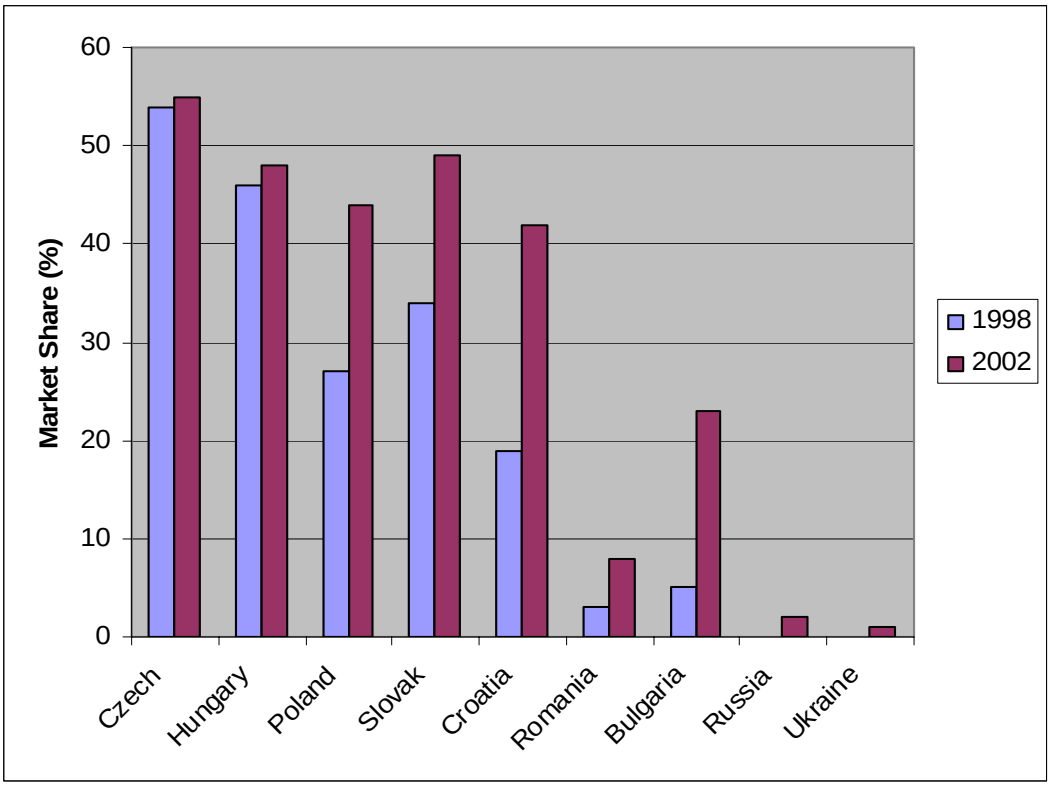
decollectivization, and small farms are less likely to be excluded in countries where there is an absence of larger farms (Swinnen, 2005) and where demand is expanding, as it has done since 1999 in the CIS. Regarding terms and conditions, the evidence is far more conclusive – processors do discriminate against small farms in the provision of contract support measures such as credit and physical inputs. For example, in the CIS survey, 60 percent of processors that offered credit and physical inputs to farmers did so selectively - they had a minimum farm size below which support was not offered.

B. RETAILING

22. Concurrent with, and in some cases precipitating, the growth of contracting between processors and farmers has been the rapid penetration of foreign owned retail chains (Csáki *et al.* 2004). This process began in the most economically developed parts of CEE, that were receptive to FDI, in the early 1990s (Hungary, Czech Republic and Poland) and rapidly accelerated in the mid and late-1990s (see Figure 1). As these countries became saturated with foreign entrants, attention turned to what Dries *et al* (2004) term *second wave* countries such as Croatia and has now reached states in the *third wave* such as Russia and Ukraine. In some cases the growth of food retail chains has been spectacular: in Croatia between 2000 and 2002 the share of total food sales accounted for by supermarkets increased from 25 to 51 percent (Reardon *et al.* 2003).

23. Supermarkets and hypermarkets have proved popular with consumers in CEE – in the Czech Republic, 47 percent of shoppers visit a supermarket at least once a week and 15 percent visit a hypermarket (GfK, 2003). Tesco reported that in Hungary over one weekend in November 2004, two million people (one-fifth of the total population) visited its stores. In these *first wave* countries the total number of retail outlets, particularly of specialist food stores such as greengrocers and butchers, has fallen as independent and cooperative stores have been squeezed out by multiple chains. While independent retailers still account for the vast majority of food purchases in the Balkans and the CIS it is important to anticipate the restructuring that will result from the penetration of multiple retailers.

Figure 1: Share of supermarkets and hypermarkets in total food retail sales



Source: Dries *et al.* (2004)

24. Foreign owned food retailers have transferred procurement practices from Western Europe to CEE and have significantly different relationships with their suppliers compared to the independent retail sector. Foreign owned retail chains have shifted to centralized procurement practices with store managers having little autonomy over what is stocked. Individual stores are increasingly supplied with goods from distribution centres that are either owned by the retailer or managed on their behalf by specialist logistics companies (Dries *et al.* 2004). When these distribution centres are in place, retailers bypass the general wholesalers and wholesale markets who serve independent retailers. Many Central European distribution centres service stores in a number of countries and retailers look to procure on an international basis. Cross-national procurement has been aided by enlargement of the EU and retailers as a result have a wider range of suppliers from which to procure and, hence, lower costs.

25. While in most food supply chains, retailers will not have direct relationships with farmers because of intermediate processing, for Fresh Fruit and Vegetables (FFV) relationships may be closer. While evidence to date is limited, it does appear that multiple retailers in CEE have shifted to more direct supply relations for FFV, either dealing directly with larger growers or, more commonly, contracting out the supply of particular products to specialist wholesalers who coordinate farm-level production through out-grower schemes (Dries *et al.* 2004). These arrangements are designed to minimize transaction costs and ensure more consistent supply that conforms to pre-set standards imposed by the retailer. As a result of these arrangements, less produce is being sourced through wholesale markets and more farms must learn to operate according to the private standards of the retailers. Most of the private standards used in CEE have been transferred from the retailer's home country, either replicating the company's own guidelines or applying the relevant BRC or EUREPGAP standard.

V. FAO Assistance and Challenges for the Future

26. The impact of greater vertical coordination and the penetration of foreign-owned retail chains have already been significant in the New Member States of the EU and similar trends are starting to be felt in the Balkans and the CIS. This restructuring of supply chains has profound implications for how both farmers operate and policy-makers address development issues. It offers both opportunities, for growers to reach new markets but also threats, particularly to small farmers. In this final section the main policy issues and perspectives are outlined beginning with a discussion of how much of the market infrastructure developed in the 1990s is being rendered less relevant or obsolete as a result of the restructuring of food supply chains. Technical assistance may be provided by FAO in crop and livestock production practices required for market-driven protocols for Good Agricultural Practices as well as guidance on assessment and design for country requirements. The section concludes with a number of recommendations which the ECA may wish to submit to the 25th FAO Regional Conference for endorsement.

A. PERSPECTIVES AND IMPLICATIONS FOR POLICY-MAKERS OF THE RESTRUCTURING OF SUPPLY CHAINS

a) *Wholesale markets*

27. During the 1990s international agencies and bilateral donors concentrated on improving market infrastructure to assist the development of agriculture in CEE. Wholesale markets were taken to be a key element of such infrastructure and EBRD, USAID, PHARE and the World Bank funded their (re)construction in several CEECs such as Hungary, Poland and Romania.[7] FAO has also played a part, for example jointly funding (with the Central European Initiative) a programme for developing agricultural wholesale markets in the region. Such support has been based on a belief that efficient wholesale markets can lower transaction costs, improve market transparency and raise farm incomes by providing better trading opportunities as well as the primary benefit of serving urban consumers (World Bank, 1998). However, many of these new wholesale markets have failed to become self-financing. There have been a number of reasons for this including the reluctance of traders to move from previously unregulated 'primitive markets', which were deemed to be safer for tax avoidance, competition between markets in the same city and the growth of retail chains that increasingly bypass such markets. Many wholesale markets currently operate at far below full capacity and mainly handle produce that fails to meet the private standards set by the multiple chains. For such produce farmgate prices are often depressed. While in much of the CIS, the importance of traditional retail and wholesale markets remains, in metropolitan Russia a movement away from kiosks and wholesale markets is already noticeable. It is vital that previous policy mistakes are not replicated and that donors appreciate that wholesale markets are increasingly becoming a second-tier outlet for produce and plan accordingly.

b) *Market Information Systems (MIS)*

28. Similar problems are apparent for *Market Information Systems* (MIS), which were funded to improve market transparency. These systems are largely based on monitoring at wholesale and retail markets and therefore aim at improving price discovery on spot markets. However as contracting becomes more widespread and spot markets thinner, data from such systems will become less reliable or appropriate in helping farmers to make decisions. This is related to a wider question of how prices are discovered in markets where long-term contracts are likely to predominate and spot markets are weak. As the percentage of production under contract increases the market clearing (spot) price is likely to become more volatile and less representative as many facets of the contractual relationships will not be captured in spot market prices

[7] For example, the World Bank financed projects in 1998 to construct new wholesale markets in Gdansk and Lublin (Poland). For an overview of internationally funded wholesale markets in CEE and CIS see Mittendorf (2001) and Shepherd (2004) for a discussion of future challenges.

(Hobbs and Young, 2001). MIS as they are currently configured may do little to help producers in deciding whether to enter or exit contractual relationships.

c) ***Measuring International Competitiveness***

29. International assistance to help CEECs to evaluate the international competitiveness of their agriculture has been widespread. While measuring international competitiveness should be an important component of policy support, its composition needs to be rethought. For example most existing studies have analysed the competitiveness of *commodity* production, typically assessing the ability of domestic producers to compete against imported goods at the wholesale market (for example import parity Domestic Resource Cost [DRC] ratios). These assessments are limited as they are linked to commodity markets and fail to consider how meeting the private standards of multiple retail chains may affect the cost competitiveness of CEE agriculture. This has meant the relationship between DRC ratios and trade has been weak. For example, a recent World Bank (2005) study on Moldova reported that farmers of high valued-added crops receive some 10 to 40 percent less for their output than international parity prices. However despite low costs and output prices, exports have been disappointing because, in the Moldovan case, the primary impediment to access to international supply chains has not been price based but quality. In addition to conventional commodity studies, future DRC calculations should be adjusted to reflect the reconstruction of supply chains with attention paid to contract conditions and understanding what proportion of farmers could meet such obligations and if they did, what would be the impact.

d) ***Improving market access to the supply chains of multiple retailers***

30. During the 1990s private standards became an important entry requirement to supplying multiple retailers in international markets. At that time, onfarm and food business conditions were found to be in need of improvement to assure food quality and safety. As described below, meeting the required quality continues to provide challenges in the region, and requires a sustained effort by government agencies and the producer/processor to achieve higher quality and safety standards. As a result of the rapid development of the predominantly foreign owned food retailers in the CEE-CIS region, private standards are becoming an important entry ticket to domestic markets as well. While agrifood production remains the main source of gainful activity in most rural areas in the CEE-CIS region, the region's record on trade has been disappointing. There are a number of reasons why trade performance has been poor but a contributing factor has been an inability to meet private standards. The main barriers to meeting such standards are inadequate quality control and certification systems, a lack of understanding of the requirements of retailers, a paucity of suitable managers for managing out-grower and contract arrangements and a lack of capital to make necessary investments (Reardon *et al.* 2003; Dries *et al.* 2004). Outdated and weak national food control infrastructures can also constitute an additional barrier to food producers accessing foreign markets. While much attention has been focused on reform of government trade regimes and implementation of national food standards, assistance to *producers in understanding and meeting private standards may be of more practical benefit.* The barriers to meeting private standards should have far greater saliency in the policy agenda and methods for addressing them are outlined below. Small farmers and small and medium-sized food businesses are often at risk of being marginalized, due to their inability to comply with the requirements set out in private standards. Therefore, policies should consider strategies to enhance access to information, resources, equipment etc., to enable gradual quality improvement.

e) ***Human Capital***

31. Higher and vocational education in agriculture in the region is still production oriented and this ethos still pervades most Ministries of Agriculture and, where they exist, extension agencies. This means that processors and farmers often cannot obtain practical advice on signing contracts, meeting the obligations of out-grower agreements and quality control from local educational and state bodies, as highlighted in the CIS by White and Gorton (2004) in their interviews with food processors. Degree and vocation programmes and agricultural extension

agencies have to be reformed to meet the realities of contemporary agrifood markets and international agencies, such as FAO with its long-standing expertise and experience in marketing and agribusiness support, can play an important role.

f) ***Improving access for small farms***

32. While most processors and retailers are not against small farms *per se* they are not development agencies, the highly competitive nature of the industry forces them to deal with a small number of larger suppliers. Processors and retailers may deal with small farmers directly if there is no alternative or if demand is rising rapidly in a protected market, but as international procurement becomes easier, the "no alternative" defence of small farms is likely to apply in fewer and fewer countries. This implies that critical to avoiding the marginalization of small farms will be *intermediary organizations such as specialist wholesalers, appropriate village collecting stations and marketing cooperatives* which can coordinate small farm production, provide a single point of contact for buyers and may offer support measures which would not be forthcoming directly from the processor/retailer. These agreements are still in their infancy in CIS and there is a need to learn lessons from the first experiences and from other regions of the world where their history is longer. Establishing such institutions requires overcoming the reservations of small farmers, who, in part for historical reasons, have been suspicious of cooperative arrangements (Csáki *et al.* 2004).

g) ***Stimulating intermediary organizations and marketing cooperatives***

33. In *stimulating intermediary organizations and marketing cooperatives* it is important to acknowledge that the record of public agencies has at best been mixed. Two factors are important in delineating what role support agencies should take. First, there is a need to avoid unnecessary replication of what the private sector is already doing regarding contract support measures, which is already advanced in some countries and sectors but poorly developed or absent in others. The second argument for downplaying this issue is to stress that the real objective of economic policy is to improve consumer welfare and that as multiple retailers have become enormously popular with consumers the question of access for farmers is of secondary importance (Timmer, 2004).

34. With regard to the first aspect, a better approach is to help enable groups of farmers to meet private standards within existing channels, particularly for higher value-added goods. FAO has also been involved in a number of such farmer-market initiatives (FAO, 2005b), for example in the FYR of Macedonia it has attempted to stimulate contracting farming for higher value added fruits and vegetables. In the Macedonian case, a three pillar model of intermediary organizations has been developed: a consortium of specialized farming associations, a revolving fund (working capital of farmers) and a private (NGO) service provider to manage the consortium. Through the project, it was recognized that without small-scale farmers being strongly linked to a consortium 'contract farming would remain an illusion' and that consortiums of local farmers should be linked to a service provider, headed by a specialist, that ensures that the scheme works to both the advantage of farmers and buyers (FAO, 2005a).

35. In establishing marketing cooperatives there is a temptation to rely solely on loans and credit. However, credit and loans are difficult to monitor, often easily diverted and therefore their impact may be modest. More appropriate measures may be *leasing equipment*. For example leasing milk cooling tanks to farmers has helped to significantly improve the quality of output on small-scale farms in Poland (Dries and Swinnen, 2002) and Moldova (Gorton *et al.* 2006). Such initiatives, by improving quality can allow farmers better access to supply chains and meet private standards. In the dairy case, the supply of clean milk to consumers has significantly improved. However, any physical capital projects will require adequate investment in human capital, none more so than in agribusiness management.

36. Before making recommendations, it is worth addressing two counter arguments that have been put forward for downplaying the importance of improving access to international supply chains. The first, which is often heard in the Balkans and the CIS, focuses on how margins for

small scale producers are higher on 'green' (peasant) markets than contract production. For example, in Kosovo farmers can currently sell their milk for approximately €0.50 a litre at green markets compared to around €0.30 per litre under contract to a processor. While ignoring contract production may currently make sense for peasant producers, this presupposes that the green market remains the main outlet for consumer purchases in future. However in Kosovo as in other parts of the Balkans, multiple retailers are rapidly increasing their market share. Such retailers in Kosovo are procuring overwhelmingly foreign produced goods and access for local producers is minimal. As multiple retailers advance, green markets will be squeezed as a source of welfare generation for small farmers. The argument that small-scale producers are better served by green markets is therefore short-termist and policy-makers have to consider alternative future supply chain arrangements.

37. With respect to the second argument mentioned in para. 33 above, in countries where farming is a minor gainful activity and the NFRE is strong such assertions are merited. However in much of the Balkans and the CIS, agriculture is by far the most important source of rural income and acts as a vital social safety net. In these cases producer welfare cannot be downgraded and Moldova neatly encapsulates the need to take the restructuring of supply chains seriously. The country had a strong reputation for agrifood production during Soviet times and agrifood exports are vital to its prosperity. However, overall, Moldova has not capitalised on its inherited position since independence. It has found it difficult to reorient its commerce to Western markets and trade with its traditional main market, Russia, is declining. For example, Moldovan FFV are not currently sold through the rapidly developing Russian retail chains due to their variable quality and poor packaging (World Bank, 2005). Similarly frozen food products are typically sold unbranded or in bulk. Moldovan goods are increasingly sidelined into low-value added outlets, further depressing rural incomes and stimulating out-migration. While in the long-term the development of a strong NFRE will be essential, improving access to international supply chains is a critical current challenge.

B. RECOMMENDATIONS FOR THE 25TH FAO REGIONAL CONFERENCE FOR EUROPE

38.

- Ministries of Agriculture are invited to take due note of the difficulties of meeting private food safety and production standards and changing consumer preferences for small farmers in CEE and CIS countries. It is important that farmers in these countries are not excluded from restructured food supply chains.
- Governments of the region should consider assisting farmers through a sustainable extension system that includes training in marketing and on how agricultural producers can meet private food safety standards and better meet other customer and consumer preferences. This will involve improving the ability of extension agencies to provide technical expertise to farmers to fulfil international certification schemes such as EUREPGAP.
- Strengthening the agricultural sector will require the upgrading of national food control infrastructures (management, inspection and laboratory capacities) to provide a sound basis for farmers, and agro-processors to gradually improve levels of quality and safety.
- Improving access to restructured supply chains for small farms typically requires stimulating intermediary organizations and marketing cooperatives, to coordinate the activities of farmers and provide a link between them and processors and retailers. Support to establish sustainable intermediary organizations with the requisite competencies and infrastructure will be of greater benefit than investments in new wholesale market infrastructure.
- Agricultural education and training in the region should be restructured so that it better prepares farmers for the new realities of supply chains (including contract farming, quality control and management) and incorporates training in marketing and agribusiness management.

39. FAO is ready to provide support to member governments, upon request, in the above-mentioned fields.

REFERENCES

Csáki, C., Forgács, C. & Kovács, B. 2004. *Regoverning Markets in Food and Agriculture: CEE Regional Report,* Budapest.

Dries, L. & Swinnen, J.F.M. 2002. *Finance, Investments, and Restructuring in Polish Agriculture,* Research Group on Food Policy, Transition & Development, Katholieke Universiteit Leuven, mimeo.

Dries, L., Reardon, T. & Swinnen, J.F.M. 2004. The rapid rise of supermarkets in Central and Eastern Europe: implications for the agrifood sector and rural development, *Development Policy Review,* Vol.22(5), pp.525-556.

Eaton, C. & Shepherd, A.W. 2001. *Contract Farming: Partnership for Growth,* FAO Agricultural Services Bulletin 145. Rome.

FAO. 2005a. *Updated Summary of Project Achievements,* Project No. GCP/MCD/001/NOR.

FAO. 2005b. *Linking Farmers to Markets: case studies,* http://www.fao.org/ag/ags/subjects/en/agmarket/linkages/index.html

GfK. 2003. *Shopping Monitor* 2002/3, Praha: Gfk.

Gorton, M., Dumitrashko, M. & White, J. 2006. Overcoming supply chain failure in the agrifood sector: a case study from Moldova, *Food Policy,* Vol.31(1), pp.90-103.

Gow, H.R., Streeter, D.H. & Swinnen, J.F.M. 2000. How private contract enforcement mechanisms can succeed where public institutions fail: the case of Juhocukor a.s., *Agricultural Economics,* Vol.23(3), pp.253-265.

Gow, H.R. & Swinnen, J.F.M. 2001. Private enforcement capital and contract enforcement in transitional economies, *American Journal of Agricultural Economics,* Vol.83(3), pp.686-690.

Hobbs, J.E. & Young, L.M. 2001. *Vertical Linkages in Agrifood Supply Chains in Canada and the United States.* Ottawa: Research and Analysis Directorate, Strategic Policy Branch, Agriculture and Agrifood Canada, http://dsp-psd.pwgsc.gc.ca/Collection/A22-226-2001E.pdf

Ivanova, N., Lingard, J., Buckwell, A. & Burrell, A. 1995. Impact of changes in agricultural policy on the agro-food chain in Bulgaria, *European Review of Agricultural Economics,* Vol.22, pp.354-371.

Morelli C.J. 2004. Explaining the growth of British multiple retailing during the golden age 1976-1994. *Environment and Planning A,* Vol. 36, pp.667-684.

Mittendorf, H.J. 2001. *Planning viable food wholesale markets in Eastern European Cities.* World Union of Wholesale Markets, mimeo.

Reardon, T., Vrabec, G., Karakas, D. & Fritsch, C. 2003. *The Rapid Rise of Supermarkets in Croatia: implications for farm sector development and agribusiness competitiveness programs.* Report for USAID, DAI and Michigan State University.

Reardon, T., Berdegue, J.A. & Timmer, C.P. 2005. Supermarketization of the Emerging Markets of the Pacific Rim: development and trade implications. *Journal of Food Distribution Research,* 36(1), pp.3-12.

Shepherd, A. 2004. *Wholesale markets in the era of supermarkets and hypermarkets: developments in Central and Eastern Europe.* FAO, Rome.

Striewe, L. 1999. *Grain and Oilseed Marketing in Ukraine.* Iowa State University Ukraine Agricultural Policy Project (UAPP), Kiev.

Swann, M. 2002. *The contractual arrangements between grape growers and wineries in a global context.* Report to the Winston Churchill Memorial Trust of Australia, mimeo.

Swinnen, J.F.M. 2005. *When the market comes to you - or not. The Dynamics of Vertical Coordination in Agrifood Chains in Transition.* World Bank, mimeo.

Timmer, C.P. 2004. Food policy in the era of supermarkets: what's different? *Electronic Journal of Agricultural and Development Economics*, Vol.1(2), pp.50-67.

White J. & Gorton M. 2004. *Vertical Coordination in Transition Countries: A comparative study of agrifood chains in Moldova, Armenia, Georgia, Russia, Ukraine*. Report prepared for the World Bank, mimeo.

World Bank. 1998. *Poland: Wholesale Market Project II.* Project Appraisal Document, Report No. 18385-PL

World Bank. 2005. Moldova: opportunities for accelerated growth. A country economic memorandum for the Republic of Moldova, Washington D.C., Report No. 32876-MD