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# Regional and International Trade Policy

*Lessons for the EU Accession in  
the Rural Sector—World Bank/FAO  
Workshop, June 20–23, 1998*



*Edited by  
Csaba Csaki  
John Nash*

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*Edited by  
Csaba Csaki  
John Nash*

*The World Bank  
Washington, D.C.*

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Csaba Csaki is lead agricultural adviser and John Nash is principal economist in the Rural Development and Environment Sector Unit of the World Bank's Europe and Central Asia Department.

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## FOREWORD

The World Bank's so-called "Strategic Compact Initiative" includes a set of coordinated activities that leverages the World Bank's comparative advantage in economic analysis and transferring world-wide experience to help the ten EU accession countries achieve EU membership. The EU accession support activities include the preparation of a series of studies to facilitate the implementation of policy and institutional reform agendas in preparation for accession; and workshops and seminars to disseminate study results and improve the analytical skills and policy analysis capabilities in the respective countries.

The first Workshop created under this program relates regional and international trade policy issues concretely to experiences with regional trading agreements, and the implications of Central and Eastern European Free Trade Agreement (CEFTA) and World Trade Organization (WTO) membership for countries EU accession. It also addresses the agricultural input regulatory reforms needed to integrate trade in farm inputs within markets in the EU. Several background studies, prepared with strong local collaboration in the respective countries, provided a solid foundation for this first Workshop. The major objective of the Workshop was to have the key designers and organizers present the results of their studies, supplemented by the presentations of the country collaborators. The Workshop offered an opportunity to discuss how the World Bank might support these countries in their preparation for EU accession in the rural sector. It also offered an opportunity for informal exchanges of information between the representatives of the accession countries.

This volume presents the major papers and summaries of the Workshop deliberations. It was agreed that the eastern enlargement of the EU will be beneficial not only for the accession countries, but also for current EU members, as well as the global food and agricultural system. The magnitude of potential benefits will depend on whether the enlargement is based on well-designed and properly implemented agricultural policies, both in the accession countries and in the EU itself. With appropriate preparation and policies, the enlargement will result in a broader and higher-level integration of European agriculture, create an environment more conducive to further liberalization of global agricultural trade, and lead to further opening of European markets.

Experiences with regional trade agreements in the Central and Eastern European region were discussed in great detail during the workshop. CEFTA, and to a lesser extent the Baltic Free Trade Agreement (BFTA), are important steps towards European integration in agriculture. The CEFTA experiences already indicate the most important aspect of joining the EU; namely, increased competition on the domestic agricultural markets of the respective countries. Recent intra-CEFTA trade developments demonstrate that the countries with more competitive agriculture sectors have been able to better utilize the export opportunities of the enlarged market. Contrary to the CEFTA

agreement, some countries have recently introduced trade policy measures aimed at protecting domestic producers from increased CEFTA import competition. Such measures will not be possible after EU accession. Increased competition and lower prices due to imports from member countries are necessary conditions to realize the benefits of preferential regional trade arrangements.

The improvement of efficiency and competitiveness in the food and agriculture sector was identified as the major task in preparing for EU membership and the new WTO round. Increased competitiveness must be the major objective of agricultural policies in accession countries, or else the potential benefits of EU membership might not be realized. The improvement of competitiveness and efficiency should have priority over the quick introduction of Common Agricultural Policy (CAP) instruments. It is important that long-term programs aimed at competitiveness enhancement not be overshadowed by measures intended to resolve short-term market and social problems.

The introduction of new technologies embodied in agricultural inputs is an important way of improving competitiveness. Harmonization with EU standards and simplification of rules and regulations used in the trade of inputs for agriculture is quite an important task in preparation for EU accession.

The presentation of the major findings of this workshop will hopefully provide assistance to the countries in the process of preparing for EU accession, and will also be a useful information resource for those organizations and individuals with an interest in EU accession in the rural sector.

Kevin Cleaver  
Director  
ECSSD  
Europe and Central Asia Region  
The World Bank

## **PREFACE**

The World Bank, under its Rural Sector EU Accession Initiative, sponsored the First World Bank EU Accession Workshop in Budapest, Hungary, between June 20 -23, 1998. The Workshop was organized in cooperation with the FAO and the Hungarian Ministry of Agriculture. Over 70 key government officials in charge of their country's preparation for EU accession negotiations in the rural sector, as well as advisors and academics, participated in the Workshop. Participants came from all ten accession countries (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia). Angel Carro-Castrillo represented the DG6 Department of the European Commission. Kevin Cleaver, Director of World Bank's ECSSD, and Michel Petit, Director of the World Bank's RDV, actively participated in the seminar together with eight additional World Bank staff members. The FAO delegation included Gregory Orriss, the Chief of the Food Quality and Standards Service at FAO headquarters in Rome, and four additional headquarters and subregional office staff. The Workshop organization was coordinated by Csaba Csaki and John Nash from the World Bank, and by Zbigniew Karnicki, Chief of the FAO Subregional Office in Budapest, and supported by David Bontempo from World Bank headquarters. This report on the Workshop proceedings was compiled by Alan Zuschlag under the guidance of Csaba Csaki and John Nash. The assistance and support provided by the Hungarian Ministry of Agriculture and the FAO for this Workshop is greatly appreciated.

## **ABSTRACT**

This report examines the reforms and policy changes necessary in the food and agriculture sectors of those countries now in the accession process for eventual membership in the European Union (Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia). The chapters in this report are taken from the presentations made by the authors at the first World Bank EU Accession Workshop in Budapest, Hungary, June 20 -23, 1998. This report is intended for agricultural policy makers and other government officials in the countries involved, EU officials, World Bank and FAO staff, and others interested in the process of European agricultural reform.



## LIST OF ACRONYMS AND ABBREVIATIONS

AFTA	Asian Free Trade Agreement
BFTA	Baltic Free Trade Agreement
CACM	Central American Common Market
CAP	Common Agricultural Policy
CARICOM	Caribbean Community
CEFTA	Central Eastern European Free Trade Agreement
CEEC	Central and Eastern European Countries
CGIAR	Consultative Group for International Agricultural Research
CMEA	Council for Mutual Economic Assistance
COMECON	Council for Mutual Economic Assistance
CR	Czech Republic
CUSTA	Canadian United States Trade Agreement
CWB	Canadian Wheat Board
ECSSD	Environmentally and Socially Sustainable Development Unit for Europe and Central Asia in the World Bank
EEA	European Economic Area
EFTA	European Free Trade Association
EMU	European Monetary Union
ERA	Effective Rate of Assistance
ERP	Effective Rate of Protection
EU	European Union
FAO	Food and Agriculture Organization (of the United Nations)
FTA	Free Trade Agreement
FDI	Foreign Direct Investment
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
MERCOSUR	Common Market of the South
NIS	New Independent States
NRP	Nominal Rate of Protection
OECD	Organization of Economic Cooperation and Development
PSE	Producer Subsidy Equivalent
RIA	Regional Integration Agreements
RTA	Regional Trade Agreement
STE	State Trading Enterprise
TRI	Trade Restrictiveness Index
WTO	World Trade Organization



## **Contributors List**

**István Fehér** - Head of Cabinet in the Hungarian Ministry of Agriculture.

**Simon Gill** – Associate, Agricultural and Rural Business Development Consultancy, Warsaw, Poland

**David Gisselquist** – Seed Industry Specialist, ECSSD, World Bank

**Stefka Grozdina** – Regional Manager, Hydro Bulgaria

**Tim Josling** – Professor and Senior Fellow, Institute for International Studies, Stanford University

**Natalie Olsen** – Agricultural Economist, World Bank-FAO Cooperative Program, FAO, Rome

**Michel Petit** – Director, Agricultural Research and Extension Group, World Bank

**Endre Smolcz** - Associate Professor at Gödöllo Agricultural University.

**Stefan Tangermann** – Professor, Department of Agricultural Economics, University of Goettingen

**Luiza Toma** – Economist, Agricultural Economics Institute of the Romanian Academy.

**Henning Twesten** – Doctoral Student, Department of Agricultural Economics, University of Goettingen

**Alberto Valdes** – Agricultural Advisor, ECSSD, World Bank

# Chapter One

## Critical Issues<sup>1</sup>

By Natalie Olsen and Alberto Valdés

The Budapest workshop was only one of a number of activities organized by the World Bank to help the accession countries achieve EU membership. This conference was intended to be the first of several annual workshops, each oriented toward an important accession-related topic. The general topic of this first workshop was how to use trade policy to prepare for accession. To provide adequate opportunity for review and discussion of all workshop topics, it was decided to separate the workshop into four sessions; session one dealing with regional integration; session two devoted to world trade; session three focused on policy reforms in trade, regulatory, and inputs; and finally session four providing concluding comments on the World Bank's role in assisting in the accession process. The critical issues laid out in these sessions will be addressed in this chapter. Following chapters will focus on specific presentations given during the course of the workshop.

### Session 1 (part 1): Regional Integration and EU Accession

The first session focused on the effects of regional trade agreements on world trade. While the objective of regional trade agreements is free trade, it is not clear what the effect on global trade actually is. In the past, it has been observed that regional trade agreements may retard global integration. The presentations of Stefan Tangermann and Henning Twesten (**Chapter 2**) and Tim Josling (**Chapter 3**) assessed the effects of regional trade agreements in Central and Eastern Europe, especially the Central Eastern European Free Trade Agreement (CEFTA) and the Baltic Free Trade Agreement (BFTA). The fact that these agreements came into existence in the context of accession to the EU -- which itself represents a large market and has relatively low barriers to trade with the rest of the world in most nonagricultural products —limits the danger that they will result in greater isolation rather than integration with world trade. Nonetheless, a number of policy actions in regard to these agreements will determine the degree to which these free trade agreements are effective in meeting their goals, while minimizing costs and maximizing benefits. Policy choices are especially critical in the agricultural sector, both because the CEFTA and BFTA countries themselves consider this a sensitive sector and have a number of unharmonized policies that directly or indirectly affect trade in these products, and because the EU subjects the sector to much greater intervention and higher trade barriers than other sectors.

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<sup>1</sup> A detail listing of the Workshop Program is attached at the end of this paper.

Several important practical lessons for policy-makers emerged from this session. One is the difficulty of achieving greater liberalization of agricultural trade among CEFTA countries when domestic agricultural policies in those countries are not harmonized. A second related lesson is the undesirability of harmonization of these domestic policies by early adoption of the EU's Common Agricultural Policy (CAP). Thus, countries are left with the option of using CEFTA to achieve limited trade policy liberalization in selected product markets where domestic product harmonization may not be such a major issue, and to focus on harmonization of technical trade standards (e.g., sanitary and phytosanitary norms), using EU standards as models. In trade policy *per se*, the focus should be on unilateral liberalization of MFN trade regimes, rather than further intra-CEFTA liberalization.

In his paper (**Chapter 3**) Tim Josling discussed the origins of CEFTA, which was set up to halt the decline in trade in member states, and to offset the "pull" effect of bilateral EU agreements, as well as to strengthen the economies of the CEEC prior to EU accession. Stefan Tangermann (**Chapter 2**) presented an analysis of the economic impact of trade flows, distinguishing between three potential effects of trade agreements on trade: (a) trade creation; (b) trade diversion; and (c) trade deflection. Trade creation improves welfare, while trade diversion has the opposite effect. The magnitude of welfare effects of each depends on several factors, including the elasticities of export supply from both CEFTA and the world. While agricultural trade is a small portion of trade between CEFTA countries, and CEFTA trade is a small proportion of global trade, the issue of trade diversion is still important.

Should CEFTA be used as a pre-accession path? There may be problems with this notion because the current mechanism for, and levels of protection of, the CAP are not appropriate for CEFTA countries (Josling). The CAP is evolving, and should be treated as a "moving target," i.e. accession strategies should be geared towards the CAP as it will be in the future, rather than current policies. With a new round of Uruguay Round negotiations to begin before the end of 1999, significant liberalization is expected.

Presentations of individual CEFTA country experiences covered the Czech Republic, Hungary, Poland, Slovak Republic and Slovenia. Benefits of CEFTA membership were evaluated in terms of increased trade, the degree of trade openness (tariff reduction), the harmonization of accession policies, and changes in foreign direct investment. While the political rhetoric of regional trade agreements focuses on potential gains from increased exports, in reality, benefits are based on increased imports (through trade creation) and falling domestic prices. Lower domestic producer prices often result in friction as producers face reduced profitability, and consumers benefit from lower prices (consumer benefits in most cases more than offset losses to producers). Many CEFTA countries are currently experiencing this cost-price squeeze which pushes governments to retaliate and to adopt tit-for-tat strategies. To avoid this type of behavior, mechanisms to compensate losers and institutional arrangements to minimize unfair trade practices, e.g. dumping, may be necessary, though these mechanisms have their own dangers, and have often been abused in the past. They should therefore be used as a last resort, and only with appropriate safeguards against abuse.

In a number of CEFTA countries there is growing disappointment with CEFTA associated with the lack of expansion in agro-food trade. However, it is difficult to analyze trade performance and the effects of CEFTA by assessing trade policy per se; factors affecting trade performance lie beyond trade policy itself. The process of transformation (modernization) of the farm sector, which is far from complete, is a critical determinant of competitiveness and trade.

Should CEFTA be viewed as a free trade agreement in its own right or as instrument to prepare for EU membership? All members of CEFTA have applied for EU membership, but it will not be useful for these countries to establish some form of pre-CAP amongst themselves, particularly since it is not clear what the future CAP will look like. Nor should they try to develop their own technical regulations, but should rather adopt existing relevant EU regulations. This would allow the pre-accession countries to focus on increasing the competitiveness of agriculture.

How will farms/processors in these countries react to, and perform in, the process of structural adjustment? Studies have shown that trade is affected by the lack of deep structural adjustment in transition economies, and many CEFTA members have adjusted only in a superficial, short-term manner. For instance, while the economy of Poland has changed dramatically since 1990, agriculture has not evolved much from its pre-reform state and, as a consequence, competitiveness is stagnating. Pre-accession countries currently have different policies, yet EU accession requires the adoption of uniform policies. Quick fixes will no longer be alternatives to deep structural adjustment, including the establishment of functioning land, and capital markets and investment in infrastructure, and trade performance should be seen in this context.

In what direction should CEFTA be evolving? Some delegates argued in favor of deepening CEFTA, with the idea that further liberalization would develop intra-regional trade prior to accession, and would spur agriculture to improved productivity. Others favored focusing efforts on EU membership rather than deepening CEFTA. The current dilemma is that trade liberalization for agricultural products is occurring without policy harmonization between CEFTA countries (as agricultural products are not included in regional agreements). A second issue is the impact of future EU membership. This will involve adopting the CAP in place of the current combination of EU Association Agreements and CEFTA agreements. This may involve introducing more trade distorting policies; CEFTA countries should be wary of changing good prevailing policies with more restrictive/protectionist EU policies.

What further investigation is required? The country studies presented at the workshop cover the period up to 1996, yet the system of CEFTA agreements changed markedly in 1997. More up-to-date, broad-based analysis is required to assess: (a) the effects of recent agreements on trade; and (b) the impact of current policies on different commodities. The impact of changes in relative prices and income between subsectors, i.e. between processors and producers, and between crop and livestock sectors, needs to be identified.

### Session 1 (part 2): Lessons from Other Regional Integration Agreements

Tim Josling (**Chapter 3**) presented a paper on lessons learned from other regional integration agreements, and the role and treatment of agriculture in these agreements. Benefits to agriculture are difficult to identify (quantify). There are often problems incorporating agriculture into free trade agreements due to the prevailing idea that the politics of the agriculture sector is more complicated than that in other sectors and difficult to build into trade agreements. Moreover, the economics of trade agreements in terms of exploiting differential resource endowments between countries are likewise complex.

Stefan Tangermann (**Chapter 2**) discussed the harmonization of agriculture policies within trade agreements, and the need to focus on differences in MFN tariffs. Divergent national agricultural policies are potentially inconsistent with regional trade liberalization. With free trade among member countries, high support prices and MFN tariffs in country A, for example, may lead to trade deflection (imports to that country via another CEFTA member with lower MFN tariffs), thereby undermining the high domestic prices. This problem is usually handled in trade agreements by "rules of origin," which only allow preferential tariffs for imports that actually originate in a member country. Rules of origin, however, are difficult to enforce for primary agricultural commodities, because they are so homogeneous. It is more difficult, for example, to distinguish between Canadian wheat and Hungarian wheat, than between a refrigerator made in Canada and one made in Hungary.

Regional trade agreements may have unexpected effects on the viability of agriculture. The implementation of MERCOSUR in Latin America contributed to a decline in the profitability of farming in some countries. While agricultural *products* were imported from within the trade agreement (and subject to no, or very low, tariffs), *inputs* were imported from non-member countries and therefore subject to higher MFN tariffs. As a result, input costs rose relative to output prices, in a manner which did not reflect actual competitiveness. Trade agreements should be instruments to lower trade barriers internally, but should not increase external protection. Viewed externally, the EU seems to be a protectionist bloc which is accumulating new members who also adopt protectionist policies. This has negative welfare effects in economic terms. The economics of trade blocs and the impact of size and the existence of low cost producers within the bloc are complex. Whatever the efficiency implications, regional trade blocs (EU and CEFTA) should not be allowed to divert attention from multilateral agreements such as the World Trade Organization (WTO) which are more important.

The impact of small size and few members is illustrated by the BFTA. It was argued that due to its small scale, the BFTA does not impede integration with global markets. The BFTA is a very small market, specialized in the production of a limited number of products. The three member countries have different levels of self-sufficiency, and trade flows within the region are small. The major export market is still

Russia, and most imports originate in the EU. While BFTA countries expressed the intention to join CEFTA a few years ago, there is no longer an official position. Given that the policies of BFTA are more liberal than those of CEFTA, there appears to be little for BFTA countries to gain in joining CEFTA as part of their EU accession strategy. In fact, the timeframe of BFTA was far more rapid than it was for CEFTA, and many of the transitional issues are different (BFTA having moved very quickly to full liberalization).

It is not clear from the literature on trade theory what the net welfare effects of regional trade agreements should be; it is difficult to quantify the costs and benefits of: (a) disciplining domestic policy; and (b) increasing competition in agricultural goods markets. To some extent, CEFTA does provide a good preparatory framework for EU accession. The performance of different CEFTA countries in terms of the speed of adjustment and shifts in competitiveness reflect changes to come during EU accession. Productivity differentials between countries have appeared with the arrival of CEFTA and have become issues to resolve in the process of EU accession. Efforts must be made to prevent the agricultural agenda of CEFTA from becoming victim to short-term political objectives in member countries. The existence of transition arrangements are needed not only to allow countries to adjust to potential market losses, but also to handle a broader range of issues, e.g. support for accession countries to maintain external EU borders.

According to EU representatives at the workshop, the EU should not be evaluated by solely economic criteria. There is some conceptual difficulty to fit the EU into the framework of a regional trade bloc. While there are many elements of trade, the EU is, above all, a political union, and this complicates the analysis in terms of net benefits. In light of accession, the EU has preferential agreements with all candidate countries, and can expand the scope of these prevailing agreements to strengthen integration between these countries and the EU. The CAP should be seen as a flexible instrument and as a moving target (which is evolving in the right direction). Changes currently underway in the CAP will make enlargement easier and will facilitate global integration of the EU.

## **Session 2 (part 1): World Trade and EU Accession**

This part of the workshop considered the implications of the external trade environment for the accession countries, and how they should formulate trade policies accordingly. The first of two FAO presentations focused on WTO and EU Accession and FAO's policy advice activities to support pre-accession countries in this process (Jurek Michalek, FAO Regional Office for Europe). The aim of FAO policy assistance projects is to increase competitiveness of agricultural and food sectors, and to assist the countries in developing agricultural strategies for EU accession (where applicable) and advise governments in preparation for the next round of WTO negotiations. There are a number of WTO-related issues in the choice of agricultural policies and the speed of sectoral reform which are specific to countries in transition. These include; determination of the status of each country, existing non-tariff barriers to trade, the role of state-owned companies, the lack of national legislation on general safeguards, the tendency to invoke

balance of payments exceptions, weak systems of monitoring, and controlling WTO commitments. Studies have been undertaken which address questions on the economic consequences of trade creation and trade diversion caused by WTO membership (e.g. trade preferences). These studies examine: the role of WTO commitments in constraining present agricultural policies and incentives for further policy change; the expected level of prices, income and budgetary implications of further policy reforms; the implications of tariff cuts on “sensitive” agricultural and food products; and alternative measures to manage market instability.

The second presentation discussed the role of sanitary and phytosanitary trade rules in EU accession (Greg Orriss, Chief, Food Quality and Standards Service, FAO-Rome). The discussion which followed raised issues relating to being able to judge quality/food safety on objective criteria (which is currently being challenged in OECD countries), i.e. the credibility of the science applied is being questioned. International rules and procedures also have some difficulty accommodating consumer preferences of quality which are not scientifically based, e.g. the differentiation within the French market for foie gras. There was concern that phytosanitary and food safety restrictions would act as implicit trade restrictions. However, FAO emphasized the sound and objective scientific basis of current regulations and rules. In order to accommodate consumer preferences in areas in which scientific criteria are less well formulated or sufficient for consumers (e.g. genetically modified organisms), labeling is important. By allowing free trade, but requiring clear labeling of the contents and process of production of goods, consumer choice does not conflict with an open trade regime. FAO is currently involved in joint consultations with consumer groups and is working on how to adjust the risk perceptions of consumers. While important issues remain unresolved, benefits of EU membership are positive in terms of: (a) the discipline imposed on food quality and safety; and (b) the ability of countries to participate in the debate on the formulation of such policies and regulations.

## **Session 2 (part 2): World Trade and EU Accession**

The second session began with a presentation by Michel Petit (**Chapter 5**) on “Pressures on, and Trends in, the Evolution of the CAP - Impact of Commitments in WTO” which presented a political economy perspective on the nature of the CAP. The CAP has been shaped by a number of political and economic interests; nominal price rigidity, the budget constraint, the impact of outside pressures in limiting trade distortions, and political pressures to reach common decisions. The evolution of the CAP was seen as the net effect of the impact of each variable. An attempt to predict future changes was based on the application of this framework.

The status quo of the CAP must be altered in face of enlargement. Enlargement will be costly, and the budget constraint will force a change in the level of support given to farming. It may also force a lengthy transition period in order to complete the accession process for agriculture. Second, reform of the CAP and the shift from market price support to direct payments has increased the transparency of support payments, and

has made evident their skewed nature. As a result, these support payments are no longer socially or politically tenable, and are under pressure to change. Third, WTO commitments (tariffication, market access, export subsidy restrictions) are becoming more constraining for the EU, and will have to be accommodated. Lastly, nominal price rigidity is decreasing with the use of decoupled payments. This will have strong political implications for current EU members, for farm lobbies in these countries, and for new members in terms of support to be expected following accession. For instance, trade pressures within the EU are changing from negative (protecting the internal market) to positive (looking for markets outside the EU). The impact of the budget constraint depends not only on internal factors, but also on assumptions about future levels of world commodity prices. The current EU position under Agenda 2000 assumes unrealistically high and steady world prices in the future (and thereby underestimates the pressures on the EU budget). Thus, budget pressures may increase more than expected. In order to prepare for pressures which will arise from financial constraints, pre-accession countries should focus efforts on exchanging information, and in coordinating their negotiating positions.

Alberto Valdes presented a paper quantifying the incentive and farm income effects of agricultural support policies in transition economies (a joint work with Nathalie Olsen, FAO/CP) (**Chapter 6**). The findings of this study indicate large net transfers going to producers in some pre-accession countries and Turkey, and away from producers in others (Ukraine, Romania, Bulgaria). The results also indicate that these transfers are very large and volatile (over time). These findings provide some explanation for the lack of deep structural adjustment in some pre-accession countries given the unstable investment environment. The policy framework which produces such transfers is not conducive to structural adjustment. Moreover, the uncompetitive nature of the agro-processing sector in most pre-accession countries requires reform along much of the marketing chain. It was suggested (Josling) that these findings be contrasted with a similar analysis for EU countries to get an idea of the relationship between CAP and accession countries.

The CAP is becoming more transparent, and is changing for predominantly domestic reasons. Agriculture is now considered an “*offensive* (i.e., export) market” for the EU in international markets. The duration of the transition period for new members was discussed extensively. Whether a transition period is required is not possible to predict across countries. What is clear is that the EU does not want to base support on direct payments to farmers in new countries, but rather on long-term investments, such as infrastructure and education. Compensation payments in the current EU have been introduced to compensate producers for the decline in market price support. However, in the candidate countries, EU accession will increase prices, and full compensation payments will not be required. Compensation payments, if any, should be flexible, and will be paid both nationally and by the EU. There is the danger that the richer countries may provide higher support payments (disguised protectionism in the form of environmental support schemes).

The EU is in the process of decoupling production from social policy. What is required in the accession countries is a gradual adjustment based on the expansion of non-agricultural employment opportunities (it is nonsense to speak of an optimal percentage of the workforce which should be employed in agriculture). And while it is important for accession countries to co-ordinate their negotiating position, the situation in each country is unique and specific to that country. Accession countries need to domestically formulate a sound, tenable position supported by domestic farmers' organizations.

The CAP is an instrument which provides a coherent framework for intervention which seeks to ensure stability rather than efficiency. In this context, it is important to explore the scope for collaboration between the World Bank and the EU. Inconsistency/incoherence of agricultural policies in accession countries may be the result of diverging policy advice, and it is critical that institutions involved must ensure consistency in their recommendations. The debate suggested that the differences in the views and approaches of the candidate countries, and the EU, World Bank and FAO are relatively minor. Accession policies are driven by numerous variables, and the speed and timing of accession will be determined by the politics rather than the economics of EU enlargement.

How will evolving environmental and consumer (price and non-price) pressures shape the CAP in future and how will these pressures affect accession countries? Until the present, budget pressures within accession countries have been quite different; some countries operate under old style market management and the desire to keep consumer prices low. Others, such as Poland, experience greater pressure to support producers. The political economy framework adopted provides a useful way to analyze these different pressures and to evaluate whether current policies in accession countries are compatible with EU policies. To understand the implications of enlargement one needs to factor into the analysis not only political pressures in accession countries, but also in the EU. There will be many issues to negotiate, e.g. the allocation of quotas, as the CAP can not be applied as it is in accession countries.

Regardless of the nature of current policies, the need to increase the efficiency of farming is critical; investment in agriculture needs to increase dramatically. Increased efficiency is also necessary to improve the negotiating position of accession countries. Reform is not only required to improve efficiency in the agriculture sector, but also to promote equity and to increase farm income. In many accession countries, producer prices are determined by the agro-processing/input industry which may be quasi-monopolistic. Market price support payments tend to go to processors and traders (rather than to producers) through higher input costs.

How can accession countries prepare, accelerate, and smooth the transition to the EU? Clearly, farmers will adjust better in the context of appropriate policies and support. How can the World Bank assist countries to increase the competitiveness of agriculture? Efforts may focus on supporting changes in institutions and in technology. Some reforms have already taken place in the context of negotiations for EU accession, e.g. the

elimination of many price interventions in input and output markets. Accession Countries are learning that price and trade policies are not effective tools to achieve social policy objectives. Tariffs have also been reduced dramatically. In many cases, adopting EU policies will involve a step back from more liberal trade policies and less interventionist price policies. For example, in the sugar sector in Poland, while quotas exist, they are now tradable (thus avoiding market rigidity); in the EU trade in quotes is not permitted. The question then arises as to how good prevailing policies in accession countries can be maintained.

### **Session 3: Agricultural Inputs, Trade and Regulatory Reforms**

David Gisselquist (**Chapter 4**) outlined four major challenges for agricultural input regulation and trade during transition and EU accession. First, millions of new small farms have been created as large co-operatives and state farms have been dismantled, creating a need for expansion of wholesale-retail networks to deliver inputs through competitive markets. Second, agricultural demand has fallen badly and may diversify with recovery, so that inputs industries lose traditional sales and have to diversify into new crops and technologies to recover. Third, former international linkages for research and technology transfer among COMECON countries no longer provide sufficient technology, so that scientists and input companies must seek out new linkages in Western Europe, US, and other OECD countries. Fourth, mounting international concern for the environment will challenge input companies to find and provide the newest and safest technologies, including especially technologies for pest management.

Speakers presented country experiences for Bulgaria (fertilizer), Poland (machinery), Hungary (livestock inputs), and Romania (seeds). During transition, fertilizer demand in Bulgaria collapsed, so that large shares of Bulgaria's fertilizer production have been exported. More recently, domestic sales have started to recover. Norsk-Hydro entered the market in 1997, setting up wholesale-retail networks to distribute locally purchased and imported fertilizers. Government is in the process of revising fertilizer regulations. Some concern was expressed that government may register combinations of nutrients allowed for sale, with official tests and registration required before the introduction of a new nutrient, compound or mix. This could be a problem. Regulations that go beyond what is necessary to protect public health, environment, and orderly markets, boost fertilizer prices and discourage competition and introduction of new products. Generally, "truth-in-labeling" is enough, with government allowing farmers and traders to determine what combinations of nutrients are most cost-effective.

Sales of tractors and other agricultural machinery in Poland collapsed with transition. Current replacement rates for tractors and combines are not over 1%, so that the average age of Polish farm machinery is increasing almost one year every year. This is not sustainable, and can be expected to lead to problems in the near future, as the average age of tractors is already almost 20 years. Ursus, the most important tractor producer in Poland, has recently raised prices must faster than inflation. No solution is in sight for this problem.

With good conditions for cereal production, Hungary has been a big livestock producer. Among major feed components, Hungary imports only protein concentrate. Demand for livestock products fell with transition, and there has also been some shift into poultry. During the socialist period, public research developed good pig and poultry breeds which have been exported to other countries. With market reforms, Hungarian companies now contract with foreign companies to introduce improved breeds into Hungary, including Danish companies for cattle and British companies for poultry. Several large foreign companies have important positions in the premix market, selling to small and medium farmers who mix feed on-farm, using their own cereals. Government lists allowed feed components and mixes, but the discussion did not clarify if these regulations go beyond truth-in-labeling and controls on dangerous substances (eg, hormones).

The government of Romania has been revising seed regulations to meet conditions for joining the EU. During 1997, Romania changed laws and regulations so that all varieties in EU Common Catalogues are automatically accepted without any further official tests and approval. This reform, which gives Romanian farmers access to all of the varieties available to EU farmers, has already had a big impact at the farm level during spring planting in 1998, the first planting season following reform. Because of adverse weather in 1997, production of sunflower seeds in Romania was far below requirements for 1998. Because all of the varieties in EU Common Catalogues are now legal for Romania, a number of private companies were able to import seeds of tested – but not yet approved – sunflower hybrids to make up much of the shortfall. Romanian seed companies are expanding linkages with EU companies. Development of wholesale-retail networks to deliver seeds to small farmers continues to lag.

Across countries and for all inputs, governments have been adjusting laws and regulations to agree with the EU's *aquis communautaire*. However, most pre-accession governments – with few exceptions – have maintained regulations that block introduction of new crop varieties without time-consuming and expensive official tests and registration. Such regulations block productivity increases, diversification, expansion and modernization of processing industries, and seed industry development.

Among bright spots, Slovenia has recently reformed its pesticide regulations to favor low risk products, easing registration processes for introducing new pheromones and biopesticides, while maintaining strong controls on conventional pesticides. Such an approach favors risk reduction and organic agriculture.

How can we explain the widespread decline in input use? In many pre-accession countries, input use fell as input prices increased faster and further than output prices (cost-price squeeze or scissors). The effect of high real interest rates and tariffs has different impacts on fertilizer/seed than on machinery, due to the higher cost and longer period before realizing benefits from the latter. There was some concern that inputs which embody new technologies (eg, machinery for low or no-till farming) may not be accessible to farmers. What policies could help without distorting budgets or prices?

The government's role in input markets was discussed. There was some concern that the debate is too narrowly focused on short-term issues; in the medium-term, a more aggressive development strategy may be appropriate. In the seed sector, government has a role to protect intellectual property rights and to ensure orderly markets (truth-in-labeling), but concerns about seed quality and variety performance can be left to the market. In the US, even inspection of seed for export is done by the private sector. Romania has taken a significant step in that direction by accepting EU Common Catalogues. Representing the private sector, the Pioneer seed company delegate noted that a new variety is normally effective in a region that crosses national borders, and that seed companies are able to identify what works best where.

While over-regulation is a danger, there was a consensus on the need for orderly and reliable government institutions and legal frameworks. Novartis seed company commented that the quality of Hungary's seed regulatory institutions was a strong attraction for private investment in Hungary. Governments were enjoined to allow farmers to choose inputs and technology in competitive markets and to focus regulation on public health and environmental concerns. They should not require approval based on performance or efficacy, as these are attributes which can better be judged by farmers than by bureaucrats.

### **Closing Session: What Can the World Bank Do to Support the Efforts of Accession Countries Towards Joining the EU?**

The options for World Bank involvement in the accession process include: (a) no involvement; (b) intellectual input/policy advice; and (c) finance for investment projects to improve sectoral efficiency. Country representatives were asked to make brief presentations on specific policy changes made until the present and current priorities.

**Hungary** signed an association agreement with the EU in 1991 with the clear intention of joining the EU after a transition period. Negotiations began in 1996, and the Ministry of Agriculture has established 15 working groups organized by product (NGOs, professional organizations, academics are represented). Current issues focus on policy harmonization for agriculture and fisheries. A Pre-Accession Fund is currently being set up by the EU to modernize the agro-food sectors and promote competitiveness in the ten candidate countries, providing 500 million ECU annually. The World Bank and Hungary are currently discussing the preparation of a special program to promote institutions necessary for integration into the EU (veterinary, phytosanitary services, food quality control institutions). This institutional support should be strengthened and accelerated. Moreover, the government is currently deciding how to allocate funds that will be forthcoming from the EU's Pre-Accession Fund; these funds may be insufficient, in which case the government would look to the World Bank for additional resources.

**Slovenia** has established a strategy for EU accession and the preparation of operational programs (programs of direct and area payments not based on current production) has been given priority. Weaknesses in current preparations are in the development of a rural development program and in organizational capacity. Working groups have been set up, but there is apparently difficulty in finding people with the skills necessary to prepare for EU accession. International support should focus on: information and statistical systems, a land registry, market information systems, the need for structural reforms within the food industry and farm sector, and institution building. The restructuring of the farm sector in Slovenia has been problematic, and there are a large number of small farms.

Preparations in **Slovakia** have been similar to those of Hungary. Possible World Bank assistance should focus on policy support to formulate agricultural policies (prior to accession) compatible with the CAP, as it will be in the future and to establish a strong analytical framework on which to base this policy. The formulation of an intermediate policy could be supported by the World Bank. Second, assistance to formulate an investment program to modernize food and vegetable production is required. While Slovakia has a good resource base, investment is required in processing and storage capacity. Third, market infrastructure is weak and the marketing chain is characterized by large margins taken by processors and traders. A future conference should focus on structural issues, i.e. how is the structure of the agriculture sector in candidate countries different from those structures prevailing in the EU, and what is the expected impact on these structures of EU accession?

**Romania** identified land titling as a major constraint to structural adjustment. While the land reform program initiated in 1991 has been one of the most progressive in the region, fragmentation has negatively affected the competitiveness of the sector. A new policy of market-oriented land reform is to be introduced in a few months, but assistance is needed to promote functioning land markets. Second, farmers receive little or no government support, and due to lack of organization, have little voice. Third, the lack of financial resources and very high interest rates make investment difficult; access to other inputs is also limited, and preference is still given to state farms. Priority areas for World Bank assistance are identified as follows: formulating a legal framework for EU accession; assisting privatization of state enterprises/farms; financial sector reform; support to set up co-operatives and farmer organizations; strengthening of research, training; education and extension; information systems and policy advice (especially through this kind of workshop).

Delegates from **Poland** identified policy advice on trade and finance as areas where World Bank support would be useful. Areas for further study include the formulation of investment programs and projects and the adoption of EU standards in the modernization of agriculture. Regardless of the time frame for EU accession, Poland must expand its trade with the EU prior to accession; investment in, and expansion of, dairy and meat processing, for which Poland is quite competitive, would promote trade and would encourage the growth of rural non-farm employment. As in other accession countries, investment needs for infrastructure are very large. The seed sector in particular

is in need of reform, and the role of the government needs to be clearly identified. There is a need to improve national capacity in research and extension, and a desire to reform public breeding and research institutions. On the other hand, a current dilemma is how best to proceed with commercialization/privatization of the seed sector without disrupting supply. More broadly, Poland needs to develop an agricultural strategy, and needs to link research and extension with producers and the agro-processing sector.

**Bulgaria** will become a member of CEFTA on January 1, 1999. A number of criteria for EU accession still need to be met in Bulgaria. The economic criteria are based on the need to improve competitiveness and efficiency. This requires progress in land restitution, the functioning of land markets, investment to upgrade standards, and farm restructuring. Accession also requires legal and administrative aspects, and the formulation and implementation of legislation needs to be harmonized with the EU. The mechanisms of the CAP need to be introduced, and institutional capacity building efforts urgently need to establish the structures and procedures appropriate to the EU. The statistical system to monitor agricultural performance requires assistance in terms of data collection and analysis. Bulgarian representatives to the workshop emphasized the need for candidate countries to meet on a regular basis to share experiences and to co-ordinate a common negotiating position. There should be research carried out on the benefits that would accrue to the current EU as the result of eastward enlargement, in order to build public support in the EU for accession.

Government support to the agriculture sector in the **Czech Republic** is currently focusing on establishing support/guarantee funds to strengthen the rural finance system. There may be scope for World Bank assistance in these areas. In order to increase competitiveness, support for marketing and the development of downstream industries is required. A major obstacle to growth in agriculture is the structure of the agro-food sector, which is dominated by large newly privatized companies that do not behave as private companies (i.e. the solution to the problems in agriculture lie beyond the scope of agriculture policy alone). Reform of the financial sector is also required to increase the flow of financial resources to the private sector. While the legislative framework exists, there is little operational experience. Structural problems in agriculture arise from the complicated structure and management of the large agricultural companies and co-operatives that dominate the sector. Modernization of the sector also relies on overcoming rigidities in agricultural asset markets (land and non-land assets). Moreover, the weak ability of farmers to organize prevents the development of economically viable farm units able to compete in external markets. To overcome these constraints, investment in agriculture and agro-processing is required.

While **Lithuania** shares many characteristics with Central European countries, the Baltic countries have strong ties with the Nordic countries and Russia. Current needs focus on policy advice (increasing the advisory and regulatory role of government in private markets), training and extension, and increased access to finance in rural areas. World Bank technical assistance in input policy reform has been very useful.

**Latvia** proposed that the next workshop cover the experience of World Bank rural development projects in the region. There are important lessons to be learned from a number of projects in Latvia that support extension services, rural finance, and land titling/registration. In contrast to other country assessments, Latvia needs assistance for training and education to prepare for EU accession, rather than institutional capacity building. The World Bank financed rural development project has been very successful and assistance should build on this experience, supporting investment in the agro-processing sector.

The World Bank is already supporting EU accession in **Estonia**. Both an agricultural finance project and a sector study and economic memorandum are focusing on this topic. A current priority is to improve the efficiency of farming, and further investment requires not only the expansion of the provision of finance in rural areas (credit lines for farmers), but also progress in the process of land reform and the restructuring of agriculture.

### **Concluding Comments by Participating Organizations**

#### **World Bank**

The timing and speed of agricultural restructuring prior to EU accession is important, and a possible focus for the next meeting. Second, the lack of efficiency in agriculture is common across accession countries, as is the uncompetitive nature of agricultural processing and marketing. Clearly, full integration with the EU will cause great difficulty; and governments need to invest immediately to improve efficiency in order to enter the EU on a more competitive basis.

The Eastern enlargement of the EU can be beneficial not only for the accession countries, but also for current EU members and the global food and agricultural system, as well. The magnitude of potential benefits will depend on whether the enlargement is based on well-designed and properly implemented agricultural policies in both the respective countries and the EU.

EU enlargement will result in a broader and higher-level integration of European agriculture. This integration will create an environment conducive to further liberalization of global agricultural trade, and will most probably lead to further opening of European markets.

CEFTA and BFTA are important steps towards European integration in agriculture. The CEFTA experiences are already indicating the most important impact of joining the EU; namely, increased competition on the domestic agricultural markets of the respective countries. Recent intra-CEFTA trade developments demonstrate that the countries with more competitive agriculture have been able to better utilize the export opportunities of the enlarged market. Some of the countries have recently introduced trade policy measures that do not fully conform with CEFTA rules in an effort to reduce the impacts on domestic producers of increased competition from imports. Such

measures will not be possible after EU accession. Increased import penetration in these markets is due, to some extent, to delayed reforms and the resulting lower competitiveness, but may also be a natural result of comparative advantages of the various CEFTA members. Increased competition and lower prices due to imports from member countries is a necessary condition to realize the benefits of preferential regional trade arrangements.

It was generally agreed that efficiency and competitiveness improvements in the food and agriculture sector are the major tasks ahead for accession countries in preparing for EU membership and the new WTO round. This will require not only policy adjustments, but also very large investments. The sources of these investments will be primarily domestic, but support from external sources will also be necessary.

The improvement of competitiveness and efficiency should have priority over the quick introduction of CAP instruments. It is rather important that long-term programs aiming at the enhancement of competitiveness not be overshadowed by measures intended to resolve short-term market and social problems in the rural sector.

The introduction of new technologies embodied in agricultural inputs is an important way of improving competitiveness. Harmonization with EU standards (such as adoption of the EU Common Catalog for Seeds) and simplification of rules and regulations used in the trade of inputs for agriculture is a quite important task in the preparation for EU accession.

The agenda for policy analysis includes: information systems, statistical systems, legal framework, food quality standards, analysis of the impact of reforms and EU accession, impact of WB projects in rural areas, potential gains from EU accession, analysis of farm structures and producer organizations, global experience of regional integration.

## **European Union**

Enlargement of the EU to the east has never been undertaken before, and there should be no complacency in this regard. To be competitive, accession countries need to reform not only productive structures, but also marketing and agro-processing systems. This process requires time, and candidate countries need to use the time available before accession to undertake restructuring of agriculture sectors. In terms of international assistance, grant money from the EU should be used for institution building while World Bank finance should be concentrated in revenue-generating investments.

Although a wide variety of farm/agriculture sector structure currently exist within the EU (and will continue to exist), accession countries must focus effort on eliminating bottlenecks to efficiency through structural changes. The World Bank and FAO have a clear role in providing objective policy advice (which the EU can not) and information during the process of enlargement. Because we, as institutions, are poorer than we were in the past (taxpayers are more demanding of value for money), and because the capacity

to finance needed investments through the public sector has declined, different types of funding need to be carefully analyzed. For each activity appropriate types of funding should be identified. Moreover, there needs to be more broad-based discussion of the respective roles of the public and private sectors, and what sort of legal framework is appropriate (for the seed sector and food quality controls in particular).

Much of the debate during the workshop focused on the CAP and the impact of enlargement on CAP support payments. The EU asserted that the CAP was developed at a point in history, under conditions that no longer exist. New members can not expect the same measures and the same level of support. The idea that most financing of domestic agriculture will come from the EU is not sound. Sub-sectors need to be analyzed carefully in order to identify comparative/competitive advantages that should be promoted, rather than relying on subsidies. The services surrounding agriculture need to be assessed as well; in particular financial sector instruments, land markets and cadastral capacity, legal security, and land titling are required to encourage private sector involvement.

### **Food and Agriculture Organization**

The role of FAO in providing technical assistance and policy advice can be summarized as follows: provision of training of trainers programs; CODEX support in the context of WTO negotiations; price and trade policy advice; assistance to prepare agricultural investment projects via the FAO Investment Center; provision of a forum for discussion; strengthening agricultural statistical systems; and establishment of information systems going beyond the World Agricultural Information Center (WAICENT, an information system providing governments and policy makers with data on global production, demand, supply, trade, prices) to provide information to farmers themselves in order to guide production decisions and improve efficient resource allocation.

# Chapter Two

## CEFTA, BFTA and Agricultural Trade in the CEEC<sup>1</sup>

By Tim Josling, Stefan Tangermann, and Henning Twesten

Since the beginning of this decade the transition economies in Central Europe have been facing dramatic changes on external markets. With the implementation of trade regimes equivalent to those in western economies and the breakdown of the Council of Mutual Economic Assistance (CMEA), trade among the Central European Countries declined dramatically. In order to halt that decline and strengthen their economies prior to EU accession, Poland, Hungary and Czechoslovakia (at that time still united) formed the Central European Free Trade Agreement (CEFTA) in 1992. At a later stage Slovenia (1996) and Romania (1997) acceded to the agreement, Bulgaria is about to join and other countries (Lithuania, Macedonia, Ukraine) also wish to become CEFTA members. Another trade agreement in the region, the Baltic Free Trade Area (BFTA), between Estonia, Latvia and Lithuania was formed in 1994, again in order to both avert a total collapse of their mutual trading relations and to strengthen their economies prior to EU accession. Both agreements contain provisions on liberalizing agricultural trade between their members. They can therefore be regarded as examples of more recent regional trade agreements which have refrained from excluding the politically sensitive agricultural sector as it had been the case for example in the European Free Trade Association (EFTA).<sup>2</sup>

The aim of this chapter is to explore the role the regional trade agreements in Central Europe can have in agricultural trade and for the agricultural sectors in their member countries. Moreover, the chapter will analyze the contribution which regional integration may make to the efforts of Central European countries both to improve the international competitiveness of their agricultural sectors and to prepare for EU membership. Hence, for the purpose of this chapter regional integration in Central Europe is regarded as a more or less temporary device to prepare for EU accession. The chapter does neither attempt to judge whether CEFTA or BFTA are desirable in themselves, nor does it try to assess the usefulness of EU accession.

This chapter describes the agricultural provisions in the treaties of both CEFTA and BFTA. It continues with a look at the impacts regional trade liberalization in Central Europe may have on domestic agricultural policies. The chapter then examines the CEFTA agreement in

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<sup>1</sup> This chapter is a condensed version of the paper presented at the Budapest Workshop, the complete text of the paper is available through the World Bank upon request.

<sup>2</sup> For a comprehensive analysis of the treatment of agriculture in regional integration arrangements see Josling (1998).

more detail<sup>3</sup>, starting with a survey of the pattern of trade in agricultural commodities of its major member countries, followed by an analysis of tariff levels and preferential margins for agricultural products. This empirical analysis is followed by an evaluation of likely trade effects for selected commodities resulting from concessions granted under the CEFTA treaty. Based on these findings the chapter concludes with a discussion of the role of regional integration in Central Europe as a means to improve competitiveness in the rural sector.

The methods used and the findings presented in this chapter are based on a more comprehensive study prepared on the same subject by Tim Josling, Stefan Tangermann and Henning Twesten for the EU Accession Rural Sector Initiative of the World Bank in May 1998.<sup>4</sup>

## **Part I: BFTA, CEFTA and Agriculture**

The countries of Central Europe are well acquainted with regional integration. They had close trade relations and even closer economic and political arrangements with each other as members of the CMEA or as parts of the former Soviet Union, as it was the case for the Baltic countries. With the collapse of these arrangements and the installation of (conventional) trade barriers used in western countries trade relations changed significantly. In agriculture, all countries implemented trade barriers on an increasing scale<sup>5</sup> restricting trade in areas where it had flowed more freely before. The wish to revive these traditional trade relations and to prepare for EU accession was a major reason for the formation of regional trade agreements. Besides, the establishment of regional integration schemes can also be regarded as a response to increasing protectionist pressure in the countries.

### **BFTA**

The Baltic Free Trade Area (BFTA) was signed by Estonia, Latvia and Lithuania in 1993 and came into force on April 1, 1994. Early intentions to build up a customs union between the member countries did not come into effect and all three countries have maintained their individual trade barriers with third countries. Trade between the Baltic countries, however, was fully liberalized for most sectors. Agriculture remained one of the major exceptions in the original arrangement. It took another two years to reach agreement on the inclusion of agriculture into BFTA. The agricultural provisions, known as Baltic Agricultural Free Trade Agreement (BAFTA), were signed in June 1996 and came into force on January 1, 1997. BAFTA calls for a total elimination of trade barriers for agricultural commodities between the member countries, but allows each member country to regulate external tariffs and domestic agricultural policies individually. Rules of origin were agreed in order to guard against trade deflection. Safeguard

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<sup>3</sup> The inclusion of agricultural trade in BFTA is so recent that there is no statistical evidence on which to base a judgement. However, the discussion of policy options is relevant to the BFTA countries as well.

<sup>4</sup> See Josling et al (1998).

<sup>5</sup> See Hartell and Swinnen (1997)

measures can be taken by BAFTA member countries, subject to consultation. One of the major problems in BAFTA has been and still is the difference in agricultural support prices across the countries, leading to trade flows driven by price differences rather than by consumer demand. In fact these problems have only recently, due to falling prices in the course of the Russian crisis, turned out to be so severe that the BAFTA deal may be suspended.<sup>6</sup>

## **CEFTA**

The decision to form a regional trade agreement was taken at a summit meeting of the heads of states of Czechoslovakia, Hungary and Poland at Visegrad in February 1991. The actual agreement was signed almost two years later in December 1992. Since then Slovenia (1996) and Romania (1997) acceded to the treaty and Bulgaria is about to join as well.

The objectives of the agreement were to revive trade between its members, to prepare for EU accession and to avoid possible distortions of trade among the CEFTA countries resulting from the bilateral trade preferences each of the Central European countries has with the EU under the Europe Agreements. Unlike BFTA, the CEFTA treaty does not call for an immediate removal of barriers on trade between its members, but the contracting parties agreed on a definite timetable for gradual reductions of tariffs which were to be removed completely by the year 2001. These reductions were implemented through bilateral offers on a reciprocal and almost symmetrical basis. Throughout the years CEFTA has been amended several times. All these amendments have in common that they accelerated the liberalization of trade between CEFTA members by bringing forward the deadlines for the complete removal of tariffs. This, however, was mainly the case for industrial products of which about 90% were traded freely in 1997.

Incorporating agriculture in the CEFTA turned out to be more difficult. In fact agriculture is regulated in a separate chapter of the CEFTA treaty, which differs significantly from that for non-agricultural products and which has been amended twice, the latest revision being that of December 1995.<sup>7</sup> Given the currently applied Second Amendment, concessions on agriculture comprise three categories of agricultural products which are treated differently regarding tariff reductions. The first group includes agricultural products on which the CEFTA members agreed multilaterally to remove tariffs without quantitative limits by January 1, 1996 (List A). The second category comprises commodities which are produced locally but not deemed to be very sensitive (List B). These products are subject to unified tariffs between 3% and 18%, which is in most of the cases well below the MFN tariff level. The third group of more "sensitive" products is subject to bilateral tariff concessions, often limited by quotas (Lists C/D). All these concessions make up for about 80% of agricultural trade between the CEFTA members, still leaving several commodities outside the concession lists. The CEFTA members were also considering an acceleration of concessions for agricultural products by introducing duty-free tariff quotas on agricultural products which were to enter into force on January 1, 1999.

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<sup>6</sup> See *Agra Europe*, *East Europe Agriculture and Food*, September 1998.

<sup>7</sup> For a detailed documentation of the history the agricultural provisions in CEFTA see Josling et al. (1998)

However, only recently this has been postponed due to increasing domestic pressure in a situation of low prices caused by the Russian crisis.<sup>8</sup> Another indication that agriculture is a highly sensitive issue in CEFTA is the fact that Slovenia did not implement tariff concessions granted for products on lists A and B until April 1998, claiming that this was not politically possible given the economic situation of agriculture in Slovenia.

Safeguards are allowed as long as they are implemented in accordance with the WTO procedures. That safeguard provisions are highly relevant is proven by the fact that Poland, Slovenia and Romania unilaterally withdrew CEFTA concessions granted on imports from Hungary, with reference to the safeguards provisions in the CEFTA treaty.<sup>9</sup> Moreover, the CEFTA Agricultural Chapter attempts to ensure that the agreement does not undermine domestic policies in the member countries, an issue that is discussed in the following section.

## **Part II: Agricultural Policy Integration in CEFTA and BFTA**

Regional integration does not only foster closer agricultural trade relations among participating countries. It also has an impact on domestic agricultural policies pursued in member countries. This is in particular the case for free-trade agreements where trade between the countries concerned is liberalized, while both border protection vis-à-vis third countries and national policies are decided and implemented individually by the member countries. The more these national policies differ the more pressure on them is likely to occur since regional free trade is changing the trading environment and thus the conditions for the maintenance of policies explicitly regulated in the free-trade agreements. Both BFTA and CEFTA are free-trade agreements and domestic policies differ significantly among their members.<sup>10</sup> Thus problems result from inconsistencies between regional free trade and national agricultural policies are likely to occur. This section describes these problems and discusses the options for dealing with them.

### **Differences in MFN Tariffs**

The first potential inconsistency is likely to arise if individual countries of a free-trade agreement apply different MFN tariffs on imports from countries not participating in the agreement. Imports from third countries will tend to flow into the region through the member country with the lowest external tariff, thereby undermining higher external MFN tariffs of other countries in that region. The lower the restrictions on trade in the region are the more external tariffs differ across the participating states, and the more likely that this "trade deflection"

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<sup>8</sup> See *Agra Europe*, East Europe Agriculture and Food, September 1998.

<sup>9</sup> Poland lifted amongst others the tariffs on Hungarian, Czech and Slovak feed maize in January 1998. Slovenia withdrew its CEFTA concession on Hungarian wheat in June 1998, and Romania raised its tariffs on wheat and flour imports from all destinations (except the EU) in August this year. See *Agra Europe*, East Europe Agriculture and Food, March 1998, June 1998 and August 1998.

<sup>10</sup> See Twesten (1997), Josling et al (1998)

occur. In particular, if the MFN tariff for a given product in a partner country plus the preferential tariff vis-à-vis that partner country plus transaction cost is lower than the MFN tariff of the importing country, trade deflection is likely to occur, i.e. the good will be trans-shipped through the partner country. Given the fact that the MFN tariffs for a lot of agricultural products differ significantly among both CEFTA and BFTA countries, this problem of arbitrage trade is likely to exist in these FTAs.

There are, of course, options to overcome the problem of trade deflection, the most prominent one being rules of origin. Rules of origin are usually implemented in regional trade agreements in order to differentiate between products produced inside and outside the region and to ensure that only products originating in the region qualify for preferential treatment. However, in order to guarantee that trade deflection is not occurring while "appropriate" trade can flow freely, rules of origin are usually rather complex. This is in particular the case for the treatment of intermediate inputs which are imported from outside the area and used for finished products exported from one partner country into the other. Besides, rules of origin are likely to cause high administrative cost which, again, can impose significant trade distortions. Moreover, in agriculture rules of origin may not be able to avoid trade deflection completely. Except for products typically produced outside the area (e.g. tropical fruits), it is rather difficult to trace the true origin of homogenous commodities such as agricultural bulk products. Moreover, there is still the possibility that the country with the lower MFN tariff substitutes its domestic produce for imports from third countries and exports the commodities produced domestically to the partner country with the higher MFN-tariffs. This type of "legal" arbitrage is relatively attractive for agricultural raw products since they are highly homogeneous and therefore easy to substitute. Whether such legal trade deflection can become a problem depends to a large extent on the market size of the low tariff member of an FTA and its resulting potential to substitute enough domestic produce for imports. No such case of legal trade deflection has been explicitly reported so far in CEFTA or BAFTA. However, it is well conceivable that forces like this are behind some of the increasingly frequent agricultural trade rows in CEFTA and BAFTA.

### **Support Prices and Export Subsidies**

Trade deflection resulting from differences in MFN tariffs is not a problem from the economist's point of view since it implicitly reduces protection. However, arbitrage may cause artificial trade and thus severe problems if the high tariff country also pursues other domestic policies such as support prices in combination with export subsidies or intervention buying. If the institutional price in one member country is higher than the minimum price plus tariff plus transaction costs in one other member country, there will be a strong incentive for producers in the low price country to sell their goods in the partner country, at the higher price prevailing there. Hence, in the high price country the minimum price will get under pressure and can only be maintained by building up stocks or dumping excess supply onto the world market. In particular, if the low-price country is a net exporter it will divert its exports towards the FTA member country with a higher support price. This can result either in price increases in the low-price country or, if the low-price country itself is applying a support price scheme, release its government from the task to act as a buyer in order to guarantee that support price. In the first

case producers in the low-price country (and traders) receive rents at the expense of the high-price country. In the latter case the government in the low-price country saves money. The situation even worsens if "legal" trade deflection is possible. Exports from the low-price country into the high-price partner will create an incentive for imports into the low-price country from the world market. Thus, in that case not only producers in the low-price country but also exporters not participating in the FTA could profit under certain conditions, at the expense of the high price countries.

In other words, differences in institutional prices in combination with preferential market access can well create problems in the high-price country, since imports will be attracted and prices will get under pressure. In order to guarantee the high institutional prices it has to build up stocks or has to export with subsidies. The typical measure to curb budgetary outlays, i.e. domestic supply management, does not help very much since it only affects domestic supply but not imports. In both CEFTA and BAFTA, support prices differ significantly among member countries and therefore create the potential for tensions.

Export subsidies within FTAs are very questionable as well. They are not only costly and highly distortive, they can also create circular trade within the regional arrangement, if the high-price member grants them on exports into partner countries. In addition to artificial trade, export subsidies within a regional arrangement can also result in a massive income transfer from the subsidizing country to consumers in the importing FTA member. In BAFTA, the incidence of circular trade seems less likely since export subsidies on intra-trade are explicitly prohibited. In CEFTA, though, this is not the case. Indeed, Hungary for example is granting subsidies on intra-CEFTA wheat exports, and they appear to be one reason for the recent trade disputes and the unilaterally withdrawal of CEFTA preferences by some importing CEFTA countries.<sup>11</sup>

The question then arises how such problematic arbitrage trade can be avoided. A solution might be to restrict, at least partly, trade in those products where arbitrage may happen. Although the CEFTA preference system, with its different product lists and hence exclusion of many products from "deep" integration, is an example for such a solution, it definitively counteracts the spirit of a FTA and its positive effects. Moreover, it gives a wrong incentive in respect to efficient factor allocation. For the same reasons, restricting imports by quantitative measures such as the tariff quotas under CEFTA is not a very attractive solution either. The only option which not only cures the symptoms but solves the underlying problem is a harmonization of support measures adopted and in particular support levels applied across all member countries. Such policy harmonization would certainly reduce a lot of economic costs and foster the aim of the CEFTA members to create closer integration. It may be the only way to avoid the growing agricultural trade tensions which have recently built up among the member countries in both CEFTA and BAFTA. On the other hand, agricultural policy harmonization would also require major political energy and could potentially distract attention from other equally important issues. We shall briefly come back to this issue in the concluding section.

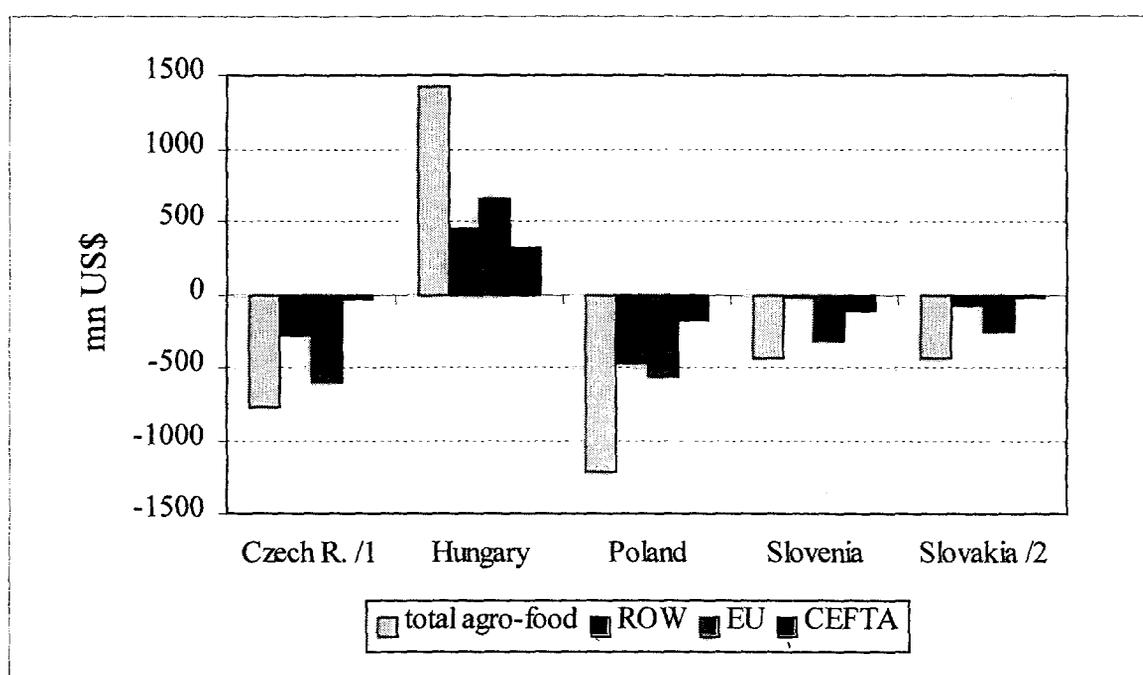
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<sup>11</sup> See Agra Europe, *East Europe Agriculture and Food*, September 1998.

### Part III: Agricultural Trade Flows in CEFTA

Except for Hungary, all CEFTA-5<sup>12</sup> countries are net importers for agricultural products, with the highest deficit being that of Poland, accounting for about US \$1200 million. Hungary's total net exports in agriculture on the other hand are worth around US \$1400 million. What is true for overall agricultural trade also tends to be true for agricultural trade with individual regions, see Figure 2.1. CEFTA countries which have a deficit in total agricultural trade are also net importers in trade with the EU, the CEFTA partners and the rest of the world. The same holds for Hungary which is a net exporter in agricultural trade with all regions (**Figure 2.1**). Judging by net trade position, the EU plays a major role as a trading partner, whereas the other CEFTA partners are of less importance for the individual countries.

**Figure 2.1: Regional Breakdown of Net Trade Position CEFTA-5, 1996**



Notes: /1: excluding trade with Slovakia; /2: excluding trade with the Czech Republic

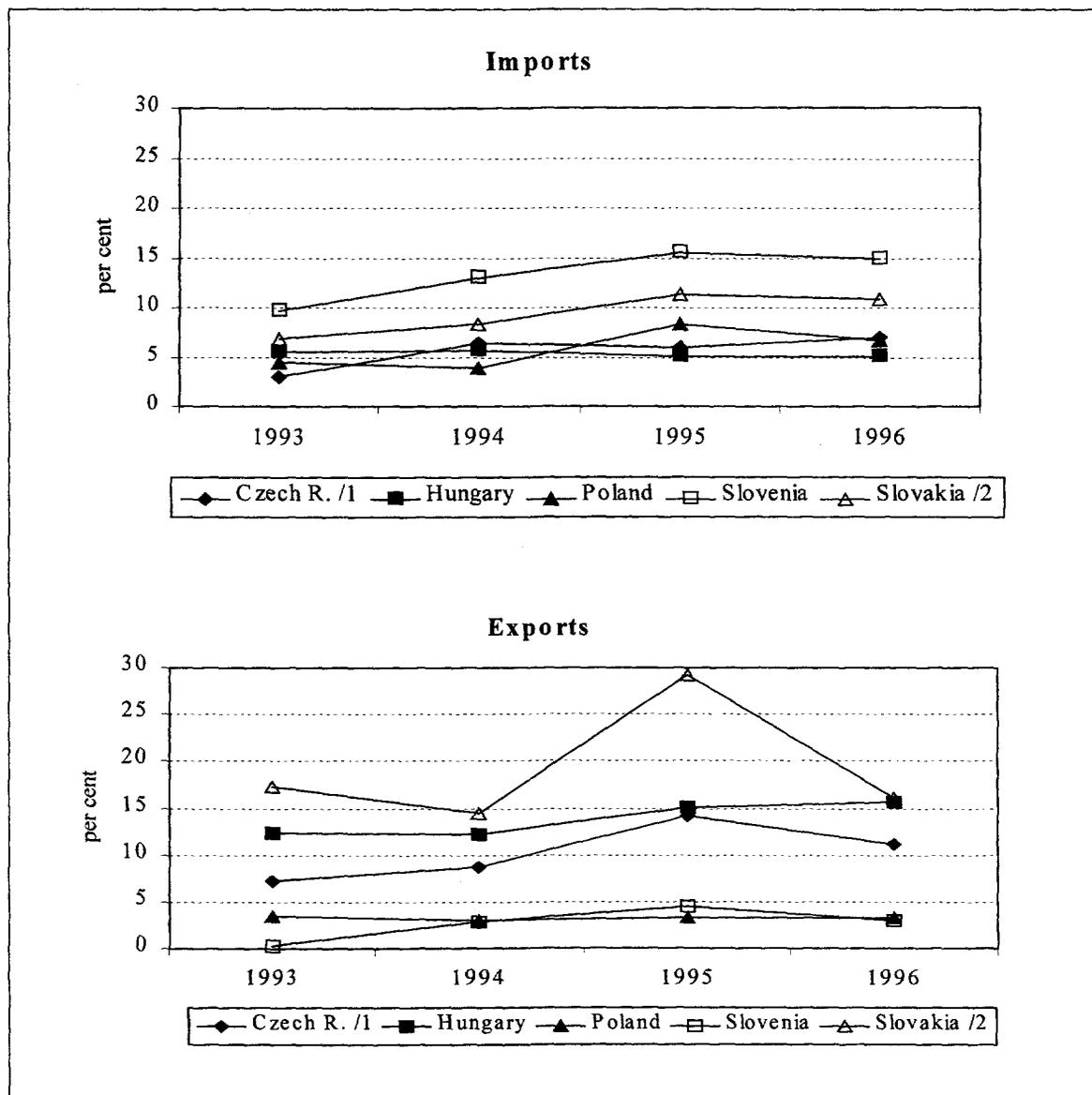
Sources: Ministry of Agriculture of the Czech Republic (1998), Hungarian Ministry of Agriculture, Office of Market Regime (1998), Polish Centre of Foreign Trade Information (1997), Slovak Customs Directorate (1998), Office of Statistics of Slovenia (1997), authors' calculations

An examination of gross trade flows of the individual countries with their CEFTA partners reveals the same picture (**Figure 2.2**). The shares of CEFTA trade in total agro-food imports range from 5% for Hungary to 15% in Slovenia in 1996. In the case of Hungary, the only net exporter in the region, most of the imports originate from the rest of the world (50%) followed by the EU (43%). For all the other countries, imports from the EU have the highest

<sup>12</sup> These are all current CEFTA members except Romania, which is not included in this empirical part due to lack of data.

portion in gross total imports (Czech Republic: 53%, Poland: 47%, Slovakia: 36%, Slovenia: 52%). Though still quite low, the shares of CEFTA imports have expanded significantly in all CEFTA countries throughout the whole period between 1993 and 1996, except for Hungary.

**Figure 2.2: Share of Intra-CEFTA Trade in Gross Trade Flows, 1993 – 1996**



Sources: Ministry of Agriculture of the Czech Republic (1998), Hungarian Ministry of Agriculture, Office of Market Regime (1998), Polish Centre of Foreign Trade Information (1997), Slovak Customs Directorate (1998), Office of Statistics of Slovenia (1997), authors' calculations

Interestingly enough this is not so much the case for 1996, i.e. the year the Second Amendment of the CEFTA treaty went into force. The share of exports to CEFTA partners in total agro-food trade is comparable to that of the import shares as far as size and range is concerned (Figure 2.2, lower section). However, the ranking differs considerably, with Slovenia

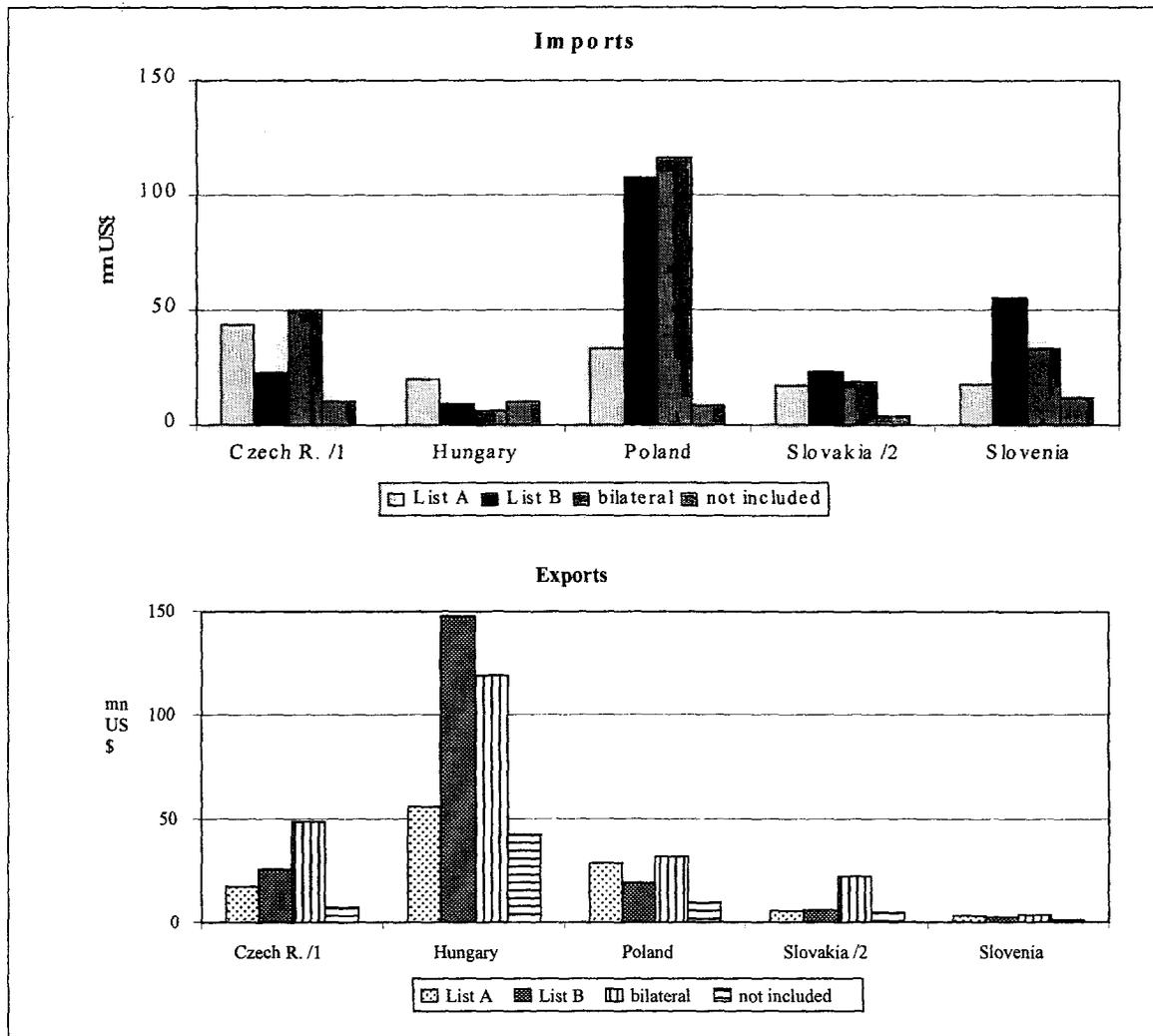
having the lowest share of intra-CEFTA exports in total exports, accounting for only 3%, closely followed by Poland, the largest importer in the region. On the other hand, Hungary's share of exports to CEFTA partners in total exports is quite noticeable, slightly above 15%. It therefore appears that the region is quite important for Hungarian agriculture. However, the EU was again by far the most important region of destination for exports from most of the countries in 1996 (Czech republic: 36%, Hungary: 45%, Poland: 47%, Slovakia: 17%, Slovenia: 27%). Only Slovenia exports more to the rest of the world, and for Slovakia the Czech Republic is the most important importer (47%). For Poland (throughout the whole period shown in the graph) and Slovenia (between 1994 and 1996), the share of exports to partners has not changed much. The same holds for Slovakia although its export shares are varying quite significantly.<sup>13</sup> The slight expansion of CEFTA export shares in the other countries is noteworthy. This is in particular the case for Hungary as the largest exporter in the region. It seems that Hungary is gaining from CEFTA treatment, since it is the only country which managed to increase its exports in 1996, the year the Second Amendment went into force.

When expressed in absolute terms and broken down by product groups covered by the CEFTA concession lists, as shown in **Figure 2.3**, the relative importance of the individual members in intra-CEFTA trade stands out more clearly. With respect to imports, Poland is the predominant country in the region. Most of the products imported in 1996 are covered by the multilateral list B and by the bilaterals (lists C/D), which contain the "more sensitive" agricultural commodities. Due to the fact that only a few products are not covered by any of the concession lists, the portion of this group in Polish imports is relatively small. Given the fact that list A contains to a large extent products not produced in the region, the low portion of that group is not much of a surprise. The composition of imports of the other countries is similar to that of Poland, though on a much lower level. With regard to exports, those from Hungary were by far the largest in 1996, mainly in list B and the bilaterals. Again, the products covered by list A or not included in any of the concession lists are of relatively less importance.

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<sup>13</sup> In 1995 the shares of Slovak exports to Poland and Slovenia expanded significantly, but decreased again in 1996.

**Figure 2.3: Breakdown of Intra-CEFTA Trade by Concession List, 1996**



Notes: /1: excluding trade with Slovakia; /2: excluding trade with the Czech Republic

Sources: Ministry of Agriculture of the Czech Republic (1998), Hungarian Ministry of Agriculture, Office of Market Regime (1998), Polish Centre of Foreign Trade Information (1997), Slovak Customs Directorate (1998), Office of Statistics of Slovenia (1997), authors' calculations

#### Part IV: Tariffs and Preference Levels in CEFTA

The structure of preferential tariffs for agricultural and food products under the CEFTA treaty is rather complex. As noted above, it consists of two multilateral lists, one covering products which are traded duty free (List A) and one comprising goods which are traded at reduced tariffs (List B). In addition, the CEFTA partners exchanged concessions on a bilateral and almost reciprocal basis for products which are regarded as being "more sensitive" (List C/D). Preferences granted under the bilaterals are not as far-reaching as those granted under list B and/or are often limited to given quotas. A look at these lists with respect to the products they contain provides a first impression of the preference structure under CEFTA. List A includes to a

large extent products which are not produced in Central Europe and which have to be imported from the world market, such as citrus fruit, coffee and tea. Given that, the granting of zero tariffs is not much of a surprise. List B, however, covers commodities produced in the region, such as barley or margarine. As a rule, preferential tariffs on List B are well below MFN tariffs. Thus, preference margins are significant for these products. Examples for commodities on the bilateral lists (C/D) are poultry meat, apples, sunflower-seed oil and beer, all regarded as "sensitive" by the CEFTA members.

In order to get an overall impression of the magnitude of CEFTA preferences, simple arithmetic averages have been calculated of the tariffs the countries levy on regional trade, on trade with the EU and on trade with the rest of the world, i.e. on a MFN basis.<sup>14</sup> The results of that calculation are given in **Table 2.1**.

**Table 2.1: Arithmetic Unweighted Averages of Tariff Rates for Agricultural and Food Products in CEFTA Countries, Percentage Ad Valorem Equivalents**

Exporter →	MFN	EU	Poland	Czech Republic	Slovakia	Hungary	Slovenia	Romania
Importer ↓								
Poland	36.2	34.8		9.6	9.6	14.6	20.8	21.4
Czech Rep.	10.7	10.2	5.7		0	6.2	6.2	6.8
Slovakia	10.7	10.2	5.8	0		6.1	6.2	6.8
Hungary	32.13	32.05	9.2	10.3	10.3		11.6	12.1
Slovenia	13.91	9.96	6.9	5.9	5.9	7.0		7.1
Romania	50.4	46.5	19.2	19.3	19.3	19.7	20.4	

Sources: EU-Commission (1998), CEFTA Agreement, authors' calculations.

With regard to MFN tariffs, Romania has by far the highest level of protection, slightly above 50%, followed by Poland, Hungary, Slovenia<sup>15</sup> and the Czech-Slovak Customs Union. All CEFTA countries grant minor tariff preferences to the EU, whereas the concessions exchanged under the CEFTA treaty are significant, i.e. mainly below 50% of the MFN tariff. It can therefore be expected that the resulting preference margins will have a considerable effect on regional trade. However, some concessions are restricted by quotas, which is not reflected in this analysis. Where that is the case, the potential of trade creation and diversion resulting from these preferences will therefore be limited. However, some of these quotas have not been fully utilized

<sup>14</sup> This approach is definitively not satisfactory. However, since use of trade values as weights would systematically underestimate high and prohibitive tariffs, and because domestic demand or supply data on the disaggregation level of the tariff data (6-digit, 8-digit or even 9-digit) were not available, the unweighted average has been calculated.

<sup>15</sup> With respect to the average MFN tariff of Slovenia, the shortcomings of simple averaging become particularly obvious. For a lot of products, Slovene tariffs are well above those of the other countries. These high tariffs, though, are outweighed in averaging by a relatively large number of low tariffs on less sensitive products.

so far, which supports the reasoning that the preference margins presented in the table remain valid even in the case of some increases of intra-CEFTA trade beyond current levels.

### **Potential Impact of CEFTA on Agricultural Trade**

The formation of free-trade areas can stimulate three different responses, i.e. trade creation, trade diversion and trade deflection. For trade creation to occur it is necessary that extra imports from a partner country, stimulated by reduced tariffs, will be large enough to lower domestic prices, thus resulting in lower supply and higher consumption in the importing partner country. Trade creation results in a welfare gain, benefiting both the importing country concerned and the world on aggregate. However, expanded imports from a partner country can also divert trade by substituting imports from third countries whose market access conditions are not improved. Such trade diversion has negative welfare implications for both third countries, which lose market share, and for the importing country, which now buys more expensive imports. It thus reduces welfare for the world on aggregate. Trade deflection, finally, results from transshipments of imports from third countries through the lower-tariff country to the higher-tariff member of the free-trade area. As already noted above, free-trade agreements often contain rules of origin in order to block this arbitrage trade. However, these provisions can well be invalidated by a substitution of imports from third countries for domestic products in the lower-tariff member.

All these three types of trade effects are not mutually exclusive and can occur simultaneously. Trade diversion and trade creation are actually closely related. Trade diversion is a prerequisite for trade creation: imports from the rest of the world are replaced by imports from partner countries, which may become so large that they begin to depress the price in the importing country, resulting in larger total imports. On the other hand, trade diversion can happen whether or not trade is created. No trade creation occurs if imports from partner countries, which may be small and therefore have limited supply potential, do no more than just replace imports from the rest of the world.

In order to predict the scope for the three types of trade effects appropriately one would like to use a full-blown trade model based on all relevant production and consumption data and the relevant elasticities. However, such information is not available at a level of disaggregation equivalent to the (rather fine) product detail for which trade preferences are granted in CEFTA. Hence, for an assessment of the potential trade impacts of the CEFTA agreement a more pragmatic approach, based on indicators such as existing trade patterns, levels of protection and location of production, is used here. Based on information as described in the preceding sections of this chapter this approach tries to identify likely trade effects resulting from the preferences granted under the CEFTA treaty. Since this approach is based on a classification of instances where trade creation, trade diversion and trade deflection may or may not occur for a given good, it does not aim at generating any quantitative results such as price movements or scope of distortionary shifts in the source of supply. However, it can help to identify those products where the different types of trade effects can be expected, based on the assumptions and criteria given in **Table 2.2**.

**Table 2.2: Classification of Instances Where Trade Creation, Diversion and Deflection are Likely and Unlikely**

Major Source of Imports	Chance of Deflection from Partner	Supply Response in Partner	Trade Creation	Trade Diversion	Trade Deflection
ROW	High	High	Likely	Likely	Likely
ROW	High	Low	Unlikely	Unlikely	Likely
ROW	Low	High	Likely	Likely	Unlikely
ROW	Low	Low	Unlikely	Unlikely	Unlikely
ROW	none	No Supply in Partner	Unlikely	Unlikely	Unlikely
CEFTA	High	High	Likely	Unlikely	Likely
CEFTA	Low	High	Likely	Unlikely	Unlikely
CEFTA	High	Low	Unlikely	Unlikely	Likely
CEFTA	Low	Low	Unlikely	Unlikely	Unlikely
Mixed	High	High	Likely	Likely	Likely
Mixed	Low	High	Likely	Likely	Unlikely
Mixed	High	Low	Unlikely	Unlikely	Likely
Mixed	Low	Low	Unlikely	Unlikely	Unlikely
No imports	High	High	Likely	Likely	Likely
No imports	Low	High	Likely	Likely	Likely
No imports	High	Low	Unlikely	Unlikely	Unlikely
No imports	Low	Low	Unlikely	Unlikely	Unlikely

Note: Major source of imports defined as greater than 80% from that source.

Chance of trade deflection defined as partner tariff below importing country MFN tariff (less CEFTA preferential tariff where applicable).

Partner supply response defined as partner supplies to rest of the world greater than (80% of) imports of the importing country from the rest of the world. Additionally, if the CEFTA import quota for the product exceeds CEFTA actual imports (by more than 20%) then partner supply response is deemed to be low.

This test was conducted for seventy-four agricultural products of particular importance to CEFTA trade. The trade data used are 1995 trade quantities from national statistics. The MFN tariffs were the ones applied in 1997/98 as published by the EU-Commission in its market access database in the internet. The CEFTA tariffs and tariffs quotas were taken from the concession lists annexed to the CEFTA treaty and the Accession Agreement of Slovenia and Romania. Using these data and based on the criteria described in **Table 2.2**, the test was conducted importing country by importing country to categorize each commodity selected as to whether the conditions existed for trade creation, diversion or "legal" trade deflection. The summarized results of this test for all the selected products are given in **Table 2.3**.

**Table 2.3: Instances of Likely Trade Creation, Diversion and Deflection**

Importing Country	Trade Creation Likely	Trade Diversion Likely	Trade Deflection Likely
Czech Republic	40	32	16
Hungary	43	43	45
Poland	41	39	41
Slovakia	44	29	16
Slovenia	41	37	32
Total, CEFTA	209	180	150
Total Items Included in the Analysis	370	370	370
Percentage	57	49	41

Source: Josling, Tangermann and Twesten (1998), p. 88.

It turns out that in 57% of the cases the conditions are favorable for trade creation. It therefore appears that the CEFTA agreement has a potentially positive effect on welfare in its member countries and in the world on aggregate. However, the fact that trade diversion can also be expected for 49% of the products analyzed dampens this optimism somewhat. It seems that extra trade within CEFTA will be to a large extent at the expense of trade with the EU or other third countries. Scope for "legal" trade deflection was also found for a significantly high share of the products included in the test (41%). That the potential for such arbitrage seems to play such a role in CEFTA is noteworthy. The beneficial aspect of trade deflection is that consumer costs are potentially reduced, unless regional producers pick up for the benefits in rent. At the same time, the negative impact of trade diversion may be offset by third country exports into the supplying member country, i.e. the lower-tariff CEFTA member. Trade deflection thus trends to offset the negative impact of trade diversion as far as market share for third country exporters is concerned. The negative effect that the importing country buys at higher costs, though, still remains valid, not to mention the problems arising from the differences in national agricultural policies between the members of the free-trade area.

Altogether, the picture these findings reveals is rather mixed, as "good" trade creation and uneconomic trade diversion are both likely to occur to a large extent. It is therefore not clear whether CEFTA is a trade relationship between "natural" trade partners on an economically sound basis. However, there are of course options for an improvement of the positive effects arising from free-trade agreements, and product-specific information as provided by the test performed here can help to identify them. CEFTA countries could try to improve domestic infrastructure and information about marketing opportunities, since this would certainly stimulate efficient trade in the region and, thus, improve the chances for trade creation. In addition CEFTA members could agree on further reductions in regional trade barriers for commodities which are likely to exhibit trade creation. Moreover, they could agree on reductions in external (MFN) trade barriers which would curb the incidence of trade diversion and thus the risk of uneconomic regional production at the expense of more efficient production in third countries, for those products identified to be primary candidates for trade diversion. A more concerted approach in the application of external border measures would also limit the incidence of trade deflection. A

harmonized external tariff level would be easier to apply if the CEFTA members could agree on more concerted domestic policies. As noted above, this is vital anyway in order to avoid policy driven trade flows without giving up the objective of liberalizing trade in the region.

## **Part V: Conclusions**

This Chapter looked at the inclusion of agriculture in the free trade areas in Central Europe. In the case of CEFTA, it reported on an empirical analysis of trade patterns, the degree of preferences involved in the agreement, and the likely implications for agricultural trade. Though the responses to regional integration are quite different across the countries involved in the Central European regional agreements, a number of common issues emerge. With respect to pattern of agricultural trade of the CEFTA members, it turns out that the share of intra-CEFTA trade in total trade is quite small, the only exception being the Czech-Slovak customs union. Other countries, in particular the EU, are of much greater importance as trading partners than the countries in the region. However, the share of regional trade in total agricultural trade has grown since the formation of CEFTA, at least for most of the countries. The big agricultural players in the region are Poland and Hungary, the former being the predominant net importer and the latter being the only net exporter.

It is too early to say whether the expansion of regional agricultural trade observed in the recent past is a direct result of the CEFTA agreement. This has to be left to a more detailed analysis in the future. The preferences granted under the CEFTA Agreement, however, are significant. The preferential tariffs on imports from partners are far more favorable than those applied on imports from the EU or the MFN tariffs levied on imports from other third countries. It, thus, appears that there may well be a relationship between preferences granted under CEFTA and the surge in regional trade.

The assessment of likely trade effects caused by the CEFTA treaty shows that there is a significant scope for trade creation. Hence, this FTA seems to have a considerable potential for an improvement of welfare in the importing members and the world on aggregate. However, the potential for serious trade diversion is also apparent. This may not only create losses in market share for third countries but can also impair welfare gains resulting from trade creation in the importing CEFTA countries. Last but not least, there is also a noteworthy possibility for trade deflection to occur. Although not very problematic with regard to the resulting welfare effects, trade deflection essentially unveils the potentially severe problems resulting from different domestic support policies pursued in the individual member countries. The differences in measures adopted and in particular in support levels granted are not only likely to cause artificial trade. They may simply not be sustainable if agricultural trade liberalization among the countries in the region is pursued seriously. The recent disputes among CEFTA members and within BFTA are a clear indication of the potential for conflict between regional trade liberalization and national sovereignty in agricultural policies.

The options increasingly chosen in order to overcome these problems, i.e. unilateral withdrawal concessions or invocation of safeguards, do not appear to be very helpful, given that

CEFTA and BFTA are aiming at closer regional integration and an improvement of international competitiveness in preparation for EU accession. More harmonized domestic agricultural policies across the countries in Central Europe, accompanied by a concerted reduction of external barriers to trade would be a better solution. This option would reduce the negative effects of trade diversion and eliminate the problems resulting from inconsistencies of national agricultural policies. Moreover, it would foster regional integration and thus improve competitiveness of agriculture in Central Europe. Closer policy co-ordination within Central Europe could also strengthen joint negotiation power in the accession talks with the EU.

However, this is also where the limits to agricultural policy harmonization within Central Europe may be. Each of the countries in Central Europe now tries to get the best deal in its accession negotiations with the EU. The countries in Central Europe therefore have a tendency to behave like competitors, rather than like companions. Moreover, in each of these countries, negotiations with the EU consume so much political energy and administrative capacity that not enough may be left for closer co-ordination with the partner countries in the region. To some extent, the regional agreements in Central Europe may, therefore, be self-destructive, in the sense that one of their central aims, i.e. preparation for accession to the EU, may paradoxically undermine the sustainability of the regional agreements themselves.

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# Chapter Three

## Regional Integration Agreements – Rural Policy Lessons for the CEEC

By Tim Josling

There are lessons to be learned from Regional Integration Agreements (RIAs) that might be useful in the formulation of rural policies in the Central and Eastern European Countries (CEEC) as they develop their own regional trade groupings, the Central European Free Trade Area (CEFTA) and the Baltic Free Trade Area (BFTA), and prepare themselves to join the European Union (EU). There are particular problems that other countries have found in the incorporation of agriculture in free trade areas and customs unions, which the CEEC can avoid. Likewise, by looking at other regional experiences, the CEEC can identify areas where regional integration in agricultural markets has been beneficial, so as to promote similar benefits in the CEEC. The specific RIAs discussed in this chapter include six from the Americas: the Andean Pact; the Common Market of the South (MERCOSUR); the Central American Common Market (CACM); the Caribbean Community (CARICOM); the Canada-US Free Trade Area; and the North American Free Trade Area (NAFTA); and two from Europe: the European Union; and the European Free Trade Association (EFTA). The main policy objective of the countries in the region is that of accession to the EU and full integration into the European single market. Before this happens, however, the treatment of agriculture in CEFTA and BFTA must be addressed. To the extent that these free trade arrangements are temporary devices to prepare the way for EU membership these issues could of course be subsumed under the heading accession policy. But they can also be seen as policies in their own right which can be judged regardless of the date of EU entry or even of whether such entry will take place.

### Treatment of Agriculture in RIAs

Agriculture is treated in various ways in regional trading blocs and free-trade areas. Agricultural is profoundly affected by the existence of free trade with neighboring countries. Countries can choose to allow national rural policies to change to take advantage of possibilities that freer regional trade brings, or can resist such change until those policies are modified by market pressures or collapse under their own weight.

There are four major reasons to include agricultural commodities in the provisions of an free trade agreement (FTA). First, exporter members within the region will want improved access to importer markets for their agricultural goods. An alliance among food-importing countries may be able to ignore intra-bloc agricultural trade for some time, but even in this case there will be some sub-sectors who wish to export to the partner country. Second, food cost differences among countries within the RIA, arising from different agricultural prices, will both distort trade and investment patterns and cause problems of wage comparability. Such cost differences will

eventually become a cause of contention between the partners. Third, if agriculture is excluded from the free trade provisions the food sector will tend to remain national in scope, as a result of different raw material costs and regulations, and may not be internationally competitive. And last, to exclude agriculture from free-trade agreements leaves countries open to challenge under the World Trade Organization (WTO). Article XXIV of the GATT (incorporated in the WTO) requires that such agreements cover essentially all trade among the partners. Though this requirement has never yet been defined, one can assume that omitting an important sector of the economy would make the RIA vulnerable to challenge. Moreover the trend is towards more strict interpretation of this provision to prevent the fragmentation of the trade system.

There is, in essence, only one reason why governments have sought to exclude agriculture from the provisions of a free-trade area. Most domestic agricultural price policies require protection at the border in order to be effective. As a consequence, free trade poses a threat to the operation of such programs. One would expect import-competing sectors to resist the spread of free trade areas as providing more competition on the domestic market. However regional trade pacts tend (with the partial exception of the early Latin American agreements) to cover all goods except those specifically excluded as a policy decision. This obviates the need for the government to convince each individual sector that they should be included. But when the market is largely determined by government regulations the issues cannot be so easily ignored. Negotiations on freer trade are indeed likely to be complicated by domestic farm policy considerations. Politicians are often tempted to take the easy way out when faced with negotiating improved regional access to domestic agricultural markets controlled by restrictive policies. However, the changes in domestic policy in recent years away from the management of agricultural commodity markets in favor of direct payments to farmers has removed many of the obstacles to the incorporation of agriculture in RIAs. This has been reinforced by the decision in the Uruguay Round of trade negotiations to convert non-tariff import barriers to tariffs.

The dilemma facing policy makers when faced with the question of the treatment of agriculture in RIAs is well illustrated by the European experience. When the European Economic Community was established, agriculture was fully included in the aim of free internal trade. The exporting countries insisted on this, as a part of the bargain that allowed them to open up their industrial markets. In the treaty establishing the European Free Trade Association (EFTA) in 1960, however, agriculture was left out. With the exception of Denmark, which got some bilateral concessions in the British market, no member was an agricultural exporter. The EFTA-EC bilateral trade agreements (1973), again left agriculture out, as no EFTA preferences were being eroded by the accession of Denmark and the UK to the EC. In the more recent negotiations leading to the creation of the European Economic Area (EEA) in 1992, agriculture was also largely left out of the free trade area between the EU and EFTA. With three EFTA countries joining in 1994, the integration of their agricultural sectors could no longer be ignored.

The various Latin American free-trade agreements in the past focused mainly on industrial products, and agricultural trade was not considered an engine of growth. In contrast the new generation of more open agreements include provisions for agricultural trade liberalization. Thus MERCOSUR, the Andean Pact, the Central American Common Market (CACM) and CARICOM all have free trade in agricultural goods, with relatively minor restrictions, as a part of their principles.

In Asia, regional groupings are less common, and hence have less direct influence on agricultural policy. The Association of Southeast Asian Nations (ASEAN) has operated a collective agreement on food security, involving the sharing of rice stocks at times of shortage, but otherwise has had little agricultural content. Agricultural products are largely excluded from the ASEAN free trade area (AFTA), and the financial crisis in the area may make it more difficult to remedy this omission. Among the free-trade areas that exist in the Pacific region, only the Closer Economic Relations (CER) Treaty between Australia and New Zealand fully incorporates agriculture. This was made easier by the sharp reduction in the level of protection of the sector in New Zealand in late 1980s, and by the deregulation of marketing systems in the two countries in the last few years.

African free trade agreements have generally included provision for freer trade in agricultural goods, as these cover a large share of trade for the countries involved. However a variety of revenue duties, coupled with the parastatal control over many of the export commodities, have made agricultural trade less than free, even when no tariff restrictions apply.

In North America, the US-Canadian Free Trade Agreement (1990) included agriculture in the tariff-cutting activity, but not in the provisions for non-tariff barrier removal.<sup>1</sup> Neither the US nor Canada thought of the other as a big potential market, and the GATT Round seemed at that time to be taking care of agricultural trade issues. The NAFTA negotiations (1992) also were overshadowed by the Uruguay Round. Market access has been improved by the provisions of two bilateral (US-Mexico and Canada-Mexico) access agreements for agricultural products (to supplement the US-Canada bilateral that already existed in the earlier agreement). Some substantial liberalization will be achieved by these bilaterals, as a schedule of tariff reductions over the next decade will give Mexico better access into the US and Canadian agricultural markets, and vice versa. Non-tariff barriers were also phased out on US-Mexico trade, leading to a relatively free internal market in at least a large part of the continent. Canadian-US farm trade however remains governed largely by the pre-existing, and less liberal, Canada-US FTA.

### **Benefits to the Incorporation of Agriculture in an RIA**

In many respects, agricultural trade might not seem to be a logical component of regional trade pacts. Neighboring countries will often produce a similar range of agricultural products. Differences in resource endowments underpin much of agricultural trade, and ensure that there will always be profitable trade between areas that have ample arable land in relation to population and those that have less. This will however often be across regions rather than intra-regional trade. Similarly, trade in crops that require particular climatic conditions will tend to be among rather than within regions. On the other hand, regional flows of agricultural products might still improve the food security of the area by allowing a de-linking of consumption in each country from production fluctuations.

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<sup>1</sup> The exception to this was the liberalization of Canadian cereal import licensing, conditional on US protection levels being less than those in Canada. This condition was met soon after the implementation of the agreement. The discrimination against sales of foreign wine in Provincial retail outlets in Canada was also curbed by the US-Canada agreement.

However, this pattern of trade across regions is rapidly changing. More agricultural trade is taking on the nature of industrial trade patterns, including two-way trade within the same sector. Intra-industry specialization owes its justification to economies of scale in particular processes, and the search for cheap and reliable components and materials. Under such a system, trade grows among countries with rather similar resource endowments and at similar stages of development. Trade in processed foodstuffs already moves among countries that produce similar products. This type of trade may be much more likely to be generated either within a region, or among countries that could form natural markets in the absence of political and infrastructure obstacles. This implies a growing significance for certain types of agricultural trade of the movement towards free trade areas.

What are the benefits of including agriculture in a regional trade bloc? Where production costs differ, and efficient suppliers are to be found in the same region, trade creation will take place. But even where such clear-cut advantage are absent, some benefits can occur. One such benefit stems from the additional competition created within a free trade area.<sup>2</sup> Competition within a bloc may be thought of as "toe in the water" liberalization. Firms and farms learn to compete with a few neighbors first before having to face the overseas efficient producers.

Regional trade schemes have other advantages, including the possible exploitation of economies of scale in the larger market. This is clearly one of the motives for Mexico and other countries in the region to have a free trade agreement with the US. Similarly the large market in Brazil attracts others in Latin America. However access to an even larger market would be possible through multilateral liberalization. Thus a country can join an RIA and still work for global liberalization as the best possible outcome.

A further advantage of a regional scheme for agriculture is that it gives some scope for a common commercial policy and common export diplomacy. This is true in particular when export patterns are similar. The CARICOM countries are presently coordinating their trade policies through a single secretariat. The EU has of course made trade policy a matter of collective competence, though the export policy has relied too heavily on export subsidies and not enough on encouraging other countries to lower trade barriers.

This problem of export subsidies is in fact a manifestation of another feature of the EU. As a result of the decision to have a common budget, the export subsidies are paid from EU "own resources." No single country has a strong incentive to impose financial constraints, as the cost is shared with others. This has been perhaps the most important single reason why the CAP has been so difficult to control. The incentives to take tough decisions were absent, at least until the budget agreement of 1988 put a firm limit on agricultural spending. It may also be a reason why other groups have not had the same problem. No other group pools tariff revenue, even when they employ a common tariff. No other group has a common budget that pays for agricultural expenditure. Perhaps the lesson from Europe is already understood.

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<sup>2</sup> This is allied to the problem of the clash between domestic policies and free trade. If the domestic policies are there to shelter farmers from external competition then any trade policy which increases competition is antagonistic to these policies.

Regional trade arrangements have a number of other dimensions that have an impact on the agricultural sector. These include investment policies, which may make it easier or more difficult to attract foreign capital; an enhanced dispute settlement process which aims to resolve regional disputes; and labor mobility policies which directly relate to the flow of people off the land. Often the health of the agricultural sector is a major factor in determining such flows, and agricultural policy is indirectly connected with migration regulations. In recent years another aspect of regional trade policy has emerged which may be of increasing importance. This is the tendency to negotiate standards and technical regulations at the regional level. As these regulations become more important in trade disputes the place of regional standards may increase.

### **Problems in Incorporating Agriculture in a RIA**

The treatment of agriculture in the RIAs of the Americas and Europe stands as a record of the achievements of governments in this difficult area but also highlights the problems. The problems that individual RIAs have had with the incorporation of agriculture in the preferential trade agreements have not been unexpected. Difficulties in running independent domestic price support policies are the most obvious of such problems. The problems that the Andean Pact had with different price band policies in different countries is a case in point. Only when the burden of support can be taken over by the RIA itself, as in the case of the EU, does this problem get resolved. But this then leads to a different problem, that of disparate views of the appropriate level of support, and a consequent drift to higher levels of protection. This drift is compounded by any arrangement to share support costs, as this reduces the incentive for each individual country to contain spending. The story of the CAP is a vivid illustration of the sensible policy of joint financial responsibility falling foul of the natural tendency for countries to spend money which is not theirs.

One would expect that potential clashes with domestic policy would be a major disincentive to include agriculture in the regional free trade plans. This is well illustrated by the EFTA decision to omit agriculture. However, this brings its own problems. One could also have predicted that the agricultural sectors of the EFTA countries would have developed independently without the constraints of free trade within EFTA, and be in effect isolated from outside competition. This was the situation in the Nordic countries, and to a lesser extent the Alpine countries at the time of the latest enlargement. One might also have predicted that the food industries in these countries would be high cost and relatively inefficient as a result of being tied to high cost inputs.

Other predictions could be made, many of which are illustrated by the experience discussed above. First we would expect problems with trade diversion, the trade in high cost goods within the RIA. Certainly this has been the defining nature of the CAP over the years. Those inside exchange high cost goods: low cost suppliers outside are displaced. Denmark felt the effect immediately the European Economic Community was formed, as it lost the growing German market to Dutch and French competitors. This has significantly reduced the benefits of the free internal market for the members.

However one would also expect in cases where there was no common support policy that the level of intra-bloc trade in agricultural goods would tend to be low, although processed food

trade within the bloc could be higher. This has been the experience of the smaller RIAs in Central America and the Caribbean, where flows of agricultural raw materials are small. One would also expect to see some policy convergence even in those RIAs which chose not to go for a common policy. The degree of policy convergence in NAFTA is striking, given the assurances that the free trade treaty did not impose harmonization on domestic policies.

Other lessons show through the experience of agriculture in RIAs. One is that it may be impracticable to control commodity trade among neighboring countries. The rules of origin are crucial in any free trade area, i.e. to prevent trade deflection where there is no common external tariff. But rules of origin are legal devices which may not be totally effective in the marketplace. And the country of origin of raw materials is much less easy to trace than that of a specialized automobile part.

### **CEEC Agriculture and Regional Integration**

The countries of Central and Eastern Europe are not unacquainted with the issues of regional integration agreements or even closer economic and political arrangements. The three Baltic nations need no reminder that they were a part of the same country, the USSR, for many years. As such they had no (conventional) trade barriers or restrictions to the movement of goods and services among themselves, though most of the trade was with other parts of the Soviet Union. These countries were also part of the same labor "market", though there were considerable restrictions on movement of factors. Capital moved through the planning system, but again no major differences existed between the Baltic countries. Under such conditions the creation of a Baltic Free trade Area (BFTA) was much less of a leap in the dark, or a reversal of years of national trade policy, than many other trade agreements. Instead it is largely a question of keeping some degree of integration in the face of pressures to fragment the Baltic region through newly minted trade restrictions and other protectionist policies.<sup>3</sup>

To a lesser extent the same motive was behind the creation of CEFTA. Each of the countries of Central and Eastern Europe (with the exception of the former Yugoslavia) was a member of the Council for Mutual Economic Assistance (CMEA or COMECON. At the start of the transition period most countries in the region adopted relatively modest tariff protection for both manufactured as well as agricultural trade. As the individual sectors ran into economic difficulties so they naturally requested protection against imports. Trade among these countries was thus threatened by the return of substantial trade impediments in an area where trade had flowed before, albeit under different institutional arrangements. The decision to form free trade areas was in part a response to this protectionist pressure.

The specific agreement which set up CEFTA was signed in Krakow on December 21, 1992. The CEFTA countries, which became known as the Visegrad Four (Poland, Hungary and

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<sup>3</sup> This phenomenon of previously integrated areas seeking to use free trade agreements to keep some semblance of the former regional market unity is quite common. It occurred in Africa and the Caribbean with the breakup of the British and French preference systems and later in the EU bilaterals with the EFTA countries that did not join the EU. It is also manifest in the Czech and Slovak Republics free trade agreement and the CIS arrangements between some of the FSU countries.

the Czech and Slovak Republics), were also widely considered as the front-runners for EU membership. Slovenia joined CEFTA in January 1996 as did Romania in July 1997. The six countries will probably be joined by Bulgaria within the next few months, and several other countries have made overtures to the group about eventual accession (including Lithuania, Latvia, Macedonia, Croatia and the Ukraine).<sup>4</sup>

The original CEFTA timetable called for free trade for all products, including agricultural goods, by the year 2001 (Kiss, 1997). Tariff reductions were to be phased in over time on the basis of bilateral offers. These offers were to be reciprocal and broadly symmetrical. Few institutions were formed, and the CEFTA was deliberately kept to the economic arena of trade policy.

Three Baltic countries, Estonia, Latvia and Lithuania, made the decision to set up the Baltic Free Trade Area (BFTA) in 1994, initially leaving agriculture out of the free trade arrangements. This omission was repaired in 1996 when the three governments agreed to set up an agricultural free trade area. The agricultural agreement came into effect in January 1997. No import or export restrictions are allowed on trade within the BFTA countries on goods of Baltic origin.

### **Sectoral Policy Issues**

Questions having to do with market access are at the heart of issues facing regional integration arrangements. The market access issues that arise in the case of agriculture include the extent to which the sector is included in the integration arrangements, the mechanisms for exclusion of certain products and the timetable for achieving free trade within the region.

The range of solutions that others have found to the problem of the inclusion of agriculture in an RIA range from the EU, which decided on full implementation with the help of a common policy, to the EFTA which excluded the sector altogether. The CEFTA countries and the BFTA countries have faced the question of the inclusion of agriculture in different ways. In BFTA, agriculture is fully included, with no exceptions. In CEFTA the solution was to fully include only those goods that were not competitive with local production (List A). For those that were “sensitive” the decision was to establish two more categories (List B and the bilateral agreements), as described above, so that at least some parts of agriculture would be subject to free-trade area rules, even if others “escaped” for the immediate future.

This raises the question of the conformity of CEFTA with Article XXIV of the GATT, that “substantially all trade be covered.” Unfortunately the meaning of this restriction has not been clarified. EFTA seemed to get away with the exclusion of agriculture altogether, but the panel report on EFTA was never adopted. Could one argue that in the case of CEFTA the lists

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<sup>4</sup> Conditions of membership to CEFTA include being members of the WTO and having “Europe Agreements” with the EU. This in fact makes these prospective applicants technically ineligible.

are not exclusions in principle but merely arrangements during a transition period?<sup>5</sup> CEFTA ministers originally agreed to omit agriculture from the target of free internal trade and then decided later that it would be included. They tried again to get agreement at their last meeting to phase out the lists over time, but without success. The accession of Slovenia complicates the matter, as it has more protection for agriculture than the original "Visegrad Four." With Romania now a member, and Bulgaria knocking on the door, the chance of all the countries agreeing to a rapid freeing of agricultural trade must diminish. The issue of GATT conformity does not arise in the case of BFTA, as the three member countries are not yet WTO members.<sup>6</sup> But it is likely that the decision to include agricultural trade in the tariff-free arrangement for intra-BFTA trade makes it acceptable under WTO rules.

The use of specified lists for liberalization has parallels in other RIAs. LAFTA drew up lists of products that would be able to trade freely within the area. Not many sensitive products ever made it to the lists. More recently, NAFTA included schedules for trade liberalization for each country, specifying alternative tariff reduction regimes by commodity. Lists have several negative consequences. First they divide the agricultural sector itself into those for which there is protection in the national market, and those which have to compete on regional markets. If the former commodities are also the products that have high degrees of protection from third country imports then the distortion is likely to be greater. Over time the agricultural sector becomes divided into a competitive and a non-competitive part. Secondly the lists of products become a magnet for political opposition to liberalization. The lists themselves become the focus of pressure, necessitating hours of debate over commodities that have little economic significance. Slovenia found problems with the lists as they existed in CEFTA and has tried to have them redefined. Romania likewise expected to be able to remove commodities from the list that was due for most rapid liberalization. But if each country can choose the commodities to include and each new country can add to that list the benefits of trade liberalization in the sector soon erode. Thirdly the food industry in the region is likely to be hampered by different raw material prices for basic commodities depending on whether they are on the liberalization list or not. This will distort investment plans, deny the benefits of scale economies and keep processing activities tied to national production.

### **The Use Of Quantitative Limits On Intra-Group Trade**

One way of making it more feasible to include agriculture in regional liberalization is to put quantitative limits on the extent or growth of cross-border trade in particular commodities. This is the main technique used in the Europe Agreements for agricultural goods as well as for other "sensitive" products such as textiles and steel. Quotas in the context of regional trade liberalization have not been so extensively used in the Americas, though there are a number of

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<sup>5</sup> Under the Uruguay Round Agreement, which went a little way towards clarifying the criteria for creating a WTO consistent RIA, a transition period of ten years is suggested as permissible.

<sup>6</sup> Estonia is currently in the process of joining the WTO and Lithuania has asked for membership discussions.

examples. Quotas can of course be combined with lists, with quantitative limits on trade flows of goods from a certain list.<sup>7</sup>

For the CEFTA countries the use of quotas has been central to the process of the inclusion of agriculture. The commodities for which trade restrictions will be removed quickly (i.e. the goods that compete less with domestic production) have no quantitative limits. The goods on the second multilateral schedule and those on the bilaterals in general are restricted by quota. This “belt and braces” policy was no doubt thought necessary to get agreement, but it puts considerable strain on the management of the agreement in the next few years.

The use of quotas as a way of opening up markets brings with it certain problems. Unlike unconstrained tariff reductions, trade creation is inherently unlikely, so long as the quota is binding. The above-quota tariff will determine the price on the domestic market, and the quota holders will (unless the quotas are auctioned) make a profit, called the quota “rent,” as a result of the reduced within-quota tariff. As the domestic price does not decline, no pressure is put on the domestic producer. The main effect is to transfer revenue from the taxing authorities to the quota holders. In the longer run, the effect depends on the way in which the quota is changed over time relative to the amount of trade that would happen in the absence of the quota. Unfortunately the incentives once a quota system are in place tend to militate against expansion. The quota itself becomes a political focus, for the agriculture minister to defend as a matter of national honor. And firms that are lucky enough to fill the quota get the “rent” to the extent of the amount of the preference. They will therefore have an incentive to keep the quotas in place. Quotas in the case of the CEFTA seem likely to become more restrictive over time unless a decision is taken to expand them at a reasonable rate. The appropriate rate is itself difficult to calculate, as it depends on the development of the market. But one could devise mechanisms to limit the rents from the quotas and to decide on future quotas on the basis of the magnitude of the rent. Additionally, the restrictiveness of the quota can be ameliorated by reducing the above quota tariff until the quota no longer has any value.

### **The Problem Of Rules Of Origin And Accumulation Rules**

Two important points can be made about rules of origin, both significant for CEFTA and BFTA. First the problem is much less significant when countries form a customs union. If each country knows that the inputs, if imported, have paid the same tariff then they can afford to be more relaxed about knowing their point of origin. The same effect can be had in an FTA by

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<sup>7</sup> Quantitative restrictions on imports of a commodity from all sources are no longer acceptable under the WTO. But quantitative restrictions on goods coming from another country under preference schemes are permissible, at least as a part of a transition to free access or as a way of giving assistance to other countries (under certain circumstances). Moreover the Uruguay Round set up a large number of Tariff Rate Quotas (TRQs) in the process of opening up markets previously restricted by non-tariff barriers. The administration of TRQs has created significant problems and will be rationalized at the next trade round. The issue of preferences will probably be addressed at that time. To the extent that the CEFTA quantity limits on bilateral access are strictly temporary they are probably safe from challenge.

agreeing to treat certain inputs alike.<sup>8</sup> Thus rules of origin are only likely to be a major problem if protection levels on inputs differ markedly. This implies that agricultural products, where levels of protection are divergent, may well be candidates for trade deflection. This would show up in the market for food products, where the different raw material prices might encourage, say, a Lithuanian food manufacturer to use inputs imported free from Estonia under BFTA which in turn might have come in from another country under Estonia's liberal external trade regime.

Secondly, the impact of rules of origin is modified by the operation of cumulation. Contribution to value added in any qualifying country can be added together to determine the status of the good. Cumulation therefore helps to avoid rules of origin problems, by increasing the number of sources of inputs that count as "domestic." In practice, cumulation also adds to the complexity of trade arrangements between the CEECs. Each of the BFTA and CEFTA countries participates in the Pan-European Cumulation of Preferences agreement, implying that as far as the EU is concerned inputs coming from any such country qualify as domestic content. But CEFTA and BFTA have their own cumulation rules for qualification for free intra-bloc trade. Thus there could be circumstances when a good can enter the EU free but not the market of another CEEC as it does not qualify as a regional good.

Rules of origin have a fundamental weakness. They rely for their effectiveness on the premise that the imported and the domestic goods are in practice rather imperfect substitutes. But if domestic and imported goods are perfect substitutes in the eyes of consumers then one would expect both more fraudulent labeling of goods and perfectly legal "substitution deflection." This is quite likely in the case of homogeneous agricultural commodities. The even more difficult case is the legal sale of the product of a partner country which then imports its own requirements from other countries. This is already widespread in such commodities as sugar where preferential export quotas are worth filling even when domestic requirements have to met by imports.

It is difficult to know in advance the extent to which Baltic trade patterns or those in the CEFTA countries will be distorted by substitution deflection. The problem is easier to describe than to detect or to solve. The fact that a country is both an importer and an exporter of the same product happens all the time as a result of transport costs, natural markets, imprecise customs classifications, etc.. If a surge in such trade was noticed then one might suspect the presence of substitution deflection. But even then there is little one can do to prevent it without harmonization of external protection. So long as this is in a downward direction this represents a beneficial movement towards a more open regional system. If protection levels remain high then such deflected trade is less desirable. Although it does not divert trade, it imposes unnecessary transaction costs and it generates rents in the exporting member in place of tariffs in the importing country.

### **Safeguards And Snapbacks**

One aspect of RIAs is the provision that is made for action to be taken if there is a surge of imports as trade barriers are removed. The import surge often triggers some safeguard

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<sup>8</sup> If all CEFTA countries were to allow animal feed to be imported without tariffs then no-one has to keep track of whether the poultry of the Czech Republic has had enough value added to call it a CEFTA product.

mechanism that gives some relief to the struggling importer. Both CEFTA and BFTA have such provisions for temporary relief. In the case of CEFTA the countries can also use WTO safeguards to guard against injury from import surges.

NAFTA has incorporated a “snapback” provision for a number of agricultural commodities in addition to the more general safeguards under both the NAFTA and the WTO. The snapback allows countries to revert to a higher level of tariff when imports grow by more than a particular percentage (a trigger). The extra duties allowed are temporary, and correspond to the tariff in place in the previous year of the transition. This mechanism gives some assurance to producers without disrupting too much the phased reduction of tariffs under the agreement.

### **Market Size And Economies Of Scale**

One major incentive for any regional trade agreement is to expand the size of the “home” market to allow firms to spread fixed costs over a larger production volume. In one sense this was behind the “import substitution” model that drove the Latin American integration experiments. It reappears in the more recent discussions of “strategic” trade policy, where capturing larger markets is the main driving force. Agriculture typically has less scope for scale economies than manufacturing sectors: the optimum size of production activity is small relative to the size of local markets, let alone national and international ones. But there are examples of economies of scale even in agricultural production. One clear example is poultry and egg production, where the scale of modern technology may be such that a large plant can service an area that crosses borders. A similar argument can be made that processing sectors need a large “catchment area” for raw materials to achieve economies in processing. The scale of most processing industries is generally increasing but rarely outgrows a national raw material base.

For the CEFTA countries these scale economies are probably not major arguments for freer trade in agricultural products. For BFTA, on the other hand, the size of the home market for foodstuffs is probably too small for efficient production, and duplication of processing activities in the Baltics could lead to higher costs.

### **“Tarrification” and Harmonization Of Tariff Levels And The Move To A Customs Union**

Non-tariff trade barriers should first be converted to tariffs, as required by the Uruguay Round of the GATT. Following this, the issue of tariff harmonization will arise. The process of harmonization of tariff levels can occur in two different contexts. First, within the plans for a customs union countries can agree to move over time their own tariffs toward the common level. Secondly, the national tariffs can converge over time as an outcome of decisions which are technically unrelated but which might be driven by similar pressures. In Latin America the tendency has been toward customs unions, with NAFTA, Andean Pact, the CACM and CARICOM all having a common external tariff, though in some cases the exceptions belie the commonality of the tariff.<sup>9</sup> North America has made a point of preserving the tariff-making autonomy of each country, and any talk of a CET has been discouraged.

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<sup>9</sup> In the Andean Pact, only Colombia and Venezuela apply the CET fully: Ecuador has negotiated a number of exceptions, Peru has suspended its membership in the economic provisions of the Pact and Bolivia has been allowed

Nevertheless tariffs do tend to harmonize over time, not least because they have all fallen as a result of successive GATT rounds. Moreover there will be a tendency to harmonize to avoid the problems of trade deflection, as discussed above. Problems both economic and political are more likely where there is a major discrepancy between protection levels in neighboring countries. It is probably constructive to have some form of "tariff commission" which can recommend tariff changes (presumably downward, and respecting WTO obligations) for the RIA. NAFTA has such a body that is empowered to consider the tariff changes during the transition with an eye to suggesting ways to speed up the liberalization. CEFTA has a good record of accelerating its internal tariff reductions: the prospect of joining the EU within five years makes it relatively easy to keep to the timetable. In the normal way one might expect the CEFTA countries to begin to harmonize third-country tariffs toward the EU CET. However, in the case of agriculture this would imply higher protection and hence trade diversion.

### **Transition Periods For Free Internal Trade**

The device of a transition period helps to surmount domestic opposition to trade liberalization. However the longer the transition period the more uncertainty is created among investors and the slower the adoption of competitive technologies and the adjustment of structures. If one takes the view that the economy will be stronger with a competitive rural sector producing the right mix of products and finding profitable markets in a new regional economy, then the quicker one can get to that position, the better. There will be adjustment costs, but even these may be reduced by speedy rather than slow adjustment. In the case of the CEFTA countries the issue is circumscribed by the likely date of EU accession. A transition period which lasts beyond the date of accession has less significance, as entry to the EU will make the question of internal access moot. The first likely accession date seems to be about 2002, on the assumption of relatively rapid negotiations and ratification by existing members. The current CEFTA timetable for industrial goods seems geared to this. Whether one could get to totally free agricultural trade within CEFTA by that time is somewhat doubtful, but it is worth attempting. The shock to the agricultural sectors of the acceding countries would be less. BFTA countries chose a short adjustment period and have therefore already faced many of the adjustments in the first year of the existence of the agreement. But as the BFTA countries themselves move closer to the CEFTA group there will be transition issues for these countries also. How rapidly, for instance, should Polish - Lithuanian agricultural trade be liberalized?

### **Export Subsidies**

The key to any politically stable market integration agreement is to persuade producers within the integrating area that conditions of internal competition are "fair." If one part of the region uses export subsidies on goods flowing to other members this task is likely to prove impossible. The regional market will not long survive such subsidies. Pressures will build up for

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to keep its own much lower tariffs. In CARICOM, exceptions to the CET are commonplace, as countries merely have to request derogations from the Secretariat and these have rarely been denied. MERCOSUR so far has been more faithful to the notion of a CET, though several products have yet to be included in the scheme.

countervailing measures and the political climate will deteriorate rapidly. In this respect it is somewhat surprising that the banning of export subsidies is not more prominently a part of all RIAs. The reason has more to do with the fact that not many countries engage in explicit export subsidies, and therefore may assume that the issue will never arise.

The Canada-US FTA included a ban on export subsidies on intra-CUSTA trade. Canada, which at that time did not recognize its transport subsidies as assistance to exports, was concerned that the US Export Enhancement Program and other such subsidies would be used to lower grain prices on the Canadian market. The US also did not want subsidized exports from Canada on its own home market.<sup>10</sup> In the NAFTA the provision against US-Canada export subsidies was retained, but no such prohibition was included in the US-Mexico bilateral. This was apparently due to the benefits that the Mexican parastatal agency CONASUPO derived from below-market imports of US butter and skimmed milk powder when these goods were resold on the Mexican market. The wording of the bilateral indicates that the importer can choose not to ask the exporter to refrain from the export subsidy. In addition, the US was concerned not to be at a disadvantage in Mexican markets from the export subsidies of the EU. Thus export subsidies are allowed in cases where similar subsidies from third countries need to be “matched.” For these reasons the prohibition against “internal” export subsidies was not possible in NAFTA at the time of its negotiation, though this situation could change.

At present CEFTA does not have a ban on internal export subsidies. Hungarian export subsidies in particular, have been the source of a good deal of tension as one would expect. The Hungarian counter argument to charges that they are distorting competition on the CEFTA market is that other members have subsidies that have a similar effect. Clearly the issue of subsidies and anti-competitive policies needs to be faced within CEFTA, but it should be possible to deal with export subsidies as a particularly egregious way of distorting competition. More problematic is the fact that regional suppliers would still have to face competition from dumped farm products from the EU. One way to deal with this is to put a surcharge on the products from the EU which benefit from a subsidy (e.g. by putting on a tax at the border equal to the amount of subsidy granted by the EU). But this would in effect raise the domestic price in the importing country, which may cause concern on the part of consumers and food-industry users of the product. BFTA does have a restriction on export subsidies within the region, and thus should be immune from this problem.

Though NAFTA contains an exhortation to avoid the use of export subsidies in third markets, there was no obligation to do so. The Uruguay Round was still going on at the time of the NAFTA talks and the US did not want to make “unilateral” concessions. But subsidies on exports to third country markets so obviously change the balance on the internal market that RIAs can hardly ignore totally the issue. Canadian grain clearly moves into the US market to displace the US grain that is exported under the EEP. This export version of the “substitution

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<sup>10</sup> The irony is that, as was discussed above, if the US gives export subsidies on third country exports then Canadian grain will come in to the US market to fill the gap. Thus an exporter within an FTA has an incentive for other exporters to give up their internal export subsidies but not their external subsidy programs.

deflection" described above will have the effect of making export subsidy programs more expensive. CEFTA and BFTA have no restrictions against the use of export subsidies in third markets. Hungary is the only country to use such subsidies widely, though Poland also has made use of the instrument on occasions. Such subsidies are rarely if ever sound policies for the exporting country, and represent a failure of rural marketing strategy. But if Hungary should be unable to move away from policies which benefit foreign consumers at the expense of those at home then other CEFTA countries might as well share in the benefits of Hungarian generosity and sell goods to Hungary that replace those it sells to others.

The export subsidy issue is among the main items for the next round of trade talks on agriculture, due to start in a couple of years. However it is conceivable that one could make progress at a regional level before this time. The EU and the CEEC could mutually agree that the twenty-five country zone (if EFTA countries would join it would be the same as the pan-european cumulation zone) be free of all export subsidies.

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### **Domestic Policies**

It is a hallmark of regional trade agreements in the Americas that they do not involve changes in domestic agricultural policy. In Europe, the same was true of EFTA by dint of leaving

the sector out of the free trade regime. Only the EU started out explicitly to change totally the range of domestic policy measures, through the instrumentality of the Common Agricultural Policy. One might be tempted to think that domestic policies in the CEFTA and BFTA countries can continue without taking heed of the trade agreements. In fact the trade rules have several very important effects on domestic policy, as was mentioned in the last section. The result is a process of convergence which can have the same effect as a formal agreement on a common path for policies. Moreover, if the issue of domestic policies is not tackled in a fairly open way the conditions will develop for mutual distrust and disillusionment.

The feasibility of maintaining different support prices depends crucially on the way in which the prices are maintained. If a country maintains its domestic price levels through border protection alone then the reduction of tariffs against imports from the partner country will help to determine domestic price.<sup>11</sup> The earlier discussion of tariff changes applies to this case. But if the prices are maintained by fixed purchase prices operated by parastatals then the border price will be less important. However the parastatal will have to buy the domestic output, or compel the private sector to do so, as the imported product becomes cheaper. In this case there will have to be some implicit or explicit subsidy to offset the higher cost of using the domestic good. This can either be an export subsidy, which raises other problems as discussed above, or some assistance to the domestic user of the good, which raises issues of competitiveness. In other words the internal price policies will come under indirect pressure from the opening up of regional trade.

Somewhat less pressure will be put on input cost policies by the opening up of internal trade within the region. If one country maintains a fertilizer subsidy then the product can be sold freely in competition with that of regional partners. But two problems will eventually arise. One is that there would be a tendency for fertilizer itself to be traded from the country where the purchase of it is subsidized. This trade could be controlled by rationing, but it is symptomatic of the tendency for arbitrage whenever a price difference exists in a free trade area. Similarly, fertilizer-intensive products will be favored in those countries where subsidies exist. This will lead to the second problem, that of protests from governments which do not use such subsidies. They will either have to adopt similar practices themselves or seek to have them banned within the region.

### **Quantitative Restrictions On Supply**

One of the more interesting implications of free trade within a region is its effect on supply control policies. Clearly the policies themselves are not likely to run afoul of any provision in a free trade agreement. Indeed in most such RIAs the partners would be only too pleased to see output being restrained. But the effectiveness of supply control is clearly undermined if goods can come in from partner countries free of tariffs and quantitative restrictions. The result is that most cases of supply control will either be associated with

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<sup>11</sup> If the product is imported from third countries, and external protection does not change, the price effect may be small. Pressure on prices in this case will not be felt unless the intra-trade displaces the imports from the third country supplier.

quantitative limits to imports or be relaxed once free trade has become established in the region. The former option is more problematic now that the WTO has ostensibly removed all non-tariff trade barriers (with the limited exception of the “rice clause” for Japan, Korea and the Philippines). If quantitative restrictions still exist they can be challenged in the WTO. One must conclude that quantitative restrictions on output are difficult to maintain in countries that are members of regional associations where agricultural goods are freely traded. As they are increasingly unpopular with farmers these instruments are likely to be put back on the policy shelf.

### **Stabilization Policies and Stocks**

Many countries like to manage stocks of primary commodities in an attempt to stabilize domestic markets. Free regional trade may alter the practicality of such schemes. It is intrinsically more difficult to stabilize the domestic market against *external* shocks if the borders are open to imports (and exports). The attempt by one country within an RIA to build up stocks (to prevent a price fall) will merely encourage imports in from the partners. Similarly, the release of stocks to keep down domestic prices is less effective if those released stocks find their way onto export markets. On the other hand instability from *internal* instability is reduced by opening up to trade, as imports can come in at times of shortage and exports flow out with local surpluses. For this reason one cannot say in general whether an RIA will increase or decrease domestic price stability.

### **Marketing Structures And State Trading**

One issue that has received scant attention is the possibility of pressures on different marketing systems within an RIA. This has arisen in the case of grain marketing in North America specifically in respect to the Canadian Wheat Board (CWB). However the problem is much broader than that, and the CEECs are by no means unaffected by the issue. At the heart of the issue is the compatibility of State Trading Enterprises (STEs) and private firms when they operate in the same market. Under what conditions do they compete with each other and when does the state firm have an advantage? Will countries that have privatized their food chains always protest the existence of state enterprises in regional trade partners? Can one separate out the domestic activities of the parastatals from their trade actions?

The evidence from other RIAs is mixed. The EU in its early years managed to remove the exclusive marketing powers of the majority of STEs in member countries, giving them in many cases a role in the organization of markets. They often became “intervention agencies” which had the role of buying up excess products at a fixed price. Coupled with the tight control of imports through the variable levy system, which gave a generous cover of protection for parastatals and private firms alike, and the export subsidy system which removed the overhang of surpluses from the market, the newly reorganized agencies became reconciled to lack of control over internal trade. For the two “quota” commodities, dairy and sugar, the adjustment was even less as the marketing of these commodities was aided by restrictions on cross-border movement of the raw material and fixed processing margins. Nevertheless the UK had eventually to modify its Milk Marketing Board which was the sole buyer of milk and controlled the activities of the private

creameries. Now, as Milk Marque, it is reduced to a role as a promoter of milk with limited market powers.

In the Americas the issue has been subsumed largely by the widespread privatization of the marketing of agricultural goods. The grain juntas of South America are gone, at least in function, as are the monopoly import agencies that operated in much of the region. The remaining STEs are mainly in Canada, where the Provinces hang on to them in part as a way of resisting a free *internal* market in Canada, and where wheat farmers far from the markets support the CWB as a way of getting a higher price for their more costly product. Tariffication of the non-tariff barriers of the Provincial marketing boards will eventually erode their market control: in the meantime the high protection means that they can continue as before. The CWB will, at some stage, lose its exclusive position on export markets and become a competitor with the US firms in the marketing of Canadian grain. Both CEFTA and BFTA have residual agencies from the time when the market was tightly controlled. Privatization has gone at different speeds in the various countries.

### **Cross-Sector Policy Issues**

One issue that emerges in the operation of RIAs is that of disparate national standards and health and safety regulations. These are often used to impede trade, even within regional markets. The benefits of harmonization of standards has to be weighed against the disadvantage of “one-size-fits-all” regulations not well suited to all parts of the region and the suspicion of firms and consumers about the unresponsiveness of centralization. The EU has been through this argument for decades, with periods of attempted harmonization leading to nationalistic reactions and calls for “subsidiarity”.<sup>12</sup> In the mid-1980s the concept of mutual recognition was applied to regulations as a way of avoiding the problem of trade barriers within the EU as a result of different products.<sup>13</sup>

In the case of the CEFTA and the BFTA countries the issue is made somewhat easier by the fact that they are all aspiring to join the EU and trade freely with Western Europe. It would seem therefore superfluous to develop standards materially different from those in use in the EU. Where the EU has no common standards the CEEC could choose those of the larger markets (in many cases this will be Germany). This process will be helped by the fact that much of the investment coming into the CEEC in the food and agricultural area will be from the EU and hence be able to bring with it the appropriate technology. As credibility and public confidence

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<sup>12</sup> Subsidiarity is an ecclesiastical term for the sharing of power downward to bishops and below. In modern political parlance it refers to the taking of decisions at a level lower than that of the EU whenever it is in the broad public interest to do so.

<sup>13</sup> The stimulus came from the European Court of Justice, who had ruled in the case of Cassis de Dijon that German regulations could not be applied to the imports of the French liquor since it had already satisfied French health and safety standards. The incentives set up by mutual recognition of each others regulations can of course lead to a “race to the bottom” as each partner tries to give its own firms an advantage.

are key aspects of any regulatory system, particularly in the food industry, some new regional agencies may need to be created to ensure that standards on the books are in practice followed.

### **Common Budgetary Resources**

The question of whether to collect and disburse any common budgetary resources raises some very fundamental issues of national taxation, fiscal control, accountability. Only those RIAs that have serious aspirations toward political union have faced up to these issues. The EU has a fully-developed system of "own resources" which constitute the proceeds of tariffs and certain other taxes (such as the sugar levies) supplemented by a payment loosely based on GDP shares. No other RIA has approached this scale of common spending or redistribution. EFTA has a minuscule budget to cover meetings, though it did coordinate some EFTA bilateral aid first to Finland and then to Portugal. NAFTA has a fund set up to finance environmental projects along the border between the US and Mexico. So far the NADBank has yet to make a loan, and the funding is too small to meet the significant problems of years of environmental neglect by the *maquiladora* industries. None of the other RIAs in the Americas has instituted common funds. CEFTA and BFTA likewise have no common financing institutions.

The costs of common budgetary resources are in the control that is needed and the profligate incentives which arise from common financial "responsibility" for policies. In short, the incentives are for overspending as a result of lax constraints. Many policies which benefit one country's farmers, but which would be too expensive for that country to undertake, look more attractive when the cost is shared. Since every country will have its own programs that generate attractive domestic political benefits, the effect is to generate fiscal "irresponsibility." These lessons would be worth remembering if BFTA or CEFTA are tempted to drift in the direction of common policies with fiscal implications. Nonetheless, infrastructure projects and market intelligence activities are good candidates for collective policies. If the BFTA countries were to set up a fund to facilitate joint action in these areas it would both strengthen the economic case for free trade in the region and give some public visibility to the trade initiative. Collaborative management of external funds is another good candidate. Here some of the problems of collective profligacy are less likely to occur. The total amount of funds available are limited by the external agency, and the issue is the most effective and efficient way of disbursing them. Benefits of coordination include scale economies, non-duplication, and administrative economies.

What does the financial decision have to do with the pattern of trade? When a country keeps control of its own tariffs, as happens in a free trade area, the revenue does not go to a common budget but is retained by the importing government as fiscal income. Even in customs unions such as MERCOSUR, CACM and CARICOM, the revenue from the CET is kept by the importing countries. This distinguishes these cases from the CET of the European Union. In Europe the revenue collected from the tariff on imports is centrally collected and then disbursed in the form of program finance. The difference is important for three reasons. First, the pooling of revenue from the common tariff gives the regional group some funds to disburse to assist disadvantaged regions or sectors. Thus it helps the cohesion of the region and the willingness of the countries to liberalize trade. Second, it cements the notion of a common tariff as an obligation of membership rather than a guideline for harmonizing national tariff levels. And third, it

removes the temptation to import from third countries as a way of gaining tariff revenue. This third aspect is potentially of considerable importance. A country importing from a non-CEFTA source pays the world price and the government gains tariff revenue. The same imports from a CEFTA source cost more in foreign exchange, as those goods compete at the tariff-inclusive price, and no tariff revenue is collected. The tariff revenue is in effect included in the price paid to the regional supplier. From the exporter's perspective such regional sales are more profitable (the regional market gives preferences for regional goods) but the importing government gains more when the product is imported from third countries. Therefore *to the extent that governments have any control over the source of imports* there will be a tendency to import from third countries at lower foreign exchange prices and keep the tariff revenue. To prevent this "third country bias" in trade patterns CEFTA and BFTA would have to find a way to ensure that governments have no control over the sources of imports. This at the very least requires the abandonment of parastatals and the usual forms of import licensing.

### **Trade Bias And Financial Pooling**

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### **Links With Other Sectors**

How agriculture is treated in an RIA has implications for other sectors, in particular the food and agricultural processing sectors. In addition, agriculture itself is impacted by the

arrangements made for other sectors, in particular those providing agricultural inputs and small business services. The more competition in other sectors the more likely it is that the rural sector will be able to withstand competition.

### **Market Access for Other Goods (Food)**

The market access for foodstuffs is likely to be an important factor in the development of the agricultural industry. Experience with other RIAs suggest that better import access for foods will have the effect of driving the domestic farming industry toward greater competitiveness. The food industry has traditionally relied heavily on local raw materials, with processing close to the production point. Recently there has been a growing trend toward a food industry which shops around for raw materials in other areas and is sensitive to price as well as quality. Under these conditions farmers are competing directly with those in other regions for the chance to supply this processing industry. Farm returns will generally improve as a result of this trend, as some degree of market differentiation is often possible. CEFTA countries have experienced considerable inward investment in the food and beverage sector, and this has given an opportunity for farmers who supply these firms with the raw materials. BFTA also should find that firms will be more attracted to an integrated region, and the improved market access for food products will be a further inducement.

### **Liberalization in the Services Market**

Another key area that could have a major impact on agricultural and rural development is liberalization of the market for services. Though for many years considered a poor relation to trade in goods, trade in services has expanded until it is now a significant aspect of open trade relations, both regionally and multilaterally. The EU has free trade in services explicitly as a goal for the internal market, and this is true for NAFTA, which was quite innovative in this regard. Other RIAs have generally followed this trend, though less completely.

For rural policy, free service trade opens up two different types of possibilities. One is to exploit the complementary nature some service activities, particularly tourism and the restaurant trade, and agriculture. This is sometimes accompanied by the formation of regional service enterprises, such as hotel chains, which in turn might exploit local attractions such as traditional foods. The other possibility is additional employment and income in the rural area from such service activities that help to keep the balance in the farming sector.<sup>14</sup>

Other services help the rural sector by reducing the traditionally high transactions cost relative to urban areas, as well as correcting the common bias towards better educational opportunities in towns and cities. Modern telecommunication systems combined with a good road network will attract investment into rural areas: improved schools and technical education

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<sup>14</sup> Farms at the level of development of those in the CEEC tend to have too much labor and too little capital relative to their land area. Thus an additional outlet for the labor is crucial to these areas and the income earned is often reinvested in the agricultural enterprises.

will ensure that the jobs that this investment brings will go to local people. Investment clearly can be attracted without forming regional agreements, as Chile has demonstrated, but if a regional agreement makes political sense then the benefits should include a more integrated service sector and better conditions for foreign firms to set up activities.

### **Capital Movement and Right of Establishment**

Free movement of capital, and the right of persons to set up in another member country, were a part of the foundation of the EU. Other RIAs have followed somewhat hesitantly. Capital movement was for instance excluded from the original objectives of CARICOM, as impairing the ability of individual governments to control capital flows. However, capital markets not are global in scope and the issue of capital mobility within RIAs is largely moot. Capital mobility is the underpinning of much of the service trade and the flow of foreign direct investment. As such it has an indirect effect on rural policy.

The freedom of establishment is often included in RIAs as an adjunct to liberalizing capital movements. Once again it is the key to the international provision of services, in particular those that require the seller to move to the buyer.<sup>15</sup> Rural service activities could greatly benefited from the freedom to establish businesses in other RIA member countries. Regulatory reform also assists in this process.

### **Labor Movement, Pension Mobility, and Qualification Recognition**

The fourth economic “freedom” in the single market area in the EU is that of movement of labor. There are several aspects to this, including the ability of skilled workers to move to other member countries to the movement of unemployed workers in search of work. The EU is the only RIA to have an explicit goal of free labor movement and have enacted the regulations to bring it into fruition. This no doubt reflects the political goals of the EU in its early days, though the commitment to free labor movement may be dwindling. NAFTA took great pains to avoid any commitment on labor movement. Other RIAs have made limited attempts to allow skilled workers to move but have been wary about allowing those without jobs to migrate freely in search of work.

Among the important issues governing labor mobility are the portability of pensions, the eligibility for social security and health benefits, and the mutual recognition of professional qualifications and university degrees. The EU is in the lead in tackling these issues, with a high degree of mobility possible. Some RIAs have addressed some of the issues. CARICOM has a unified university system (The University of the West Indies) with its three campuses open to students from any CARICOM country. Though apparently remote from rural policy, the

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<sup>15</sup> Service trade is often divided into those transactions where the buyer goes to the seller (e.g. tourism); those where the seller goes to the buyer (e.g. construction work); and those where no physical movement is needed (financial advice). The second of these types often requires both capital and labor movement and the right of establishment in the “host” country.

conditions under which families and workers can move may well have very profound impacts in the CEEC where there has been a considerable history of movement but several decades of tight restrictions.

### **Cross-Country Issues**

Most important are the institutions which deal with disputes in the trade area. Once again agricultural issues are likely to be over-represented in the area of trade disputes. NAFTA has perhaps the most elaborate dispute settlement mechanism of the American FTAs. Several agricultural disputes, mainly between Canada and the US, have been adjudicated in this way. The EU, by contrast, goes much further by setting up legal institutions at the multilateral level. This changes the nature of dispute settlement from intergovernmental intermediation to interpretation of established Treaty articles by a judiciary process. CEFTA and BFTA have not included any such legal apparatus as yet, and as their aim is to join the EU they are unlikely to make the effort to do so in the future.

The private sector can have a direct influence on the direction and path of integration. Often the politician makes the first move, by announcing a regional initiative, and the businessman takes him at his word. When the pace of political action slows the private sector applies pressure to complete the task. Once business starts to think of a region as constituting an integrated market then they are impatient of impediments to the movement of goods, services, labor and capital. Politicians often find themselves following this trend by removing barriers to regional trade and factor movement as requested by the private sector.

One lesson from the early days of the European Union is that the political and the economic motives are in any case closely aligned. Economic integration was undertaken as a way of advancing the political agenda in post-war Western Europe. Investors and businesses began to think of Europe as integrated, and the combination of commercial and political arguments proved irresistible. Integration in EFTA did not proceed far beyond a modest industrial free trade area in part because of a lack of any political rationale. Businesses were more interested in the developments in the EU, and never were able to push the free trade area much beyond its initial goals. NAFTA has some political justification, including the benefits to the US of having friendly neighbors, but in general the public debate has emphasized economic issues, along with those of the environment. US business interests are generally in favor of further integration in the hemisphere but there is no long-term political agenda which excites public interest and justifies short term sacrifices. MERCOSUR started with a strong political incentive to defuse bilateral tensions between Brazil and Argentina: it has sparked the interest of the private sector and seems to be developing a momentum that other RIAs in the region lack. The Europe Agreements would be much less viable in the absence of strong political and security motives for entry into the EU.

The question therefore is whether CEFTA and BFTA have a strong political rationale which will drive the economic agenda, and whether the private sector is sufficiently interested in the economic agenda to back the politicians. In the case of CEFTA there does not seem to be a political rationale separate from that of EU entry. It is unlikely that one could make a strong case for economic integration among these economies, as opposed to their independent participation in an open economy, if they were not lining up for membership of the EU. For this reason it is

likely that the private sector will continue to look to Western Europe and leave the development of the CEFTA market to the politicians. For BFTA the economic case must rest on the advantages of scale economies, but the centrifugal tendency for the Baltic Three to assert their independence at the expense of solidarity will be difficult to resist. Once again the private sector may not be able to keep the regional show on the tracks.

This issue is important for agriculture for two reasons. First, without the political commitment it may be difficult to make the modifications to domestic agricultural policies to make a success of the regional agricultural market. There has to be some broad political benefits to allow rural legislators to confront those who favor the status quo. Secondly, the agricultural processing sector and the food sector can be key actors in the politics of regional integration. If they shift from a national orientation to a regional (or international) view of their production base and market then they will exert pressure on politicians. Otherwise they will tend to support policies which maximize domestic production.<sup>16</sup>

### **Accession / Exit from CEFTA**

The timetable for accession is both an economic and a political issue which new members have to face, and often the two considerations clash. For the existing members the faster the new member adjusts the less disruption - unless the new member is a particular threat to the stability of the internal market. For the new member a slower transition for sectors in which there are likely to be adjustment problems would seem better. Transition arrangements are therefore heavily dominated by agricultural arrangements, as one of the sectors where adjustment to internal free trade could be painful. However, every new member wants to be a full member of all decision-making bodies from the start. Thus the EU has usually offered new members a voice in decision making at once but a lengthy transition period in which to align agricultural prices with those in the existing members.

More recently, with the accession of the three EFTA countries, the pattern has changed. The emphasis was on the immediate entry into the single market, with compensation payments to ensure that particular farm groups did not suffer income collapse. There would seem to be some uncertainty as to whether this model will be applicable to the CEEC entrants. On the one hand there should not be the same problem of farm income falls in the CEECs: on the contrary, income is likely to rise. But the agriculture of the existing EU could be adversely affected by produce coming in from the new members and diluting market prices.

One issue that is likely to be relevant for countries in CEFTA and perhaps BFTA is that of exit. Suppose one or more countries gain admission to the EU in advance of the rest. How the exit is handed may be important to preserve the benefits for the remainder. The precedents are favorable for an arrangement which does not involve increases in tariffs. When Chile left the Andean Pact there were bilateral agreements to soften the impact on the most affected sectors. Peru suspended its membership of the same group more recently, but signed bilaterals with the

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<sup>16</sup> The fact that so much of the investment for the food industry in the CEEC is coming from foreign firms suggests that they will be outward looking. On the other hand anecdotal evidence suggests that when a foreign firm buys into a protected national market they can turn protectionist in outlook.

other members to preserve most of the advantages of free trade. When two of the EFTA members defected in 1973 to join the EU there were bilateral free trade agreements (excluding agriculture) between the EU and each EFTA member. It would seem likely that similar agreements could be worked out if some of the CEFTA and BFTA countries joined before the others. The easiest way would be to incorporate the relation into the respective Europe Agreements of the excluded member. With respect to CEFTA, the terms of access for (say) Romanian and Bulgarian goods into Hungary and Poland (assuming they were in the first wave) would not have to be changed. They would merely be covered by the Europe Agreements rather than CEFTA. Clearly the closer are the terms of access incorporated into the Europe Agreements to those in CEFTA the easier such a transition would be. For the BFTA countries the same provisions should hold. Entry by one country could have little impact if the Europe Agreements matched the previous BFTA access.<sup>17</sup>

### Conclusions

The advantages and disadvantages of incorporating agriculture in a free trade area such as CEFTA and BFTA can be related to the dominant objective of rural policy. If the policy goal is to fully integrate the rural sector with the world market then regional or preferential trade liberalization is rarely the best way of opening up the agricultural sector. Unilateral reduction of protection is more likely to give the best results, as this will allow third country suppliers to compete for the domestic market, along with domestic producers. (This is essentially the Chile model, with Estonia being the only European country to follow a similar path). Regional liberalization will be less efficient than unilateral action in that some suppliers will get preferred access. If these are not the most efficient suppliers then the agricultural market will not be truly competitive (this is Chile's problem with adopting the MERCOSUR CET). On the other hand the "first best" policy may not be available, either because it is a political non-starter or because the regional route has political rationale. In this case the policy issue is to keep trade diversion costs to a minimum. In a free trade area this should be possible through a low external tariff for each member. In a customs union one country could be forced into a more protectionist position than would be preferred by that country (the UK problem with joining the European Community in 1973). Then the institutional process for changing the CET becomes crucial.

Suppose the policy goal of governments is eventual liberalization, perhaps a little ahead of global liberalization in the WTO. If there are real problems in the short run with imposing too much pressure on certain sectors that need time to be globally competitive, then a case could be made for regional liberalization of agriculture under certain conditions. One would be that the country with which one was entering into a preferential agreement should ideally be a more efficient producer of agricultural import items. In other words the price should tend to go down with regional liberation. That way the regional agreement would not be used to support high cost

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<sup>17</sup> The new members would of course have to change more policies, as a result of adopting the CAP, but in terms of market access for agricultural goods the Europe Agreements are already aiming for free trade by the year 2000. Agricultural provisions include quotas on access to the EU market, which would need to be liberalized or expanded with membership changes. In turn the access of the EU to the CEEC would be liberalized with membership, but then there would be no export subsidies paid on such exports.

agriculture. (For export products it is in a country's commercial interest to have preferential access to an otherwise highly protected market in a partner country: it is up to the importing country to worry about the inefficiencies of such a policy).

If, however, the main goal of a particular government were to be to preserve agriculture from outside competition then any form of trade liberalization will presumably be resisted. This was the Scandinavian model before entry into the EU. Even limited opening to trade from a partner country will lead down a slippery path to liberalization, hence the need to exclude agriculture from EFTA. Domestic policies will become more difficult to manage. Program costs will increase. Trade tensions will be exacerbated. Goods will find their way in through partner countries, as rules of origin don't work well for agriculture. One would hope, however, that few governments in the present era of expanding global markets still want to insulate their agricultural sector in this way. Slovenia has recently made it clear that they wish to reform and modernize their agriculture and farm policy, and Lithuania has made significant strides in the same direction.<sup>18</sup>

Moreover, if for reasons other than agricultural policy a free trade area was to be set up, then agriculture should normally be included. To leave it out would be to risk isolating that sector from competitive pressures, as happened in EFTA. But if agriculture is included then it is important that the level of protection against external sources of agricultural products be as low as possible, to avoid the EU problem of trade diversion. In a free trade area one could even imagine one country having a zero tariff on third country imports (Estonia within BFTA?), implying that other member states would have to rely on the enforcement of rules of origin to avoid losing all protection of their own markets.

It follows that, if the other members of a customs union do not agree to a strategy of following a low protection policy for the agricultural products which one imports, it could be best to request that some of those commodities be excluded (as Canada did with sugar, though NAFTA is not a customs union). In that way a more liberal policy can be continued in at least one country. Other countries may wish to exclude commodities when they wish to maintain *inefficient* production: this is a reasonable solution only if the alternative was to have higher protection throughout the RIA. However, there are limits to the exclusion strategy since under WTO rules the free trade area has to cover "substantially all trade" (Article XXIV). One can do the same thing by having flexibility in the operation of the CET and the rules of origin (the CARICOM solution).

If one joins a RIA, and agriculture is included, one crucial question is whether to move toward a common agricultural policy or to allow each country to run its own rural policy. If a customs union arrangement is favored, the level of common protection is crucial in determining whether the incentives are there for efficient agriculture. It may be difficult to influence this common level, as interests in other countries will tend to focus on keeping prices high. Without a

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<sup>18</sup> Both Romania and Bulgaria started with the opposite problem, taxing their agriculture sectors and in particular restricting exports. Under such conditions the opening up of these sectors to the world market (*i.e.* removing the "protection" that the rest of the world enjoyed from Romanian and Bulgarian goods) should pose few political problems.

common policy the level of protection is that which can be sustained by the market arrangements, which will reflect third country access agreements, internal trade flows, arbitrage and different production conditions.

# Chapter Four

## Agricultural Input Industries in EU Accession Countries

by David Gisselquist, Simon Gill, Luiza Toma,  
Stefka Grozdina, Istvan Feher, and Endre Smolcz

### Part I: Common Issues for Input Industries During Transition and EU Accession

Modern agriculture demands a reliable input supply to achieve stable production levels. Input industries are the driving force of technological change in agriculture. New seed varieties, machinery, pesticides, and herbicides allow farmers to shift to more efficient farming methods.

Agricultural input industries in transition countries face challenges and opportunities. Four of these challenges are discussed in this Chapter. First, there are many more farmers, or farm management units than in the past. Second, agricultural producers in the EU accession countries face dramatic shifts in output demand. Third, old patterns for managing research and technology transfer are giving way to new ones. And fourth, environmental issues are becoming more important for agricultural policy.

#### The Challenge of Serving More Farmers

Changes during the 1990s have brought an enormous increase in number of independent farm management units in most of the accession countries represented in this workshop. Only Poland and Slovenia escaped socialization of agricultural land ownership after WWII. In other pre-accession countries, large state farms and cooperatives controlled most of the land and livestock.

In Romania at the end of the 1980s, 90% of agricultural land, and 66% of livestock, was managed in 4,000 separate agricultural units averaging over 3,000 hectares each. By 1996, however, 80% of agricultural land was in 3.5 million individual private holdings. In Lithuania, 1,200 state farms and collectives averaging over 2,500 hectares each controlled 90% of agricultural land in 1991, whereas by 1996, over 500,000 private owners managed two-thirds of agricultural land. With the exception of Poland and Slovenia, all of the countries represented in this workshop have gone through similar changes.

Although some new landowners have leased or sold land back to larger units, most new owners -- at least for now -- are doing their own farming. Furthermore, the shift to smaller farms is still going on as state farms and cooperatives and their organizational descendants continue to break down and to distribute land.

Among countries represented in this workshop, the number of farm management units has multiplied enormously, nearly 400 times as many in Lithuania and almost by a factor of 1,000 in Romania. This has obvious implications for machinery sales, but also effects marketing

strategies for other inputs. During the 1980s, an average Romanian farm of 3,000 hectares might buy 200 to 600 tons of fertilizer in one order, picking it up with its own trucks from the factory gate. In 1996, an average Romanian farmer with four hectares might buy 50 to 400 kgs at a time, worth DM 16 to 160 only. With smaller orders, farmers are looking for traders or retail outlets to sell smaller quantities of inputs in local towns and markets. The old arrangements for delivering inputs to a few large farms involved no more than a few dozen major parastatal producers and importers and a network of government warehouses. In contrast, arrangements that are emerging, but not yet in place, to serve new Romanian farms include hundreds of private companies producing and importing inputs, and hundreds of wholesalers supplying thousands of retailers.

At the end of the 1990s, remaining state farms, and new corporate and other large private farms, generally account for no more than 10% - 15% of agricultural land in the ten countries represented in this workshop, and prospects are for that area to shrink further. For seed, fertilizer, machinery, and other inputs companies, the message is clear: Focus your sales efforts on small and medium farmers. What do they want and how can you get your products to them? Since small and medium farmers control most of the land, that is where input markets are for the foreseeable future.

Poor access to inputs for small and medium farmers is one of the factors that contributed to large declines in input use during the early 1990s. Throughout all transition countries, many agricultural experts believe that small farms do not use inputs at efficient levels. This may be true for the time being, since it is taking some time for wholesale and retail markets to develop. For example, in Bulgaria, Norsk-Hydro's entry in 1997 represented the beginning of organized wholesale and retail fertilizer marketing. In Hungary, the number of small-town stores retailing inputs multiplied from the mid-1990s. As wholesale and retail networks develop throughout Central European countries, small and medium farmers can be expected to buy and use more inputs. In other countries in Europe and elsewhere in the world, small and medium farmers typically adopt seeds, fertilizer, and pesticides technologies that are comparable to large farms, and achieve similar or even higher output per unit area. These farms can remain competitive. In Italy, Portugal, and Greece, the average farm size is below 10 hectares, and in the entire EU, the average size is only 19 hectares.

### **The Challenge of Adjusting to Demand Shifts**

From about 1990, farmers in all of the 10 transition countries represented in this workshop suffered large drops in demand for agricultural products, with exports collapsing due to a breakdown in trading relations to the east and with domestic sales falling due to often severe drops in per capita income. In many cases, demand -- and production -- for important products such as wheat, milk, pork, and tobacco fell over 50% from peaks in the 1980s to low points in the 1990s.

Drops in demand and production translated into less demand for inputs. Fertilizer use in some countries fell by 80% from highs in the late 1980s to lows in the early and mid-1990s. Machinery sales have fallen far below levels required to maintain and replace current stocks. In

Poland, for example, new tractors bought in 1997 were only 0.7% of all tractors in use, while for combines, new ones were only 0.3% percent of all combines in use. These low rates of equipment sales are not sustainable unless farms de-mechanize or the average tractor and combine stays in use for well over 100 years.

Where is the opportunity for input industries in this decline? We can be fairly confident that aggregate levels of agricultural production and input sales will recover to, and even exceed 1980s levels within the next 5-10 years. However, not everything will recover. We can expect that future output demand and corresponding input markets will be different in some respects from 1980s patterns. Companies that are able to anticipate and cater to those differences will enlarge their shares of an expanding market.

What are some of the changes we can expect? As already noted, input markets will often be dominated by small and medium farmers. Also, former trade patterns for agricultural outputs, based on political boundaries and alliances, are in some cases no longer efficient. For example, Russia may be able to buy fruit and tobacco more cheaply from countries nearer to the equator than from Bulgaria. Similarly, during the 1980s, a large share of grain production in pre-accession countries went into meat for export east. Today, Russia's meat imports may be cheaper from non-European countries with lower production costs. Also, farmers in Central European countries may not want to return to supplying Russian demand, and Russian farmers may lobby for more national self-sufficiency.

With demand shifts, farmers have begun to reorient production. Lithuania, for example, produced fodder wheat and imported most of its bread wheat during the 1980s. With the collapse of livestock exports, farmers shifted from fodder wheat to bread wheat, and Lithuania no longer imports bread wheat. In Romania, sunflower production has expanded as government has allowed market prices to move toward world market levels.

A large share of future growth in agricultural production — for export as well as domestic markets — is likely to come from a broad range of high value processed products, including, for example, wine, beer, cheese, seeds, sausages, fruit juices, fresh and frozen vegetables, etc. Farmers will increasingly produce for specific markets, such as grapes for a wine label, spring barley for a specific brewery, or potatoes for a particular fast-food chain. Some commodity exports such as cereals and meat, etc., may also be important.

This reorganization or reorientation of output markets works its way back into input markets. When processors want particular products, such as potatoes of a specific variety, farmers look for inputs that allow them to satisfy high-value markets. Some of this specific input demand can be satisfied with technology and inputs that are already available. In other cases, meeting market demand may call for new input technology, which may be imported or developed in country.

### **The Challenge of Rebuilding International Scientific Linkages in New Circumstances**

Countries in this workshop have strong traditions of world-class agricultural scientists and research institutions, sometimes continuing from before World War II, but often developed

during communist times. During communist times, government scientists and institutes managed international scientific linkages and developed and approved all new technology.

Transition and EU accession have implications for the organization and management of agricultural research and technology transfer. To maintain world-class research and technology, international linkages are crucial. Transition countries can build new linkages with OECD countries, replacing and supplementing former linkages to the east. Building these new linkages entails adjusting research institutes and inputs industries to OECD patterns. In OECD countries, a large and increasing share of agricultural research and technology transfer are managed through private inputs companies and markets, while public research is also strong and supports private research.

The following paragraphs discuss three areas where government policies and programs in pre-accession countries can encourage stronger scientific linkages and hence provide better access to technology for farmers, researchers, and inputs industries.

First, input regulations deserve some attention. In OECD countries, private input companies develop and introduce new technology, while governments regulate to protect public health and the environment and to ensure honest advertising and packaging. Although the EU and other OECD governments sometimes extend regulations into questions of technology performance, the overall design of the regulatory process favors market entry, leaving farmers and markets to determine the success of a new variety or other new technology. In pre-accession countries, however, government experts as regulators have, in some cases, been unwilling to give up the notion that they must decide not only what seed, pesticide, or other technology is safe for use, but also what is suitable for use. In some of the countries represented in this workshop, regulations concerned with technology performance slow introduction of new crop varieties, livestock genetics, and low-risk pesticides.

In some cases, staff of regulatory institutions may look at tests as a source of income and jobs, so that institutes start to favor more tests and higher regulatory barriers with little attention to social costs or benefits. To get out of such situations, ministries of agriculture can be encouraged to clarify strategies for technology transfer, and then to adjust institute budgets and missions to fit that strategy. This may involve reassigning scientific staff from testing and regulating for performance to other activities, such as regulating for environment or public health, registering and protecting intellectual property rights, or research to develop new technology.

Second, promoting domestic private input industries through new start-ups and privatization improves a country's capacity to access foreign private technology. In Poland, development of the private seed industry and international private linkages are inhibited by continued public ownership of more than 30 breeding companies that manage a large share of Poland's considerable breeding skills and germplasm. In Bulgaria, development of private fertilizer trade (which has introduced new compounds and specialty fertilizers) depends in part on government decisions to privatize several fertilizer factories.

Third, government research continues to be important to support local agriculture and also input industries. However, many governments have cut public budgets for agricultural research, and have challenged institutes to make money. This strategy to “reform” public research has been widely perceived as a market-friendly and progressive approach. However, what has been happening in many countries suggests that we may be on the wrong track. Government institutes continue to breed finished varieties and to produce and sell seed as in communist times. While government institutes compete unfairly with private companies, research that requires public funding -- that does not lead to marketable inputs -- goes unfunded and undone.

The solution to this dilemma is two-fold. On the one hand, market-oriented research and related activities such as breeding finished varieties and seed production, can be separated from government research institutions and privatized. On the other hand, governments can be encouraged to increase budget support for research in public institutes and universities to levels found in OECD countries. A common rule of thumb is that government research spending should be at least 2% of agricultural GDP. For countries in this workshop, this means returning to 1980s levels of budget support for research. Generally, governments can boost research budgets without any increase in overall agricultural spending by shifting money from seed and other inputs subsidies.

Agricultural scientists and institutes in pre-accession countries have much to contribute to the international community, but the current weakness of private input companies, combined with low public research budgets inhibit international collaboration. Private research collaboration can be expected to develop as private inputs industries gain sales and resources. National governments have to take the lead in rebuilding budgets for public research. However, we can also recommend that international public organizations allocate funds to mobilize personnel and institutes from pre-accession countries for selected programs, such as the World Bank-FAO IPM Program for low risk pest management, or research for developing countries coordinated through the Consultative Group for International Agricultural Research (CGIAR).

### **The Challenge of Adjusting Inputs Industries and Regulations to Environmental Concerns**

Emerging international markets for organic products create opportunities for farmers in pre-accession countries. Looking forward to EU accession, farmers may also be able to take advantage of anticipated EU financial support for organic or extensive (low-input) agriculture.

Expansion of areas registered for organic or other extensive farming creates new markets for inputs that these farming practices favor or require, including:

- seeds of varieties that perform well in organic or low input conditions, and for organic farmers these seeds must also be organically grown; and
- pheromones and other non-poisonous or biological pest management inputs that are allowed in organic or other extensive or low input agriculture.

Since the areas registered for organic agriculture and other extensive practices begin from such small bases in pre-accession countries, current input demand is generally too low to pay for companies to test and regulate these special inputs. If access to inputs is not going to be a constraint, then governments must reconsider their regulatory strategies for these inputs. This has already begun in some pre-accession countries. In Slovenia, for example, the government registers new biological pesticides without new in-country efficacy tests, as long as they have been registered in at least two EU countries. This regulatory strategy is consistent with EU practices and at the same time favors farmer access to inputs necessary for organic and other extensive agriculture.

As pre-accession countries shift some significant proportion of land into organic or extensive agriculture, farmers sell high value products into expanding markets for organic crops, and at the same time, sensitive environments (such as Lithuania's Ramsar site for migrating birds) are protected. Pre-accession countries will also be preparing claims on EU agricultural support budgets, which have been shifting from production supports to environmental and other concerns.

## **Conclusions**

If farmers and processing industries are to build capacity to enter and compete in EU markets, it is essential that farmers have access to varieties and technologies that are available to EU farmers. This is not yet the case. For some inputs and countries, competitive input industries have not yet developed. Wholesale and retail trade networks are sufficiently developed to deliver inputs to small and medium farmers in only a minority of countries represented at this workshop. In some cases government regulations inhibit introduction of new private technology.

While all governments are moving to adopt input regulations and to develop regulatory institutions that satisfy conditions for EU accession, this does not always mean the same thing for technology transfer. For example, Romania has regulations and institutions in place to test new varieties as in the EU, but Romania also accepts all varieties from the EU Common Catalogue without tests, as is done in EU countries. On the other hand, Hungary and Poland test varieties as in the EU, but unlike Romania and EU countries, they do not accept varieties from EU Common Catalogues without tests. Farmers in Romania consequently have access to all varieties available in the EU, whereas farmers in Poland and Hungary do not. Similar differences can be found in regulations for pesticides and livestock genetics, where countries are all moving towards EU patterns, but it is easier in some than in others to introduce new low risk products. Slovenia, for example, does not require in-country efficacy tests of low risk pesticides, whereas most, if not all, other pre-accession countries do require such tests.

It takes time to develop farming skills, input industries, and output processing industries that are competitive in EU and other world markets. While input trade is not large in value relative to output trade, lack of access to inputs can be absolutely constraining for development of much larger downstream activities. Following EU and OECD patterns, private companies have the primary task to develop input industries and international links into world input

industries and technology. Governments can speed this development through workable regulations and supportive public research.

## **Part II: Agricultural Machinery in Poland during Transition**

Given the size and importance of its agricultural sector, Poland has a surprisingly low level of farm mechanization. An estimated 50% of farms larger than one hectare do not have tractors, and many of the existing tractors in private hands are more than 10 years old. On many small farms, the prime mover remains the horse. Given the current economic climate for farmers, and the increasing age of the machinery, estimates project a significant decline in tractor numbers and some de-mechanisation in the near future, which threatens agricultural productivity on the eve of EU accession.

Polish agricultural machinery production has been dominated by large state and formerly state owned companies of which ZP Ursus is perhaps the most well-known. There are significant tariff barriers to foreign machinery companies, and the privatisation of the Ursus tractor factories still remains a politically sensitive issue.

### **Polish Agriculture and Farm Mechanisation**

The structure of Polish Agriculture. The 1996 census reports 2.9 million farmers/growers in Poland, but the bulk of these are smallholders. There are 890,000 farms of less than one hectare in size. Over 80% of farms larger than one ha, are less than 10 ha in size. Small farm size has a detrimental effect on a farmers' ability to mechanise, or if already mechanised during the centrally planned economy, to now replace machinery in a market economy.

The average Polish farm consists of an arable area covering 67% - 72% of the farm, a meadows area of 8% - 14%, a permanent pasture area of 5% - 8%, a small orchard area, forests, and other land. **Table 4.1** below shows typical crop areas in Poland, using data from the 1996 census. Most small farms also have some livestock. Farms below five ha have an average of 0.6 cows, 0.9 pigs and 10.9 chickens, whereas all farms have an average of 2.8 cows, 5.8 pigs, and 16.3 chickens.

Polish Farm Mechanization. Looking at the number of tractors and combines per hectare, Poland's level of mechanization compares favorably with a number of EU members and candidate EU accession countries (**Table 4.2**). The 1996 census reports an average of 14.2 hectares per tractor in Polish agriculture. This is consistent with other countries of the EU, and it is much higher than most other former COMECON countries. For example, Bulgaria, Hungary, and Romania report, averages of 163, 67, and 92 hectares per tractor, respectively, in recent years.

**Table 4.1: National Crop Areas 1996**

Crop	National Area	No of farmers/growers	farmers/growers (percent)
Winter Wheat	8.7 million hectares	946,600	30.9
Spring Wheat		349,400	11.4
Rye		1,030,500	33.6
Winter Barley		105,500	3.4
Spring Barley		467,000	15.2
Oats		557,200	18.2
Winter Triticale		402,200	13.1
Spring Triticale		57,600	1.9
Mixed grains		740,600	24.2
Potatoes	1.3 million hectares	2,223,200	72.5
Field Vegetables	22,100 hectares	1,631,600	53.2
Sugar beet	452,600 hectares	258,700	8.4
Oil Seed Rape	187,900 hectares	28,500	0.9

Source: 1996 Census of Agriculture

**Table 4.2: Tractor and Combine Numbers in EU and Poland**

Country	Ave. farm size (ha)*	Tractors per farm**	Tractors ('000)	Hectares per tractor	Combines ('000)	Hectares per combine
Austria	15.4	1.49	343	10.3	24.0	25.8
Italy	5.9	0.55	1470	10.7	50.2	50.7
Holland	17.7	1.61	182	11.0	5.6	31.8
Finland	21.7	1.83	230	11.8	37.0	25.3
Benelux	18.8	1.42	112	13.2	10.1	30.1
Germany	30.3	2.28	1300	13.3	135.0	41.6
<b>Poland</b>	<b>7.8</b>	<b>0.55</b>	<b>1303</b>	<b>14.2</b>	<b>97.1</b>	<b>75.7</b>
Denmark	39.6	2.16	147	18.3	29.8	47.2
Sweden	34.4	1.69	165	20.3	40.0	27.0
France	38.5	1.84	1440	20.9	154.0	40.3
Portugal	8.7	0.33	150	26.0	4.0	110.0
Ireland	28.2	1.08	168	26.1	5.1	84.5
Great Britain	70.1	2.05	500	34.2	47.0	64.6
Greece	4.5	0.12	227	38.6	6.3	180
Spain	19.7	0.51	790	39.0	49.1	123
Hungary***			92	67.0	9.5	497
Romania#				92		
Bulgaria#				163		

\* GUS 1996 data, # GUS Yearbook 1997

\*\* Larger than 1 hectare

\*\*\* Hungarian National Statistics Office 1996.

Looking at number of tractors per farm, the level of mechanization in Poland (0.55 tractors per farm) is consistent with EU member states that have small farms and high employment in agriculture. This is far less than in EU member states with the highest average farm sizes, however, (Germany, Denmark, Great Britain and France), which have over 1.8 tractors per farm.

In Poland, Portugal, Greece and Italy, small subsistence farms still dominate agriculture, and average farm size is less than 10 hectares. The majority of Polish farms smaller than 5 hectares often cannot economically justify the purchase of agricultural machinery that is designed for far large field and farm operations. Machinery costs need to be spread over larger

areas, otherwise fixed costs become unbearably high. As a consequence there is little economic justification for machinery that could replace difficult and time-consuming manual labor. Yet, mechanization can significantly reduce labor costs. For example, replacing manual labor with mechanized labor can potentially reduce labor requirements for harvesting by 90%. However, the inherent problem is the small size of the average farm.

Smaller Polish farms have even fewer “prime movers” (i.e., horse, oxen, or tractor) and less machinery. Roughly 40% of Polish farms have no prime mover, either horse or tractor, and most of these farms have less than five hectares. While 55% of all Polish farms are in the one to five ha range, only 25% of tractors are located on such farms. Of the 210,000 farms reliant on horses, 99% are less than 10 hectares. Even on farms with a tractor, the number of implements (attachments) is often very low. Data from a 1994 survey suggests that as many as 38% of all Polish farms have only one implement or no implements (see **Table 4.3**). Most farm machinery other than tractors is concentrated on farms between seven and 30 hectares as shown in **Tables 4.3 and 4.7**.

**Table 4.7** also shows a significant increase in the amount of machinery available to farmers with more than 30 hectares. Much of the machinery located on larger farms is also extensively used on the smaller farms. There is a growing trend towards co-operating in the use of machinery, especially combines and other harvest equipment. In rural communities there is also a great deal of co-operation in the provision of mechanical services, such as assistance to repair tractors and the aging combine population.

**Table 4.3: Number of Implements in Use in Agriculture in Poland (1994)**

Machinery level	Total farms	Farms less than 7 ha	Farms more than 7 ha
1 or no implements	38.0	62.5	17.8
2 implements	12.0	13.2	10.9
3- 6 implements	33.5	21.7	43.3
7 or more implements	16.5	2.6	28.8

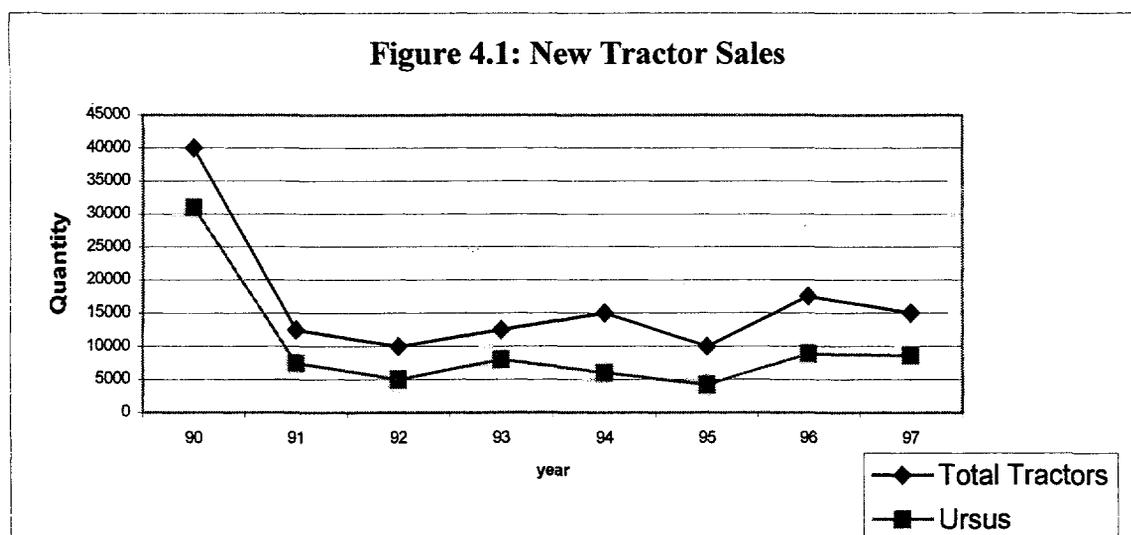
Source: Szemberg, *Zagadnienia ekonomiki rolniej 2-3 1996*. Institute of Agricultural Economics (IERiGZ)

Despite arrangements for sharing of equipment, field operations and cultivation techniques differ between small and larger farming units. This has an effect on yield potential. However, since efficiency of production depends also on unit costs, smaller farms using more labor and less machinery are not necessarily less efficient.

**Table 4.4: Distribution of Agricultural Machinery in Poland (1996)**

Machine Farm size	No. of farms	Fertilizer Spreader			Sprayer(mounted)			Combines		
		No.	%	Farms	No.	%	Farms	No.	%	Farms
1-10 ha	1651488	172243	38.8	0.10	170035	45.7	0,10	20174	20,9	0,01
10-15 ha	217387	118972	26,9	0.55	91034	24,5	0,42	16597	17,1	0,08
15-20 ha	89552	63276	14,3	0.71	46858	12,6	0,52	14018	14,4	0,16
20-30 ha	55890	46135	10,4	0.83	34294	9,2	0,61	15884	16,4	0,28
30-50 ha	19815	19221	4,3	0.97	14156	3,8	0,71	9462	9,7	0,47
50-100 ha	6015	6487	1,5	1.08	4792	1,3	0,80	3975	4,1	0,66
100-200 ha	2199	2788	0,6	1.27	1984	0,5	0,90	1952	2,0	0,88
200-500 ha	2352	4477	1,0	1.90	2787	0,7	1,18	3892	4,0	1,65
500-1000+ ha	2108	8054	1,9	3.82	4605	1,2	2,18	7605	7,8	3,60

Source: GUS Adjusted by Author

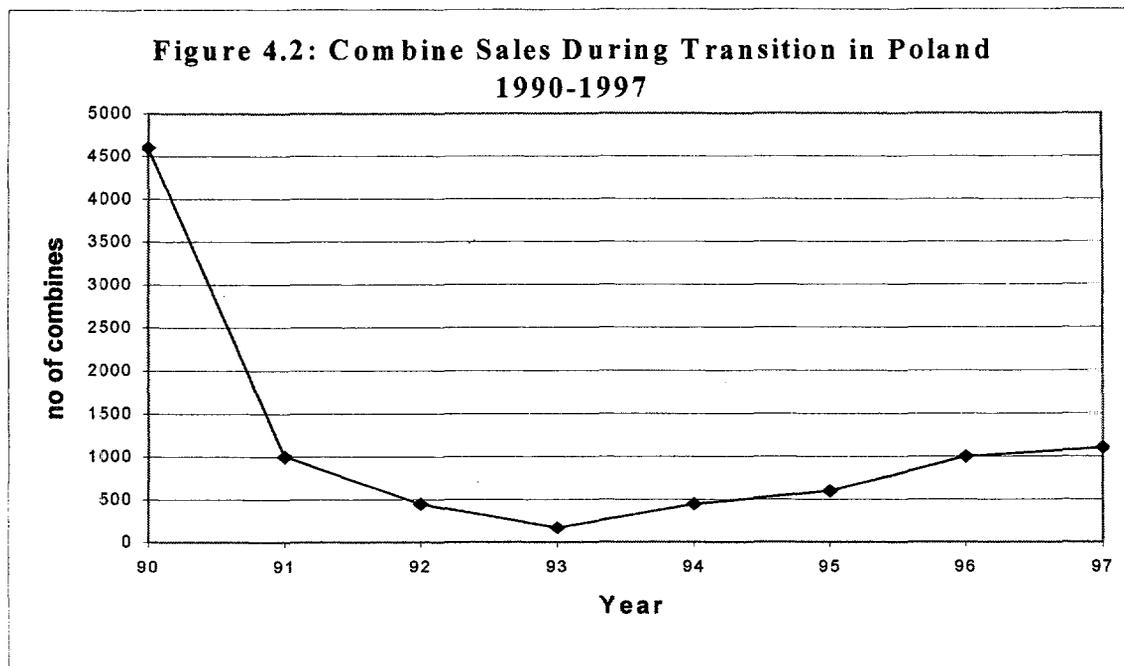


In many cases the area used for producing certain crops does not allow for efficient mechanization. For example, 2.2 million farmers grow potatoes on 1.3 million hectares (see **Table 4.1**), for an average planted area of 0.58 hectares per farm, which may in part explain the low level of mechanization for potato harvesting. Similarly, 1.6 million growers plant 22,000 hectares in field vegetables, with an average plot size of 0.01 hectare. Even for cereal crops, the average planted area per farm is small, and this is often further divided into small plots interspersed with neighbors' plots. This is particularly the case in the areas that were controlled by the Russian and Austrian-Hungarian Empires during Poland's partition, where strip farming still is prevalent. **Table 4.5** describes typical tools for various field operations on Polish farms.

**Table 4.5: Agricultural Operations on Small Farms (<50 hectares)**

Operation	Method/tool
Prime mover	Horse and small tractor mostly 2wd
Subsoiling	Little or none done
Plowing	Horse single furrow or small conventional
Discing	Very little
Cultivation	Horse or tractor zigzag or small spring tine
Power harrowing	Limited by tractor size
Drilling	hand broadcast, small horse/tractor drawn,
Spraying	Knapsack or small mounted
Fertilizing	hand broadcast or small spinner
Combining	Scythe, binders or small combines on contract
Baling (straw)	Loose, or forage trailer, small bales
Loading	by hand, some front loaders on small tractors
Transport	Horse drawn or tractor drawn traditional trailer
Mowing	Scythe, finger and some drum mowers
Raking	hand or rake wheels
Baling (hay)	Loose ricks or small bale
Silaging	very little, but some round bale wrapped
Forage feeding	hand chopped, hand fed.
Muck spreading	by hand or small moving bed
Root harvesting	by hand or by hand with spinner

Source: Szot, Edmund Rzeczpospolita 17<sup>th</sup> June 1998 (IERiGZ)



Source: Szot, Edmund Rzeczpospolita 17<sup>th</sup> June 1998 (IERiGZ)

### Changes in Agriculture and Mechanization during Transition

Machinery sales have fallen away from pre-transition levels. For example, the 1.3 million tractors in use in Polish agriculture today, originated from sales in the 1960s through the 1980's. Annual tractor sales in Poland averaged over 60,000 during 1980-85, but fell to 40,000 by 1990, and then collapsed to an average of less 15,000 during 1991-97 (see **Figure 4.1**). Similarly, annual combine sales fell from 4,500 in 1990 to an average of 700 per year during 1991-97 (see **Figure 4.2**). With lower sales of new tractors, the average age of tractors has grown. Tractor and combine replacement rates during the 1990s have averaged only about 1% per year, far too low to maintain current numbers.

During transition, sales of used tractors – associated at times with the reorganization of state farms – have dominated tractor sales. During 1990-1996, farmers bought over 200,000 second hand tractors while only 101,000 new tractors were sold to all parties, including the public sector for non-agricultural use. Although most new and used tractors continued to go to farms less than 10 hectares, the much smaller number of larger farms increased their share of total tractors owned. During 1990-96, 70% of new tractor sales were to the public sector, though only 23% of these went to former state farms under the control of the Agricultural Privatization Agency. Tractors are finding their way back to agricultural after work in the public sector. Prior to 1990 there was a considerable market in southern Poland for “home-made tractors.” In Bielsk voivodship as many as 30% of all tractors in use at the time were made by local mechanics.

Tractors in Poland have much longer working lives than in the EU. This may be as a result of lower annual usage, as well as a financial restraint on being able to replace machinery. Textbook agronomy suggests 9-12 tractor hours per hectare for a cereal/livestock farm per season. The large number of tractors on small farms may explain low use and longevity, although

Polish tractors are also used heavily for transport. Similar calculations could explain the longevity of Polish combines. There is an average of one combine per 100 hectares of cereal crops. Most combines are able to clear 0.75-1.0 hectare per hour, so that the average Polish combine works 75-100 hours per year. At this rate of use, the average combine would be expected to last 12 or so years by applying standard figures.

**Table 4.6: Transfer of Tractors in the Period 1990 to 1996**

Model Year	Tractor sales	Size farms to whom tractors were sold				
		1-5 ha	6-10 ha	11-20 ha	21-50 ha	>50 ha
1966-1975	36,273	15139	11876	5995	1825	1438
1976-1980	48,546	18041	15328	8654	3277	3246
1981-1985	50,181	15893	15049	10584	4229	4426
1986-1990	88,986	21018	26500	23612	10566	7290
1991-1995	71,949	19176	21080	19425	8900	3368
1996	5,631	879	1405	1808	1060	479
Total	301,566	94781	93634	70835	30006	20283

Source IERiGZ/GUS

Recent work by Professors Zalewski and Pawlak highlight the changes in tractor sales during the years of economic transition. Their work published through the Institute of Agricultural Economics and Food Economy shows that in 1998 the average age of the Polish tractor population has risen to 19 years and the average power output is 31 kW (42 hp). Some analysts expect that the demand for machinery will grow as the current age of machinery gets older. There is also some expectation, so far unfounded, that cheap credit will also be made available to rectify the poor level of sales.

**Table 4.7: Age of the Polish Tractor Population**

Year of production	Percentage of total Polish Tractors
Before 1965	5.0
1966-1975	19.6
1976-1980	21.4
1981-1985	23.6
1986-1990	23.9
1991-1996	6.5

Generally levels of production and sales of agricultural machinery have been dropping since transition. Sales are insufficient to replace virtually all equipment. For example, with 56,940 (59%) of combines over 10 years old, and with only 300 replaced annually, the annual replacement rate (0.3%) is far too low to sustain the current average of one combine per 100 hectares.

A few items are selling somewhat better. For example, relatively high sales of milking machinery and cooling equipment are a result of not only new legislation moving Poland toward EU standards, but also profitability and changing attitudes towards the modernization of this sector. For some items, such as Ursus tractors, large recent price increases – far in excess of the rate of inflation -- may be slowing sales (see below).

**Table 4.8: Machinery Produced and Sold in Poland in 1997 and Replacement Rates**

Machine type	Machinery production	Machinery sold	Population of machinery in 1996	Sales as % of machinery population
Ursus and MTZ Tractors	10,012	8,950	1,302,908	0.7
Muck spreader	410	378	484,223	0.08
Fertiliser spreader	4,346	4,144	442,706	0.9
Mounted sprayer	1,365	1,391	372,161	0.4
Mowers	1,899	2,058	439,699	0.5
Combines (Bizon)	336	312	97,058	0.3
Thresher	1,619	1,947	104,669	1.8
Binder	278	299	98,046	0.3
Potato Harvester	0	206	76,467	0.3
Sugar beet harvester	0	0	26,996	0.0
Trailers	210	222	668,008	0.03
Twin milking bails	117	123	294,180	0.4
Cooling milk tanks	9,017	9,005	156,690	5.7

Machinery sales to larger farmers have been expected to grow in importance. However, expectations are not yet being realized. Recent machinery sales have stayed at low or declining levels. Since early 1997 there has been a decline in the production and sale of agricultural machinery. Investment in machinery is thought to be lower because of the worsening financial position of many of Poland's farmers.<sup>1</sup> This is also apparent from simple study of the sales figures of BIZON combines, which, prior to transition, had a production capacity of several thousand combines per year. By 1997 production was down to mere 336 pieces. In 1998 this company was in part sold to a multi-national machinery manufacturer.

The production of agricultural machinery is carried out in approximately 500 small plants across Poland, with many producing traditional farm implements. There are also an estimated 600 outlets selling agricultural machinery. The number of outlets per voivodship varies greatly from 3 to 56.

### **Policies Affecting Mechanization During Transition**

A significant factor affecting the level of mechanization of Polish Agriculture has been the decline of State and co-operative farming structures in agricultural production. Changes to the co-operative laws in the early 1990's affected both co-operative state farms and the state machinery co-operatives. This left the small private farmer cut off from the state machinery co-operatives. Beset by financial problems, these large state structures were no longer the dominant market force that they had been throughout the 1970's and 1980's. Prior to transition, machinery sold off from the farms and co-operatives was sold at a price "affordable" to smaller farmers and, especially during the 1980's, enabled a large number of farmers to obtain sophisticated farm machinery far beyond needs of their minimal hectares.

Preferential credit programs were put in place throughout the 1990's to enable farmers to purchase new machinery. Many of the beneficiaries of these programs were the new lessors of

<sup>1</sup> Rynek Środków produkcji i usług dla rolnictwa. IERiGZ October 1997.

former state farms and large farms. The impact of these programs on the smaller farmer is expected to be minimal, especially given the number of small farms, the cost of new machinery, and the inability of many smaller farmers to provide the financial guarantees necessary to the banking sector, even in a preferential credit program.

Second-hand transfer of machinery was high in the early 1990's as a result of the method of liquidating and subsequent transfer of farming assets of the former state farms. That the farms were over-equipped and had too many workers for a market economy is evident. As a result, a number of tractors came onto the market as these had been transferred, along with the lease, to the private sector. The surplus of tractors was quickly sold. The main recipients were smaller farmers, who bought the oldest and lowest powered tractors.

Most agricultural machinery – except for tractors and spare parts -- is zero tariff rated and assessed VAT at 7% (see **Table 4.9**). The main tariff barriers to the international movement of agricultural machinery into Poland have been placed on imports of tractors. This is a protectionist measure favoring the Polish tractor company Ursus, the Czech manufacturer Zetor, and MTZ, who have significant shares of the Polish market. The Czech company has a manufacturing base in Poland. Tractors produced in the EU face a 14% tariff, whereas American-made tractors such as John Deere face a 35% tariff. These rates are applied to all tractors over 35 kW, although no domestically produced tractor has a power output higher than 120 hp. Romania receives special treatment (higher tariffs) on its agricultural machinery exports.

**Table 4.9: Tariff Codes for Selected Agricultural Machinery into Poland**

Goods Description	Vat rate	Automatic Tariff	Preferential Tariff		Tariffs on imports from certain countries according to trade agreements		
			DEV	LD C	EU and EFTA	Czech, Slovak, Hungary, Slovenia, Latvia, Lithuania	Romania
New tractors over 18 kW	7	35			14	0	26.3
Second Hand Tractors	22	35			14	0	26.3
Agricultural Trailers	7	15	0	0	6	0	10.5
Ploughs	7	30	7.2	0	0	0	0
Plough and machinery parts	7	30	7.2	0	3.6	0	6.3
Seed Drills	7	30	7.2	0	0	0	0
Fertiliser spreader	7	30	7.2	0	0	0	0
Mowers	7	30	7.2	0	0	0	0
Hay making equipment	7	30	7.2	0	0	0	0
Forage harvesters	7	30	7.2	0	0	0	0
Sorting and grading machinery	7	30	7.2	0	0	0	0
Milking machines	7	30	7.2	0	0	0	0
Parts for milking machines	7	30	7.2		3.6	0	6.3

## Conclusions

In Poland tractor sales have plummeted during the transition period of 1990-1997. Tractor sales reached their peak in the early 1980's when over 60,000 new tractors per year were

put to use on Polish farms. By 1990 annual sales had declined to approximately 40,000 tractors. Similarly combine sales peaked during the 1980's. Poland now faces very low replacement rates for machinery. Annual tractor sales of 10,000-15,000 make little impression on a total tractor population of over 1.3 million tractors. In 1996 the average age of a tractor in Poland was 16 years. By 1998 the average age had risen to 19 years. Analysts at the Institute of Agricultural Economics and Food Economy project some recovery in tractor sales by 2002 -- the hoped for date of Poland's Accession to the EU -- to around 22,000 new tractors per year. However, even at this rate there is still expected to be a decline in the amount of mechanized power that will be available to Polish farmers in the near future. Farmers in half of Poland's farming area do not have the financial resources to replace machinery, due to lower farm incomes and the rapidly rising cost of new machinery.

### **Part III: Seeds Regulation and Trade in Romania**

Romania's seed subsector is transforming its regulations and institutions to better suit a competitive market economy. In time, new institutions including private seed companies are expected to link Romanian farmers, the seed industry, and scientists to seed technology and markets in the EU and other developed countries. However, the process of establishing new regulations, institutions, and linkages takes time.

#### **Regulatory and Policy Framework**

Romania's seed law -- Law 75/1995 as amended by Law 131/1997 -- requires compulsory variety registration and compulsory seed certification (with some exceptions) as in the EU. The 1997 amendment expanded Romania's list of allowed or registered cultivars to include all cultivars in EU Common Catalogues. Based on the 1997 amendment, the government prepares two lists of cultivars, an Official and a Recommended List. The Official List contains all cultivars from EU Common Catalogues as well as other cultivars that pass DUS (distinct, uniform, and stable) and VCU (value in cultivation and use) tests in Romania's State Institute for Variety Testing and Registration (ISTIS). The Recommended List comprises cultivars from the Official List that have also passed ISTIS VCU tests or performance tests under Romanian conditions.

Ongoing changes in the legislative and institutional framework are guided by the goal of harmonizing with EU legislation. Legislative harmonization has been partially achieved in the plant health area; eight more regulations are planned in this area to complete the job (see **Table 4.10**). Current legislation provides weak protection of intellectual property rights in plant cultivars. New legislation on plant variety protection consistent with UPOV guidelines has been drafted and is currently awaiting approval.

The main government institutions dealing with seed trade, all of which are within the Ministry of Agriculture and Food, are as follows:

- The State Institute for Testing and Registration of Seed Varieties (ISTIS), which tests and registers seeds; ISTIS has 45 subordinate units, each having 50-70 ha experimental plots and laboratory facilities.
- The State Inspection for Seed and Planting Material Quality Control, which authorizes economic agents to produce and trade seed and sets and enforces rules for certification and trade; components include the Central Laboratory for Quality Seed Control and the Territorial Inspectorates for Seed and Planting Material Quality. Government plans to strengthen Romania's institutional capacity for seed certification and quality control.
- The Inspectorate for Plant Protection and Phytosanitary Quarantine, which monitors seed imports through Customs Phytosanitary Quarantine Inspectorates at 35 border points, and has many other duties as well. Government plans to strengthen customs facilities, including staff and equipment for the Central Laboratory for Plant Health Quarantine.

**Table 4.10: EU Phytosanitary (Seed) Legislation to be Harmonized in the Short-Term**

Commission Decision 92/231/EEC (OJ No L 106, 30.04.1993, p. 11) as last amended by Commission Decision 95/76/EC (OJ L60 , 18.3.1995, p. 1)	Commission Decision 92/231/EEC of 30 March 1993 authorizing, in respect of the marketing of seed potatoes in all or part of the territory of certain Member States, more stringent measures against certain diseases than are provided for in Annexes I and II to Council Directive 66/403/EEC
Council Directive 77/93/EEC (OJ No L 26, 31.01.1977, pp. 20-54) as last amended by Commission Directive 95/4/EC (OJ L44 - 28.2.95, p. 56)	Council Directive 77/93/EEC on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community
Council Directive 93/85/EEC (OJ No L 259, 18.10.1993, pp. 1-25)	Council Directive 93/85/EEC on the control of potato ring rot
Council Directive 69/464/EEC (OJ No L 323, 24.12.1969, pp. 561-562)	Council Directive 69/464/EEC on the control of Potato Wart Disease
Council Directive 69/465/EEC (OJ No L 323, 24.12.1969, pp. 563-564)	Council Directive 69/465/EEC on the control of Potato Cyst Eelworm
Council Directive 92/70/EEC	Council Directive 92/70/EEC of 30 July 1992 laying down detailed rules for surveys to be carried out for purposed of the recognition of protected zones in the Community
Commission Directive 92/76/EEC	Commission Directive 92/76/EEC of 6 October 1992 recognizing protected zones exposed to plant health risks in the Community
Commission Directive 92/105/EEC	Commission Directive 92/105/EEC of 3 ebruary 1992 establishing a degree of standardization for plant passports to be used for the movement of certain plants, plant products or other objects within the Community, and establishing the detailed procedures related to the issuing of such plant passports and the conditions and detailed procedures for their replacement
Commission Directive 93/51/EEC	Commission Directive 93/51/EEC of 24 June 1993 establishing rules for movements of certain plants, plant products or other objects through a protected zone, and for movements of such plants, plant products or other objects originating in and moving within such a protected zone
Commission Directive 94/3/EC	Commission Directive 94/3/EC of 21 January 1994 establishing a procedure for the notification of interception of a consignment or a harmful organism from third countries and presenting an imminent phytosanitary danger

Source: National Program for the Adoption of the Acquis Communautaire.

From early 1997, Romania has moved away dramatically from foreign trade controls – administered access to foreign exchange and extensive import and export controls – and toward markets. Following a large devaluation in early 1997, importers have market access to foreign exchange. Government also cut seed import duties; duties on sunflower seed, for example, fell from 138% to 30% in 1997 and are expected to fall further to 10% in 1998. Government has also cut non-tariff barriers on seed exports and imports. For example, during 1994-97 government enforced *ad hoc* seed export bans for wheat (1994) and sunflower (1994 and 1995) and seed export quotas on maize hybrids, sunflower hybrids (230 tons in 1994 and 2,000 tons in 1996); and wheat. From May 1997 there have been no more interdictions on seed exports and imports. In 1998, despite a serious shortfall in hybrid sunflower seed due to bad weather in 1997, the government allowed Romanian exporters to honor existing foreign orders.

According to trade agreements (EU, CEFTA, Czech and Slovak Republics), Romanian seed exports qualify for preferential custom duties and/or tariff contingencies. Romania made little use of these preferences due to various factors, including low customs duties, better trade opportunities in other markets, and low demand for specific products. For example, the opportunity to export 750 tons of potato seed to the EU during 1996 and also 1997 with 60% custom duty was not used at all, and the same happened for barley seed in 1994-97 (Romanian Foreign Trade Center).

Government subsidizes some seed sales through public, as well as private, companies. Total seed subsidies fell from 160 billion lei in 1996 (roughly \$40 million) to 150 billion lei in 1997 (less than \$20 million). Only 10% of private farmers buy subsidized inputs. Since 1997, the government has been distributing input vouchers to all farmers in the fall and spring (e.g. with a total value near \$160 million by the fall of 1997). Farmers use vouchers to buy seeds, fertilizers, and other inputs.

### **Industry Structure and Associations**

The Ministry of Agriculture and Food has authorized about 4,000 economic agents to produce and trade certified seed. The dominant Romanian firms in the seed market are SEMROM (mostly field crop seeds) and UNISEM (mainly vegetable seeds), both of which are state companies. With headquarters in Bucharest, Semrom has 38 subsidiaries in most of Romania's counties. It has a total storage capacity of about 650,000 tons and about 2,500 employees. In January 1998 Semrom was divided into five companies to facilitate privatization, which is to be completed during 1998. Similarly, UNISEM has been divided into 18 units. Some foreign companies have been negotiating to buy parts of SEMROM and UNISEM. Some of the shares of privatized companies (about 10%) may be retained by the state.

Private seed companies in Romania include subsidiaries of multinationals, joint ventures, and Romanian companies. Some of the most prominent foreign seed companies present in the market through subsidiaries and joint ventures include Pioneer, ITC Zeneca, Saaten Union, Verneuill, Monsanto, and Novartis. Prominent private Romanian seed companies include Cyproma and ITC. For many years, Romanian companies have multiplied imported parent seed for export. Some companies are licensing foreign cultivars for production and sale in Romania.

No data is available on the private sector share of Romania's seed markets. According to their own evaluations, SEMROM and UNISEM cover about 80% of the commercial seed market.

Before the 1997 market liberalization, state-owned companies dominated input distribution. With access to subsidized credit, these companies extended inputs to farmers on credit, which farmers repaid by delivering a portion of the harvest to state companies at fixed prices. For seeds, SEMROM and UNISEM dominate input distribution networks. Among the emerging distribution systems, it is too soon to say which are going to stay and which will disappear.

Step by step, other companies have gotten involved in seed and other input distribution. New entries take time to get acquainted to the domestic market. Some foreign input companies keep an office in Romania and sell to private distributors, which is cheaper and less risky than establishing their own networks. Once state-owned seed companies are privatized, new owners may further develop existing facilities, including dealer networks.

Some producers associations and cooperatives buy inputs for members. These organizations vary from one region to another. Most are temporary and are dissolved after their business is done (e.g., after receiving and distributing a single order of fertilizers). Some program and project initiatives support cooperatives (e.g., a PHARE program promotes producer groups for various purposes, including input purchasing). New cooperative legislation may be necessary for cooperatives and farmers' associations to play a meaningful role in input distribution and other activities.

Seed Trade Associations. Trade associations protect members' interests, serve as interface between producers and official bodies, collect and distribute information on domestic and international markets, arrange workshops and conferences, etc. However, some trade associations are not so effective, and members often complain about the very formal character of some Romanian associations.

There is a strong need for a national association of seed producers to address issues such as changes in the legislative framework, delays in reimbursement of VAT, etc (Gisselquist 1997). The major private companies have already started to organize an association. For potato seed, there is a special association, the Romanian Federation of Potato Growers, which was established in 1991 on the basis of Law 21/1924 and has about 3,600 members in 34 branches.

The Romanian government has been a member of the International Seed Testing Association (ISTA) since 1962, and also belongs to the OECD Seed Schemes, and the International Plant Protection Convention (IPPC), but is not a member of UPOV (International Union for Protection of New Plant Varieties). Since there is no Romanian seed association to join FIS (International Seed Trade Federation) and ASSINSEL (International Association of Plant Breeders), Romania is not yet a member of either of those organizations. Romania's certification system has been approved by the EU since 1985.

## **Seed Trade Performance**

During the 1990s the annual number of new cultivars registered by ISTIS (and therefore allowed for sale in Romania) has increased several hundred percent. For example, for five main crops (straw cereals, maize, potatoes, sugar beet, and sunflower), new cultivars increased in number from 15 in 1990 to 82 in 1997, and the foreign share increased from 15% to 50%.

As of 1997 Romania allows new cultivars from the EU without ISTIS tests. Nevertheless, companies still test cultivars according to local conditions, either in their own local experimental plots and/or through ISTIS. During 1998 ISTIS added 87 foreign cultivars – 62 from the EU (six countries), 15 from the US, and 10 from former socialist countries (three countries) – to its new Recommended List. However, since seed companies have also begun to introduce other cultivars from the EU Common Catalogue that are not in Romania's Registered List, there are no longer any comprehensive records of new introductions. While farmers gain from new foreign varieties, at least some Romanian breeders have balked at paying ISTIS testing fees, so that approval of some Romanian cultivars has been delayed.

One immediate and concrete example of the beneficial effects of amending Law 75 has been the seed industry's ability to import and deliver sufficient sunflower seed in 1998 despite bad weather in 1997 (that cut Romanian seed production). 1998 imports of an estimated 3,000 tons of hybrid sunflower seed – two-thirds of total planting requirements – would not have been possible without the expanded Official List, including hybrids from EU Common Catalogues. Many of the sunflower hybrids imported in 1998 had been tested by ISTIS but not yet registered.

Romania has been involved in international seed trade, but annual fluctuations are very high. In recent years, Romania's seed imports have exceeded exports; major imports include hybrid maize and potato seeds. Both exports and imports responded to 1997 reforms. As already noted, imports of hybrid sunflower seed in 1998 covered an unexpected shortfall. Also, taking advantage of access to all EU cultivars, one joint-venture seed company imported French wheat seed in 1997 to multiply for local sale in coming years. In 1998, Romanian seed exports (mostly on contract to EU companies) surpassed 1997 levels. Romania can expect much larger seed exports as companies develop stronger links with EU seed markets.

Data on domestic seed trade provides only a partial picture on trends. SEMROM's sales on the domestic market fell by 60% between 1990 and 1994, then partially recovered through 1996. With a few exceptions (e.g, tomato and eggplant) UNISEM's domestic seed sales for root crops and vegetables fell steadily from 1990 through 1996 to levels that are often far below 1990 sales. These trends reflect lower consumption of commercial (certified) seed as well as increasing market shares for private foreign and Romanian firms.

## **Conclusions**

Harmonization with EU legislation has been partially achieved. Still to be harmonized are standards and testing procedures at the border. There is still poor protection for intellectual property rights (weak rules and enforcement). Legislation on plant variety protection following UPOV guidelines has been drafted and is currently before Parliament.

By the end of 1998, once SEMROM and UNISEM are fully privatized, all companies involved in the seed industry will be private. For the time being, the wholesale and retail distribution system is weak. In order to enable cooperatives and farmers associations to play a meaningful role, the government should pass new cooperative legislation. There is a strong need for a national seed industry association.

Among former socialist countries in Europe and Central Asia, Romania has been a leader in moving towards a competitive and private seed industry that is fully linked to EU companies and markets. Since 1997, Romania has accepted cultivars from the EU Common Catalogues, which lowers barriers to entry for companies and cultivars from the EU, and brings more competition and better seed supply to farmers. Further steps toward stronger international linkages include joining UPOV, FIS, and ASSINSEL.

#### **Part IV: Fertilizers in Bulgaria During Transition**

Changes in fertilizer trade and use in Bulgaria are closely related to what has happened to the agricultural sector during transition. Fertilizer has an important role to play in the recovery of agricultural production, and has begun to do so in the mid-1990s with the entrance of new private traders distributing domestic and foreign fertilizers, including specialty products.

#### **Fertilizer Use, Trade, and Production before 1990**

In 1987-1989, Bulgaria used an average of 199 kg/ha of fertilizer nutrients, roughly similar to the 227 kg/ha average for Europe. Germany, the Netherlands, and several other EU countries, however, used more than 400 kg/ha. The column at the far right in **Table 4.11** shows 1989 consumption by product, while the next column to the left shows production capacity. Some of the phosphate, and all of the potash fertilizers were imported. Before 1990, manure from Bulgaria's large livestock sector made a significant contribution to soil fertility for horticulture.

To understand fertilizer distribution and trade before 1990, it is important to recognize who was buying fertilizer. Big agro-complex holding companies with more than 100,000 ha of arable land were the major clients. These agro-complexes consisted of state, cooperative, and community property, including TKZS (cooperative farms), DZS (state farms), greenhouse complexes, research institutes, trade organizations, etc. A typical TKZS (cooperative farm) covered 1,000-3,000 ha, while 10 ha was a common size for a plot covered with a single crop.

Fertilizer orders were submitted in advance on the basis of annual plans. The distribution system was built on a system of agrochemical centers (AHTS) in all of the bigger towns. These centers supplied fertilizers, agro-chemicals, plant protection services, and advice to production units. They also had retail shops for small home gardens, averaging 0.1 ha, that produced mainly vegetables and flowers under plastic and open field for household needs and open markets in the towns.

Under central planning, Bulgaria established four fertilizer plants, Chimko, Neochim, Agropolychim, and Agrobiochim, which produced mainly nitrogen fertilizers. A number of other chemical plants produced some liquid and other fertilizers, such as bone-meal.

The biggest plant, Chimko, is in Vratsa, north of Sophia. This plant produces urea, of which the largest share is exported, though small quantities are used for grain production in the northwest and rice and maize fields in the southwest. The second largest plant, Neochim, in Dimitrovgrad in the southeast, produces mainly ammonium nitrate. Its major role was to supply south Bulgaria with nitrogen fertilizers, though some production was exported. Agropolychim in Devna, near the Black Sea, also produces ammonium nitrate, which was intended both for export and for supply to northeast and southeast Bulgaria. It also produces triple super phosphate and fertilizer blends. The fourth plant, Agrobiochim in Stara Zagora, near the center of the country, produced mainly ammonium nitrate for the local market.

**Table 4.11: Fertilizer Production Capacity\* and 1989 Fertilizer Use**

Product	Chimko	Neochim	Agropoly- chim	Agrobio- chim	Total production	Consump- tion
Urea	800,000				800,000	215,000
AN**		630,000		420,000	1,050,000	529,000
SAN**			300,000		300,000	
UAN**			300,000		300,000	284,000
AS**				100,000	100,000	21,000
TSP**			120,000		120,000	1,091,000
MP**						90,000
SOP**						5,000
Totals	800,000	630,000	720,000	520,000	2,670,000	2,235,000

\* Fertilizer production capacity is for 1997, but there has been little change from production capacity in 1989.

\*\* AN is ammonium nitrate. SAN is stabilized ammonium nitrate. UAN is Unstabilized ammonium nitrate, AS is ammonium sulfate. TSP is triple super phosphate. MP is muriate of potash. SOP is potassium sulfate.

Source: Bulgarian Government

### Post-1990 Changes in Fertilizer Production, Trade, and Use

In Bulgaria committees were formed to restitute land and other property nationalized since 1944, but for many reasons restitution was slow until 1997. Almost all AHTS (agrochemical centers) were privatized and became private companies trading agricultural inputs, both wholesale and retail. Most of the agricultural machinery was restituted or privatized.

The way the transition was managed undermined agricultural production in the period 1990-1997. With decreased production, farms used less mineral fertilizer. Between 1990 and 1997 use of nitrogen fertilizers fell by 75%, phosphorus by 93%, and potassium by 98.4%. Since livestock production also declined, use of manure also fell, and it is still important only in mountain villages and home gardens.

With the drastic decrease in domestic fertilizer consumption, the four fertilizer factories oriented their production programs towards export. In 1996, Bulgaria exported 1,930,000 tons of fertilizers, which was roughly 75% of production capacity. Despite difficulties with demand, the first private fertilizer factory – producing liquid fertilizers – opened during this period, but with a small capacity compared to the four state-owned factories.

In 1996-97, the country experienced an economic crisis with high inflation. After elections changed the majority in Parliament, the new government established a currency board in 1997. From that time onward, the economy has improved, and this has favorably influenced agricultural production and demand for fertilizers. Sales are expected to increase substantially over the next several years. Restitution of land has been pursued more vigorously and is to be finished by end-1998. As of 1997, private farmers provide 40% of agricultural production, while cooperatives and state owned organizations supply 52% and 8%, respectively.

As of mid-1998, the Privatization Agency is negotiating with potential buyers for the government's four fertilizer factories. Through mass privatizations in 1996, up to 28% of stock has already been sold. Remaining shares are to be sold by the end of 1998. Gas supply is important for fertilizer production. Russia is the major supplier of gas for Bulgaria through Bulgargas, a Bulgarian state company.

For fertilizer distribution, ownership of trading companies is 80% private and only 20% public. In all of the bigger towns, private companies distribute agricultural inputs both wholesale and retail. In some regions of the country, retail networks exist. Overall, there are more than 400 retail shops for agricultural inputs in the country, and the number is increasing. Private traders not only deliver standard products, but also help with technology transfer and advice to farmers. For example, Hydro Bulgaria, which entered the market in 1997, has introduced made-to-order bulk-blended fertilizers corresponding to soil conditions, crop requirements, and farmer needs. Applying the right combination of nutrients, the farmer can save money and cut damaging fertilizer run-off. Most fertilizer (65%) is applied by eight-ton trucks with disks, while other fertilizer is applied by combine drilling (10%), airplanes and helicopters (10%), new machinery (5%), and hand (5%).

Private traders buy from Bulgarian factories and also import mainly potassium and combined fertilizers for soil and foliar application from the Netherlands, Germany, Israel, US, Macedonia, and other countries. Major importers are Hydro Bulgaria, BASF-AG, BRIT-Pleven, Veterin-Bulgaria, and others.

### **Fertilizer Policies and Regulations**

During the 1990s, and especially since 1996, government has passed new laws and regulations dealing with agriculture. While the general strategy has been to harmonize with EU regulations in preparation for EU accession, some aspects of Bulgaria's new regulations go beyond what is required for EU accession. In some cases, details of new regulations threaten the efficiency of fertilizer markets, and could delay the introduction of new private technology and boost fertilizer prices.

The National Service for Plant Protection at the Ministry of Agriculture registers fertilizers and controls fertilizer trade (according to Law for Plant Protection 1997, Regulation on Organization and Activities of the National Service for Plant Protection, Quarantine, and Agrochemistry of 4 March 1998, and Regulation No 3 of 1996 amended on 16 January 1998 on Biological Testing and Registration of Plant Protection Chemicals, Growth Regulators, and Micro-Fertilizers). The National Service for Plant Quarantine publishes the "List of Plant Protection Chemicals, Mineral Fertilizers, and Growth Regulators Approved for Use in the Republic of Bulgaria." The 1996 edition of this list includes 52 fertilizers produced by Bulgarian and foreign companies. The time required to register a new fertilizer is one year. Fees for testing and registration are determined by the Ministry; in 1997/98, the annual fee for a fertilizer product was equivalent to roughly \$1,500.

According to new laws and regulations, fertilizer trading companies and agricultural shops must be licensed separately for trade with fertilizers, agrochemicals, and seeds.

The National Service for Plant Protection tests and approves (registers) models of plant protection and fertilizer machinery and controls their import and production (according to Law for Plant Protection 1997 and Regulation No. 4 from 1996 for Control of Machinery for Plant Protection, amended on 12 March 1997).

Fertilizers are assessed VAT at 22%. Fertilizer imports are allowed in without limit, and duties are limited for the most part to nitrogen fertilizers. As of January 1998, duties for urea and ammonium nitrate are 39.3%, with preferential duties for products from the EU and CEFTA at 26.2%. Ammonium sulfate pays duties at 15%, or preferential duties at 11%. Duties for many other fertilizers, including mono-ammonium phosphate, NPK, and potassium chloride and sulfate are 0%.

## **Conclusion**

With expansion of private land ownership, recovery in agriculture and in fertilizer sales may be expected. There is a challenge in promoting modern fertilizer systems for both big and small private farms. Before 1990, research was directed to big agrocomplexes that employed agricultural specialists. After 1990, agricultural production has been undertaken by people without agricultural education and experience, which has resulted in many mistakes in crop management, including fertilizer use. To ensure better use of fertilizers, research and education should be refocused on environmentally friendly agriculture with new ownership conditions.

Further change in fertilizer production and trade can be expected after the privatization of the government's four fertilizer factories. New owners are expected to invest in new technologies for more efficient production. Bulgaria's entrance into the EU will remove tax and duty barriers for fertilizer exports and imports, which will give Bulgarian farmers more choices.

### Part V: Livestock Inputs Trade and Regulation in Hungary

With a dry continental climate, Hungary can produce all types of winter and spring cereals. Based on its traditionally strong cereals production, Hungary became an important regional producer of meat and other livestock products. The number and evolution of the total livestock in the country can be found in **Table 4.12**. Numbers of animals fell from the late 1980s due to reductions in exports to the former USSR as well as some smaller declines in Hungarian incomes and consumption.

**Table 4.12: Numbers of Hungarian Livestock, 1988-1997 (in thousands)**

Years	Cattle	Pigs	Sheep	Chicken
1988	1 690	8 327	2 216	36 222
1989	1 598	7 660	2 069	35 607
1990	1 571	8 000	1 865	43 309
1991	1 420	5 993	1 808	35 557
1992	1 159	5 364	1 752	36 419
1993	999	5 001	1 252	30 812
1994	910	4 356	947	33 665
1995	928	5 032	977	31 458
1996	909	5 289	872	27 692
1997	871	4 893	858	30 987

Source: Food and Agricultural Statistics different volumes

Between 1988 and 1997, cattle and pig populations fell by 48% and 41%, respectively. For sheep, the decline was even more drastic, with numbers falling 61% over the same period. The only exception is chickens, where numbers fell only 14%, and essentially all of this decline took place through 1993, after which numbers have stabilized. Since chicken is the cheapest meat on the market, a continuing and further shift to chicken meat can be predicted.

Declines in livestock numbers have been highest in the cooperative sector, next in the state farm sector, and least in small farms. In many cases, members left cooperatives, taking livestock paid for by business shares

For the main branches of livestock production, **Table 4.13** shows production costs in large farms (the only reliable cost data is for large farms) and average sales prices. As shown in the table, feed is the most important cost in livestock production. Wages and salaries are low, but can be expected to rise in coming years. High petrol prices are a major factor in auxiliary costs.

### Regulatory and Policy Framework for Livestock Inputs

The two most important inputs for livestock in Hungary are animals and feed. Animal breeding is regulated by Law N° CXIV of 1993 on Animal Husbandry and by several related ministerial regulations. The objectives of the Law are: to support production of good quality animal products; to support Hungary's participation in international professional and trade organizations; and to maintain efficient breeds and also to conserve traditional Hungarian breeds as genetic reserves. This is one of the first Hungarian laws in agriculture aiming at harmonization with EU regulations.

**Table 4.13: Production Costs for Cattle, Pigs, and Chickens, 1996 (HUF/100 kg)**

Denomination	Cattle for slaughter	Pig for slaughter	Broiler chicken
Material costs, total	11,850	11,765	14,568
Of which			
Cost of fodder	11,456	11,480	8,711
Wages and salaries	986	427	591
Auxiliary costs	1,057	93	371
Of which			
Cost of tractors	693	64	58
Cost of trucks	58	9	209
Other costs	322	74	211
Direct cost, total	14,398	12,750	16,145
General Operating Costs	4,099	2,049	1,664
Production cost	18,519	14,775	17,786
Average sales price	17,065	17,961	14,253

Source: Food and Agricultural Statistics, 1996

In accordance with this law and related regulations, the state licenses artificial inseminators and also controls trade in cattle semen. All breeding bulls must meet performance conditions, and the performance of their progeny is also monitored. Controls and testing standards are harmonized with those of the EU and many other countries. Also all individual animals of the Hungarian cattle herd must be registered in the Herd Book.

Government regulates import of breeding materials, including semen and breeding stock with attention paid not only to health but also to genetic background and performance. Aside from health and performance barriers, the standard tariff on bull semen is 16-20%, but imports for genetic improvement are possible at 0% duty with Ministry of Agriculture permission.

Feed components and feed production are regulated by Law N° XCII of 1995 on Feed and related ministerial regulations, which has been designed to harmonize Hungarian feed regulations with those of the EU. Objectives of the Law are: to exclude harmful and undesirable substances;

to create a clear competitive environment on the market; and to protect feed users by monitoring feed producers' guarantees about ingredients and quality. The Law sets quality standards for feed ingredients. It also obliges companies to set up their own internal quality control units. The Law prescribes standards for company staff and technology.

The Law on Feed broadened state control to all of the production chain, from feed production through trade and use. Regulations related to the law delegate testing and quality control to the Department for Feed Quality Control of the National Institute for Agricultural Quality Control, which contracts with other organizations in Hungary to conduct feed tests. Based upon test results, the Department issues permission to sell new feed compositions. Three levels of permissions exist: temporary; definitive; and naturalization of a foreign permission.

The quality of marketed feed is guaranteed by the producer and by the Department of Feed Quality Control. According to regulations, feed tags or labels must give date of production, shelf-life, ingredients (energy, protein, and crude fiber content, etc.), and manufacturer's name. Companies -- especially the smaller mills -- can modify contents according to the availability and cost of ingredients. Larger companies cannot afford to supply less than the best quality under their widely known brand names. However smaller companies sometimes produce feed with ingredients other than what is stated on the label, even, for example, replacing a high protein component with maize. This results in a bad feed conversation ratio, higher fat content in slaughter animals, and hence lower procurement prices. Also, the microbiological status of feed is often questionable, and there may be harmful toxins from poor storage.

Soybean and fishmeal can be imported without limitations at 0% tariff. There is no limitation on the import of cereals for feed, with tariffs at 35-49%. The vast majority of supplements come from imports, allowed without limit. Lysine is an exception, with Hungarian production exceeding 7,000 tons annually.

### **Production and Import of Main Feed Components**

Cereal grains: In Hungary more emphasis has been given to animals that eat feed grains (pig and poultry) than to ruminants (cattle and sheep). **Table 4.14** shows the importance of cereals for feed in total cereal production. Hungary is self-sufficient in cereals for feed, and is even an exporter. Maize, wheat, winter barley, oats, and rye are the basic feed grains. During the 1990s, planted areas for all these major cereal grains fell marginally, except for winter barley. Most of the 1990s production declines for these crops have been due to lower yields. Out of total cereal production, the share going to feed fell from 71% in 1990 to near 60% in the mid-1990s.

Protein: For a long time Hungary has not been able to cover livestock protein needs. In the mid-1980's, the state initiated a program to improve protein crop production through 1990. The program, however, was stopped and protein imports fully liberalized. During the 1990s, Hungary's planted areas and yields of not only pulses but also leguminous fodders (pea, soybean and broad bean) have diminished. Among major high-protein crops the 1996 planted area of soybean was 69% lower than in 1990, so that despite a 75% increase in average yield, gross yield dropped by half. Production possibilities for soybean are limited. The crop area and total yield of peas also decreased.

By-products from the food industry play an important role in livestock feeding. Some are crucial sources of protein. Quantities available in the mid-1990s are as much as 50% less than in 1986-90, due primarily to a decline in processing animal products. An increase in pet food production has also contributed to this trend.

**Table 4.14: Total Cereal and Feed Cereal Production in Hungary, 1990-1996 (in '000 tons)**

Crop	1990	1994	1995	1996
Wheat - Total production	6,198	4,874	4,614	3,910
Production for feed	2,593	1,454	1,289	898
Rye - Total production	232	193	171	98
Production for feed	178	115	147	91
Oat -Total production	163	131	139	112
Production for feed	110	111	115	120
Barley -Total production	909	825	746	447
Production for feed	947	1,555	1,284	880
Maize - Total production	3,990	4,761	4,680	5,989
Used for feed	5 097	4,067	3,698	4,962
Triticale for feed	8	100	203	203
Other cereals for feed	42	13	12	11
Total cereals for feed	8,975	7,016	6,747	7,165
Cereals for feed as % of total cereal production	71	60	60	63

Sources: Total cereal production from Agricultural and Food Industry Statistical Yearbooks. Cereal production for feed from Demeter, J. and J. Schmidt, "Review and development roles of feed sector in Hungary"

Only 30% of the protein in livestock feed is supplied by domestic production, mostly in the form of sunflower meal and dried pulses. **Table 4.15** shows protein imports for feed. Animal feed components are the biggest item in Hungary's agricultural imports – 23% by value in 1996 – and among all feed components, the most important is soybean meal.

**Table 4.15: Protein Feed Imports, 1990-1997 (in '000 tons)**

Crop	1990	1991	1992	1993	1994	1995	1996	1997
Sunflower meal				3.0	36.7	45.0	61.0	54.3
Soybean meal	651.5	382.2	417.3	425.4	435.4	521.0	515.1	530.5
Soybean cake		2.0			0.9	0.8		
Soybean expeller		1.0	0.4	3.5	15.0	16.3		
Meat meal	1.9	6.7	12.4	2.9	1.0	4.0	18.2	14.8
Fish meal	77.7	27.5	30.8	31.2	41.5	45.7	37.1	35.2
Bone meal			3.4	2.3	6.2	5.0		
Other animal fodder		0.2	0.6	4.3	7.4	9.0		
Total	731.1	419.6	464.9	469.3	544.1	646.8	631.4	634.8

Sources: Foreign Trade Statistical Yearbooks of the Central Statistics Office of Hungary

Fodder and forage crops: Bulk fodder crops and field forages are of particular importance in animal production, especially for ruminants. Pastures provide the second major bulk source of energy and protein. An enormous decrease can be seen in the total area planted to bulk feeds during the 1990s. The main reason for this decline is the drastic fall in livestock numbers. The area planted to silage maize, which is the main crop for ruminants, fell 42% during 1990-96, while yields also fell about 20% during 1990-94 and have since slightly increased. Hay production similarly fell by nearly half from end-1980s through 1996. Grass hay is the most natural feed of ruminants, therefore it has particular importance. By the end of the 1990s, an increase in both area and yield can be expected along with an increase in number of ruminants in the country.

### **Feed Industry Structure, Production, and Companies**

In Hungary, 50-60% of livestock feed is complete "mixed feed" with added minerals, vitamins, and amino-acid supplements. The remaining portion is mainly cereals mixtures. The production of livestock feed can be divided into two activities: production of preliminary mixtures (premixes, supplements, and concentrates); and production of complete feed.

Hungarian capacity for preliminary feed mixtures is in the hands of large companies, including former state-owned companies and subsidiaries of multinationals. Major companies include: Bábolna, Purina, Central Soya, ISV, Vitafort, Környei Mezőgazdasági, and Nagisz. With the transformation of the economy, practically the whole sector was privatized and many foreign investors entered, bringing not only capital and machinery but also formulations of different feed mixes. Production facilities for preliminary feed mixing are up-to-date, and are the best in Hungary's feed industry.

On the other hand, the mixture of complete feeds is obsolete and fragmented. Among the many surveys that have looked at this activity, Csermely-Komka (1997) report the following situation. There are 750 feed mills, of which 440 produce for sale, and there are another 650 small mixers with small holdings. Among all mills, at least 50 have an hourly capacity over 10 tons. In 1996 and 1997 Hungary produced 4.5-4.7 million tons of mixed feeds annually. Only one feed mill produced more than 100 thousand tons, and less than 50 produced as much as 10 000 tons annually.

The average age of the mixing facilities was 15.9 years in 1996. Among 1997 investment projects, almost 2 billion HUF has been committed to feed mills. However, this has not brought about significant changes. Premix producers are a decisive force on the market, since the smaller feed producers use their recipes and components. Stock financing is a significant problem. Due to this, domestic firms lacking capital lag behind large multinational producers (Purina, Central Soya, etc.).

Large facilities may be able to modernize and to stand up to competition, while only a small portion of mid-size facilities producing 2-10 ton per hour can modernize with their own resources. In the long run, their positions may be taken over by larger producers.

## **Changes in Livestock Breeding and Supply During Transition**

In animal breeding, international technology transfer has been important to Hungary, both in terms of transfer into Hungary and transfer of Hungarian technology to other countries. As one of the main breeding countries in the region, Hungary is very strong in poultry, both in meat and egg producing breeds. Different Hungarian Tetra hybrids are used worldwide. Also, in pig breeding Hungary was -- and still is -- strong. Complete pig production technologies were transferred to China, where many farms use HUNGAHYB technology with Hungarian hybrids.

Technology transfer into Hungary has been important to Hungary both under central planning and in a market economy. During central planning, the state worked with foreign companies to transfer technology to Hungary. After the shift to a market economy, private companies have the right to contract with foreign companies for technology transfer.

There are several examples for livestock technology transfer to Hungary. In the dairy field, Dutch companies are the most active, providing not only technology but also breeding stock. For poultry British companies transferred technology to Hungary along with breeding stock. For pig farming, there are only a few initiatives in the field of technology transfer; the dominant international activity is the transfer of breeding material.

Much poultry and pig farming is vertically organized. In the case of poultry, for example, companies provide day-old chicks and feed (and sometimes technology and veterinary services) to producers, who fatten the chickens for delivery back to the company. Poultry breeding stocks are imported by breeding companies or processing companies who have their own breeding operations (e.g. British-owned SAGA Foods). Almost two thirds of the Hungarian market is supplied by Hungarian eggs and chicks.

For pig farming, processing companies often supply pigs for fattening, feed, and technical assistance to producers. But in many cases producers buy pigs for fattening directly (or through merchants) from breeding companies. Three Hungarian companies, KAHYB, HUNGAPIG and ISV, provide the majority of pigs for fattening, and imports have been insignificant during the past decade. Only breeding animals are imported to improve the genetic base.

For cattle, Government began a program more than 20 years ago to improve the productivity of the traditional Hungarian Simmenthal breed. Pregnant Holstein heifers and bull semen were imported from the USA, Canada and the Netherlands. After the transformation of the political system, improvement of cattle stock has continued through large agricultural companies and co-operatives. Small producers who keep a maximum of 5-10 cows are using artificial insemination to access semen from foreign and from Hungarian bulls, with services provided by a state-controlled insemination service. Large-scale agricultural companies and cooperatives usually employ an inseminator, who plans breeding with other specialists, and also does the insemination work. Practically no natural reproduction is used in the country for cattle breeding

**Conclusions**

Based on Hungary's desire to join the EU, Hungary began to harmonize not only its political system and economy but also its laws and regulations with those of the EU. Laws have been issued in agriculture and in other sectors which are based on or harmonized with EU regulations, including for example the Law on Seed, the Law on Animal Husbandry and the Law on Feed.

According to the EU's Agenda 2000, released in July 1997, Hungary meets the basic political and economic requirements for EU integration. However, there are a lot of things yet to do in agriculture as well as other sectors. Further investments are needed to modernize technology in the country. Also, it is important to find markets for Hungarian agricultural products to expand production and incomes for Hungarian companies.

# Chapter Five

## The Evolution of the Common Agricultural Policy: Impact of WTO Commitments

By Michel Petit

The rapid evolution of the international trade environment must be taken into account in the preparation of Central European countries for accession to the European Union (EU). This is particularly true in the agricultural and food sector, because the measures of the EU's Common Agricultural Policy (CAP), which are multiple and have pervasive but diverse impacts throughout the sector, may change fairly radically in the next few years. In their desire to adjust to the CAP, candidate countries may be "shooting at a moving target." Can the evolution of the CAP be predicted? In particular, what will be the impacts on the CAP of the significant international commitments made by the EU to the World Trade Organization (WTO)?

Can we really predict in matters of policy? Obviously, pretending to have a perfect knowledge of the future would be preposterous. Yet the main thrust of this chapter rests on the conviction that a political economy approach can provide us with predictions, regarding the future evolutions of economic policies, which are not significantly less robust than those permitted by other approaches in the realm of social sciences. Indeed, past experience demonstrates that the CAP has evolved under the influence of a limited number of economic and political forces. These forces have shaped the evolution of the CAP since its inception in the 1950s to the recent so called "MacSharry reforms" in 1992, through the establishment of such measures as the co-responsibility levy in the late 1970s or the dairy quotas in 1984, as well as the negotiating positions of the EU in the successive rounds of GATT negotiations. In light of this analysis, it appears clearly that the current status of the CAP is not tenable for both internal and external reasons. And it is in this context that the impact of the EU's commitments to WTO will be assessed. Finally, we will stress that all these developments enhance the credibility of the Commission's proposals, presented in its "Agenda 2000," in spite of their limitations; and we will reflect on the implications of our analysis for the countries of Central and Eastern Europe.

### **Economic And Political Pressures**

The economic, social and political processes involved in the evolution, over some four decades, of such a broad and encompassing set of policies as those included under the CAP label, have undoubtedly been complex. They are made up of multiple interactions among many parameters. Yet we believe that it is possible to simplify that maze and to focus on four main political and economic forces: the pressure within European institutions to reach a "common decision;" the need to accommodate a budget constraint; the downward rigidity of price support levels; and finally, the influence of outside pressures to limit trade distortions. Each of these pressures will now be briefly discussed and specified.

A common feature of EU agricultural policy decisions is that every year they are often taken early in the morning after long nightly “marathon” sessions of the Council of Agricultural Ministers. Many times the decision is made weeks, sometimes months, after the agreed deadline. Admittedly, these are only anecdotal characteristics, but they are actually very revealing. Such a decision procedure does not seem reasonable, but it can be understood if one remembers that any decision package can only be the result of multiple compromises among member country representatives. Once back home, every Minister must give an excuse for the concessions he/she made in Brussels. The Minister will invariably point out that the process had to be brought to some form of closure and that he/she did win some valuable concessions from his counterparts. This feature leads to a crisis mode of decision, which can only move forward because of the fear of paralysis. At some point a less than perfect package of decisions appears to every participant better than no decision at all. It is indeed striking that in matters of agricultural policy, the EU decision process has, over the last forty years, produced decisions. The pressure to reach a “common decision,” despite all the inherent conflicts of interests and views, has indeed been very powerful.

The nature of the budget constraint, as a political and economic force influencing CAP decisions, is somewhat subtle and often leads to misunderstandings. Everybody recognizes that the budget cost of agricultural policy measures is an important consideration in deciding on those measures. But many observers point out that there is really no hard budget constraint since, repeatedly, the budget ceiling which had been previously announced, or even formally decided, has been broken. How can a budget constraint be effective if it is not hard? Paradoxically, the answer is very straightforward. The budget constraint can indeed be very effective, even though it is not hard. The sequential nature of the economic policy decision process is critical to explaining this paradox. Any policy decision can be interpreted as the last step in a sequence. It modifies the status quo that had been produced by the previous steps in the sequence. The status quo does not change unless and until a force powerful enough to overcome the resistance to change, is activated. In many cases CAP modifications have been caused by concerns about escalating budget costs. Everything works as if there is some threshold beyond which budget costs become unbearable.

The downward rigidity of nominal agricultural price support levels is very similar to the downward rigidity of nominal wages, pointed out by Keynes more than sixty years ago. Here again, we are dealing with a political constraint. It is not absolute, in mathematical terms, but it is real. Politicians have shown that they were extremely reluctant to reduce nominal price support levels after they have been set. Presumably they fear political retributions by farmers if they were to do so. Similarly, Keynes argued that for all practical purposes, nominal wages could not really be reduced, and that, as a result, we should focus attention on other economic policy levers (e.g. monetary or fiscal instruments). The rigidity of nominal wages reflected the clout of workers’ unions, the downward rigidity of agricultural price support levels reflects the clout of farmers’ organizations.

Finally, many of those involved in agricultural policy outside of Western Europe, frustrated by the CAP’s trade distortion impacts, would dismiss the idea that external pressures have had any influence on the CAP. They might have had a valid point until a few years ago.

But the conclusion of the Uruguay Round of trade negotiations demonstrates that such pressures have had an impact. We will even further argue that the main force, which had earlier brought about the so-called "MacSharry reform," was the external pressure on the EU to reduce trade distortions in agriculture. But we must then explain why this external pressure became effective only then, whereas it had had little impact before. The answer to this question can only be found in the internal conflicts of interests within the European Union, exacerbated by these external pressures. In the framework of multi-lateral trade negotiations, the main internal conflicts are related to the differences of interests among economic sectors. Many in Europe have a great stake indeed in international trade liberalization and are not ready to let the protection of agriculture stand in the way. Because the relative economic and political weight of the various interest groups varies from country to country within the European Union, member countries have different attitudes and different positions in response to external pressures. One then understands that in some circumstances external pressures on the CAP can become a very significant force shaping its evolution.

### **How Have These Pressures Influenced the CAP?**

A purposely selected sample of key decisions, over the 40 year history of the CAP, will be used here to illustrate that the four pressures described above have indeed been critical in shaping the evolution of that policy.

The very creation of the "Common Market" (formally the European Economic Community) by the Treaty of Rome in 1958 reflected the determining importance of agricultural policy considerations. The original six member countries had tried to convince other countries, particularly the UK, to join them. Though the intensive preliminary discussions which took place, it had become obvious that the main British objection had to do with the idea of a common agricultural policy, which because of French and German influences, was sure to entail high levels of price support and, as a result, "unbearable" budget costs. So, even before the CAP had been born, two of the main pressures identified above played a critical role in determining the membership of the Community.

The decision on the first common price support level for wheat, a few years later, demonstrated that the British fears had indeed been legitimate. The French government, with the personal involvement of President de Gaulle himself, had insisted that agriculture should not be left behind in the process of economic integration as Germany, in particular, was perceived to be the main gainer from the establishment of a common market for industrial products. This led to an agreement on the key principles for common market regimes for various agricultural products: financial solidarity and community preference. When the time came to implement these principles and to take the really important decision to set the price support level for wheat, the German government was in a very strong position to resist pressures from other member countries and insist that the common support level be near the German price, which was at the top of the range of support levels of all member countries. German policy makers, politicians in particular, were adamant that they could not accept a common price significantly below the German price. Eventually, the common support price was set very slightly below that level, but

specific, transitory measures for the benefit of German farmers to compensate them for the corresponding small losses, were accepted, thereby illustrating the significance of the downward rigidity of price support levels.

These developments had a strong impact on the Kennedy Round of international trade negotiations. American interests and US government officials were genuinely concerned that the high level of price supports would stimulate European cereal production and that the new common market regime, with its variable levies and export subsidies (disguised under the expression "restrictions"), would eventually lead to a loss of market share and perhaps even total elimination of US exports of cereals to Europe. Pressure was exerted by farmer groups and their allies in the US Congress and Administration, to denounce this new European policy. Eventually, however, broader strategic interests, mainly articulated by the State Department, prevailed within the US government. The new European common market was not seriously challenged because it was perceived as a price to pay to support the construction of a strong Western Europe, capable of opposing Soviet imperialist pressures. But this resolution did not come about until significant trade concessions were extracted from the European Community, which had to accept the free entry of protein rich grains and seeds, such as soybeans, and of industrial by-products, such as corn gluten, substituting for cereal in the animal feed mixing industry. It turned out quite a few years later that these concessions had a much greater economic significance than had been anticipated by either party. Here again, we can see that a significant policy development was driven by two of the major forces identified in the previous section: downward rigidity of nominal price support levels and external pressures to limit international trade distortions.

In 1968, the Commission presented a fairly radical proposal to reform the Common Agricultural Policy. Commonly known as the "Mansholt Plan" after Sicco Mansholt, the Dutch Commissioner in charge of agriculture who was Vice President of the Commission, the Plan was indeed based on a strong rationale. Yet it was essentially rejected even though, paradoxically, several member countries were pursuing at the national level, policies which were in many ways more compatible with the spirit of the Commission's proposal, than the common market policies it was aimed at reforming. This paradox can only be explained if one bears in mind two forces identified in the previous section of this chapter: the downward rigidity of nominal price support level and pressure to reach a common decision.

The Mansholt Plan was a reaction to the third force identified above: the budget constraint. It was based on the unassailable argument that existing market policies, if left unchanged, would entail escalating budget costs which would soon reach unbearable levels, while providing significant income support to larger farmers, who did not really need it, and leaving poor smaller farmers in the lurch. The Plan proposal shifted the bulk of intervention from product markets to markets for key factors of production, particularly labor and land. The published proposal specified farm size thresholds in terms of hectares and livestock units, below which farmers were deemed economically unviable. As alluded to above, the Plan was rejected even though several governments, notably France, Germany and the Netherlands, were implementing intervention measures on the land and labor markets (early retirement schemes, support to starting young farmers, etc.) which were fully consistent with the Mansholt Plan.

Retrospectively, it appears that the main cause of rejection was that the very transparency of the proposal exposed, and even stressed, the conflicts of interest within the agricultural sector. Obviously, medium-size farmers would gain but large farmers stood to lose, and many small farmers, whose farms were well below the published thresholds, were sure that they would not benefit from the proposed measures, while losing because of the reduction in price support levels. Exposing these internal conflicts of interests was seen as a political blunder, and even denounced by some leading politicians as "irresponsible." Reaching a common decision on such a basis was impossible. Eventually only a few very watered down measures, proposed by the Plan, were adopted; they became, however the first seeds of what was to become the socio-structural "chapter" of the CAP. This chapter has grown in importance over the years and which will surely be a major component of future policies. But in the late 1960s the "big bang" a reform of the CAP proposed by the Commission was a flop, because it could not be the basis of a common decision.

A few years later, pressures to reform the CAP came from the United States during the Nixon Round of GATT negotiations. Essentially, the same US economic and political forces, which had failed to carry the day within the US government during the Kennedy Round, attempted to bring political pressure on the CAP during the next round of GATT negotiations. The Republican Administration of President Nixon endorsed that view and pressed for major reforms of the CAP to eliminate its trade distorting effects, and thereby enhance the competitiveness of American products in international markets, be it in Europe or elsewhere. Thus the external pressure on the CAP was real indeed. Eventually it turned out that this external pressure was not sufficient to bring about a major reform of the CAP.

The Democratic administration of US President Carter, when it came to power, decided that a partial trade liberalization of international trade, essentially excluding agriculture, was better than the stalemate with the European Community, which had prevented the completion of the round of negotiations during the proceeding years. Thus an agreement was reached without major commitments of trade liberalization for agriculture.

The creation of the co-responsibility levy in the late 1970s was a direct response to the budget constraint, while compromising as little as possible on the downward rigidity of nominal price support levels. The co-responsibility levy on milk is paid by milk processors to the public Treasury. Receipts go into the Community Fund (FEOGA) and thus alleviate the budget constraint. The net price paid by dairy processors to farmers is reduced by the amount of the levy. Thus the downward rigidity of the price support level is not respected. But the corresponding price reduction is less than what would be required to reduce Budget expenditures by the same amount through a simple reduction of the price support level, at least in the short run and given plausible orders of magnitude for the price elasticities of supply and demand.

A few years after the establishment of the co-responsibility levy on milk, it became obvious that further policy changes would be required. Surpluses of butter and milk powder were accumulating, budget costs continued to escalate with no end in sight. Something had to be done. Strong voices were heard, advocating a reduction in the price support level to bring about a better balance between supply and demand growth. These forces were powerfully echoed by

the positions taken by such member state governments as those of the UK, Denmark, and the Netherlands. But such a policy change would have been in direct contradiction with the downward rigidity of nominal price support level, one of the four major forces identified above. Yet, something had to be done to alleviate the budget constraint. The pressure to reach a common decision led to the adoption in 1984 of dairy production quotas. It is striking to note that none of the major actors in the policy process were originally in favor of that solution. But the dynamics of the debate and the policy process led to a situation where the establishment of quotas was seen by all as the least objectionable option among those that were politically and institutionally feasible. Here again, we can see that a very significant policy change was the outcome, the “resultant” (to use the mechanical analogy of the interaction among several forces) of three major pressures identified above (budget constraint, downward rigidity of price support level, and the pressure to reach a common decision). It is also striking that this adoption took place in 1984 and not earlier. In a sense, the co-responsibility levy adoption appears retrospectively as a necessary step in the sequence of policy decisions leading to the adoption of quotas. Thus this case is another illustration of the importance of the sequential nature of the policy process.

In spite of the dairy quotas, budget costs continued to escalate in the 1980s because the rate of growth of production continued to outrun demand growth for several products benefiting from price support under the CAP. The same forces led to the adoption of a set of measures, called “stabilizers,” designed to contain the budget costs of market interventions, particularly for grains and oil seeds.

Finally, the adoption of the so-called “MacSharry reforms” in 1992 can only be interpreted as a major turning point in the evolution of the CAP. Until then, the pressures from outside the Community to reform the CAP in order to reduce international trade distortions had never played a major role, even if those pressures had on few occasions been very real. In the early 1990s, it became clear that those pressures could no longer be ignored. At the same time, internal pressures continued to exert their powerful influence. The “MacSharry reforms” are the “resultant” of these forces. The major innovation is, of course, a major reduction of price support levels. In order to make this shift politically acceptable, a very steep price had to be paid: the adoption of very hefty compensatory payments, which of course broke the budget constraint! Do these events contradict two of our key hypotheses (i.e., that nominal price support levels are rigid downward, and that the budget constraint is real)? At first glance, they do indeed. But actually, they are very helpful in forcing us to specify more precisely the nature of a force or a constraint in a conceptual framework, couched in terms of political economy. Any policy decision is a “resultant” of forces, i.e., the result of conflicting pressures that have somehow to be accommodated. The pressure to reach a common decision was powerful indeed, hence some policy change had to be adopted since outside pressures made the status quo untenable. Price support levels had to be lowered and this could only be achieved at a steep price in terms of budget costs. All four forces identified in the first section of this paper played a very significant role in this major reform. The fact that new major measures have been proposed since then and that significant policy changes will probably be adopted in the relatively near future does not invalidate this analysis. On the contrary, if a policy decision is understood to be a compromise among several pressures, one would expect that decision to be challenged as soon as the balance

of forces, which brought it about, is shifting. This interpretation provides us a clue to look now at the future of the Common Agricultural Policy.

### **The Current CAP is not Tenable**

The same forces, which have played a key role in the evolution of the CAP, will continue to shape its future. More specifically, it is very likely that the current status quo is not tenable for three main reasons. Internally, the shift to direct income support to compensate farmers for the reduction in the price support level, makes government support much more transparent than in the past and exposes its skewed distribution. Many comments already suggest that, now that it is transparent, that is skewed distribution is just not sustainable. In addition to concerns about equity within the sector, it appears very unlikely that direct income payments to rich farmers, which are much higher than what the EU spends on average per person unemployed, can be sustainable in the medium or long-term. Proposals have already been made at the Union level, and at the national level, to review and change the distribution of subsidies. Thus equity considerations, a source of pressure which has not played a key role so far (other than providing a legitimacy to agricultural support policies, based on the idea that farmers deserve special support), seem to be poised to weigh significantly in the future, the current status quo being seen as very unfair. The impact of these equity concerns will be enhanced as the budget constraint becomes more binding. We touch here on a linkage mechanism between internal and external pressures.

Among the external pressures, two developments deserve to be emphasized here: the enlargement of the Union to Eastern and Central European countries and future international trade negotiations in WTO. The enlargement of the EU to the East will undoubtedly have major budget consequences, as it will significantly increase total agricultural population and the area of land devoted to agriculture (broadly defined to include livestock production – including cattle grazing). Admittedly, everybody expects that all the benefits of the CAP, particularly the direct-income payments put in place to compensate Western Europe farmers for the losses they incurred as a result of lower price support levels, will not be extended to farmers in the new member states. But such a differentiated application of a common policy, such as the CAP, can only be transitory. Besides, it is very likely that the candidate countries will want to negotiate as short a transition period as possible and, in the meantime, request financial support to adapt their economies, including their often large agricultural sector, to the competition of a common market. Thus budget costs will increase and considerable pressure will be exerted on the CAP to adjust in order that its budget cost, once the new member states are finally integrated, be “bearable.”

Finally, external pressures to pursue liberalization of international agricultural trade regimes can only be expected to increase. Already a review of the implementation of the “Marrakesh agreement” in agriculture is due to begin in 1999 within the WTO framework. Several governments, noticeably the US, Australia, New Zealand, and Brazil, have very clearly indicated that the current status quo is unacceptable to them and that they will press for further

liberalization and that they expect major “improvements.” Small, mainly cosmetic, changes will be viewed as unacceptable. In this context the Western European agriculture sector is very much on the defensive.

Aware of these pressures, the Commission has proposed significant policy changes as part of its “Agenda 2000” package, presented as “Directions” in July 1997, and as slightly modified “legislative proposals” in March 1998. These include further reductions of price support for cereals, oil seeds, milk, and beef and increased direct payments, computed to partially compensate farmers for the corresponding income losses. In addition ceilings would be imposed on individual payments to large farmers. Some of the budget resources saved because of the proposed changes in market interventions would be used to finance, at least in part, “the overhaul of the Community’s structural funding policies to better aid for regional and social development within the present fifteen Member States.” This regional and social development objective would be pursued, *inter alia*, through a “coherent and sustainable rural development policy” as well as “agri-environmental” measures.

Several governments and several farm organizations have criticized the Commission’s proposals, suggesting in particular that they were too radical in decreasing support to farmers. Yet these proposals must be taken very seriously if one accepts our analysis of the economic and political forces which have shaped the past evolution of the CAP. Within that framework, the Commission proposed changes appear as direct responses to the four main forces (pressure to take a common decision, downward rigidity of price support levels, budget constraint and external pressures to reduce trade distortions). In addition, as just discussed above, equity considerations are recognized as important – hence the proposed ceilings on direct individual payments.

The point here is not to judge whether the Commission’s proposals are good or bad. Rather than a normative assessment, our political economy approach permits us to be predictive and to suggest that the future evolution of the CAP in the next few years will indeed be in the direction of, and close to, what the Commission has proposed for the year 2000. The configuration of pressures on the CAP is such that the margin of maneuver is very limited. Other scenarios that one could imagine, including maintaining the current status quo, would lead to major contradictions with one or several of the major forces and constraints identified above.

### **Consequences for Future Member States of the European Union**

Obviously future Member States must understand the dynamics of the policy process in the Union they aspire to join. More precisely, future Member States must adjust their domestic agricultural policies to eventually be ready to adopt the CAP. Some idea of where the CAP is going is necessary in order to best shoot at a “moving target.” But obviously, adopting the CAP before joining the EU would be neither desirable nor probably feasible, because of the high budget costs this would entail. Domestic policies must be designed to maximize the benefits to be derived from EU accession. In all cases this will mean enhancing the competitiveness of domestic agriculture so that it fares as well as possible in a new, very large common market. But in any country, the choice of a policy is not a matter of rationally choosing the “best” policy.

Pressures and constraints have to be accommodated, just as the case was made in this chapter for the Common Agricultural Policy. Can the analytical framework presented here be useful in other countries? Undoubtedly, within all the countries of Central and Eastern Europe, the budget constraint and external pressures cannot be ignored; there is also a pressure to reach a decision, as procrastinating in policy matters almost always entails a political cost eventually. Equity concerns are also relevant everywhere. But the interplay of these forces, and perhaps of others which may be significant, is unique to each country situation. It is, however, likely that an interpretation could be constructed in political economy terms, following an approach similar to that of this paper, and that such an interpretation would be useful.



# Chapter Six

## **Agricultural Support Policies in Transition Economies: Effect on Incentives and Farm Income for Selected Countries 1994-1997**

**By Alberto Valdés, Nathalie Olsen and Claudia Ocana**

### **Introduction**

How and to what extent do governments in transition economies intervene to support agriculture, and through which policy instruments? What has been the impact of these interventions on the net income of farmers, the government budget, and consumer welfare? How level is the playing field? These are the basic questions addressed in this chapter, as we attempt to illuminate the costs and benefits of agricultural support programs in transition economies.

Since 1990, the agricultural sectors in much of eastern and central Europe have undergone profound structural transformations that have occurred within the framework of an economy-wide program of economic reform. These structural transformations have presented enormous challenges for the public and private sectors. It is clear that an important determinant of the "efficiency" of this transition is the ability to access relevant and reliable socio-economic data that is needed to guide public action during the reform process.

In parallel with domestic policy reform, the international economic environment is also experiencing significant new developments in agricultural policies. The United States, the European Union, most of Latin America, and many other countries are reducing their levels of agricultural support and increasing the effectiveness and equity of income support programs. They have also made significant strides in liberalizing trade. The Uruguay Round Agreement's treatment of agriculture reflects this commitment, as member countries agree to stricter disciplines on market access and lower levels of export subsidies and domestic support.

The debate on agricultural support in transition economies has focused on the evolution of the terms of trade (prices received relative to prices paid) relative to a base period. Indications of deteriorating terms of trade against agriculture have been used to justify the need for agricultural subsidies. One of those indicators is the purchasing power of outputs relative to inputs (e.g. the price of grain relative to the price of fertilizer). However, these relative prices do not capture the misalignment of the base-period incentive structure (which was frequently severely distorted) relative to current economic conditions.

This chapter is a synthesis of an on-going World Bank comparative study titled "Agricultural Support in Transition Economies During Major Policy Reforms," managed by A. Valdés. The study covers Bulgaria, Poland, Romania, Russia, Turkey, and Ukraine during the period 1994-1997. Although Turkey is not a transition economy, it falls within the same administrative region at the

World Bank, and its inclusion was thought to provide a useful comparison. The numbers presented here are still preliminary estimates. Germany was included as the European reference case. Analysis for Russia is in progress.

Following a common format, local collaborators in each country provided the basic data and initial estimates of several of the indicators. The analysis for Russia is incomplete at this time, and will be included in the project's overall report.

In Part I of this Chapter, we briefly discuss the approach and data sources. Part II presents estimates of aggregate measures of support for each country, distinguishing between output market support, input price support, credit subsidies, and transfers through other government programs. Part III presents a picture of agricultural support for individual commodities, and Part IV presents an analysis of the evolution of real domestic prices.

## **Part I: Methodological Approach and Data Sources**

### **Approach**

In order to trace the impact of price distortions on specific policy variables, we first needed to characterize the magnitude of domestic price and price-related interventions in each market by developing a common set of indicators. Given the objective of assessing the effect of farm policies and market structure on producers' incentives, we focused on the effect of prevailing policies on value-added (returns to primary factors), measured relative to border (world) prices of output and tradable inputs. At the product level, value-added was measured as the gross agricultural revenue, based on the actual volume of production, minus the value of purchased inputs. In the summary tables presented, the impact of policy interventions is expressed as a percentage of agricultural value-added (agricultural GDP) as measured in the national accounts. For each country we selected approximately eight commodities, representative of the major import-competing and export products.

To quantify the price gap between domestic producer prices and border price equivalents for each commodity, an effort was made to adjust for quality differences, transport costs, distortions in marketing, and other relevant variables. For example, reference prices for Poland were derived from actual border prices for the three main trading blocs: the European Union (western borders), CEFTA countries (southern borders) and the Former Soviet Union (eastern borders). An average reference price, weighted by the respective shares of trade going in each of the three trade directions, was then computed for each product.

In choosing to use a partial equilibrium framework, no adjustment was made for a possible exchange rate misalignment. However, we considered the possible impact of the evolution of the (real) exchange rate in the analysis by examining the evolution of "real" domestic farm prices. For credit that was repaid, credit subsidies were measured as the interest rate differential between the actual lending rate for agriculture and the average prevailing lending rate in the economy (multiplied by actual credit flows). Credit that was not repaid was treated as a grant.

Three complementary indicators were used: the nominal rate of protection (NPR), the effective rate of protection (ERP), and a variant of the producer subsidy equivalent (PSE), conceptually closer to the effective rate of assistance (ERA). The NPR is the simplest and most widely used indicator, defined as the difference between the domestic, and the border price at the prevailing nominal exchange rate, and expressed as the 'tariff equivalent' of tariffs and non-tariff barriers (or export taxes and subsidies). A more relevant indicator in determining the effect of price-related policies on the returns in farm production is the ERP, which accounts for the effect of interventions on the prices of both the output and intermediate inputs. For most of the countries studied, we employed Corden's method for the computation of ERPs which does not adjust for the traded component in non-traded intermediates. For Romania, this component was taken into account following what is usually referred to as the Balassa method. The PSE captured the net effect on producers' income of both price-related and non-price related transfers attributed to government policies (credit subsidies, direct payments, and others).

Whether to and how to adjust these indicators for the effect of noncompetitive market structures on agriculture, particularly in the areas of agroprocessing, distribution, input delivery, storage, and transport is a particularly difficult task. In computing the above indicators, considerable effort was made to adjust for "excessive" marketing margins, captured by the "equivalent tariff" measure. The distinction between trade and price policies (which can be corrected quickly) and structural flaws in the market (which take longer to correct) is relevant to any analysis of policy reform. In some countries where barter arrangements are prevalent (such as in Ukraine), the effect of those arrangements is difficult to quantify and therefore the computation of these indicators is more complicated. It should then be understood that the rates of protection reported here represent a tariff equivalent measure, as defined by a direct price comparison and not a measure of the actual statutory tariff at the border.

Who gains from, and who pays for, agricultural protection policies? One might expect that the primary beneficiaries are farmers who own their land and who have larger farms. The economic rents from protection are captured mainly by the supply-inelastic factors, essentially through higher land values and land rents. New entrants to farming do not benefit as much since they pay higher prices for land. The impact on farm labor is probably not great, as higher agricultural support induces employment of more labor in agriculture (rather than higher wages). As a result, any difference in the return to labor with and without farm support is likely to be small.

Another dimension of agricultural policies is the difference in the impact of those policies among regions and between state and private-sector farms. An analysis of the incidence of agricultural support by region and by farm size was attempted for both Poland and Turkey. The distinction by type of farms (private vs. quasi-state farms) can be seen in the case of both Romania and Ukraine, in that some policy transfers are linked to specific commodities that are predominantly or exclusively produced by either state or private farms. For example, in Romania pork and poultry, largely produced by quasi-state farms, are heavily subsidized, while beef and milk, produced by small private farms, are taxed.

We can further identify the distribution of benefits and costs of agricultural support by estimating the size and direction of income transfers between agriculture, consumers, the

agroprocessing industry, and the government accounts, using the approach applied by Schiff and Valdés (1992). Unfortunately, we do not yet have the data to complete this four-section disaggregation for all the countries. The results of this disaggregation for Poland and Turkey will be available in the future.

### Data sources

The basic data used in the analysis was obtained directly from various domestic sources that will be detailed in the final report of the project. In the case of Turkey, OECD (1997) market price support estimates were adjusted and used in the computation of PSEs.

Output price support for the selected countries was measured for a specific basket of commodities that covered between 50% and 70% of the total value of agricultural production. Credit and other government subsidies are not commodity-specific, so that these transfers are presented for the agricultural sector as a whole. Net transfers are presented for the entire agricultural sector for Romania, Poland and Turkey, while for Ukraine and Bulgaria, net transfers cover only the commodities included in the study. For the countries where data on the share of included commodities in total value of production was available, we assumed that transfers to and from excluded commodities were equivalent in proportional terms to transfers to and from included commodities. The derived 'grossed up' sectoral estimates of support may be biased because the commodities included in the analysis were selected based on their importance in terms of value of production. However, one could expect that the degree of government intervention in those markets would be higher (positive or negative) than in the non-covered commodities.

## Part II: Aggregate Measures of Support - Main Findings

Let us look first at the magnitude of price interventions in output markets expressed as a proportion of agricultural GDP. **Table 6.1** presents the total support (+) or tax (-) in output markets by country for the period 1994-97. The very different experience across countries is remarkable. On the one hand, we observe high and negative protection (in other words, tax) of exportables in Ukraine, Bulgaria, and Germany, and lower but also negative protection of importables in Romania. In contrast and quite surprisingly, we find high positive protection (that is, subsidy) of some exportables in Poland and Romania. There are inevitable year-to-year fluctuations in these estimates due to world price fluctuations that are exogenous to domestic policies. However, the consistently high and positive values for Poland and the high and negative values for Bulgaria, Ukraine, and Germany (updated indicators for Ukraine for 1996-97 are currently being computed) are striking, and the magnitude of these transfers is very large. In Poland in 1993, 1995, and 1996, output price interventions *increased* gross farm income from between 18% to 28% (adding importables and exportables). In contrast, output price interventions *reduced* gross farm income by 33% in Bulgaria and by 3% in Romania in 1997.

Considering short-term fluctuations in world prices and the relatively limited time period of the study, we should not interpret the numbers in **Table 6.1** as indicative of a clear downward or

upward trend in the levels of intervention. Nevertheless, the levels of intervention, particularly for exportables, are high and have not declined. Most striking is the very different treatment accorded to importables and exportables, which we shall see in Section III is all the more dramatic when disaggregated by commodity.

**Table 6.1: Aggregate Transfers to Agriculture**  
The Income Effect of Output Price Intervention as a % of Agricultural GDP. a/

Country	Year	Importables	Exportables	Total
<b>Romania</b> <sup>a/</sup>	1994	-2%	17%	15%
	1995	-16%	17%	1%
	1996	-5%	19%	14%
	1997	-7%	4%	-3%
<b>Ukraine</b> <sup>b/</sup>	1994		-100%	-100%
	1995		-35%	-35%
	1996		e/	e/
	1997		e/	e/
<b>Poland</b> <sup>a/</sup>	1993	7%	21%	28%
	1995	13%	13%	26%
	1996	1%	17%	18%
<b>Bulgaria</b> <sup>b/, c/</sup>	1994	13%	2%	15%
	1995	28%	-1%	27%
	1996	12%	-2%	10%
	1997	27%	-60%	-33%
<b>Turkey</b> <sup>a/, d/</sup>	1994			15%
	1995			23%
	1996			24%
<b>Germany</b>	1994	124%	-15%	109%
	1995	94%	-16%	77%
	1996	71%	-6%	65%
	1997	67%	-2%	65%

a/ Defined as change in the value of output at the actual level of production expressed as a % of Ag. GDP. Transfers defined to include to and from the agricultural sector.

b/ Transfers for Ukraine and Bulgaria refer only to the basket of commodities included in the analysis and have not yet been grossed up to the sectoral level (due to poor data on total value of production). For the others these aggregated transfers are calculated assuming that transfers to commodities excluded from the analysis are equivalent to transfers to those included in the analysis in terms of value of production.

c/ The output price interventions as shown significantly underestimate non-market price transfers.

d/ Turkey's market price support (MPS) measures are OECD estimates that equate CSE transfers with MPS in output market transfers.

e/ Pending calculations.

**Table 6.2** presents a decomposition of government support to agriculture, including output and input price interventions, credit subsidies, and other fiscal transfers. The decomposition analysis clearly illustrates that intervention in output markets is the major policy instrument used to channel resources to and from agriculture in all countries.

Transfers through input and credit subsidies represent a smaller, but significant, share of agricultural GDP in each of the countries except in Bulgaria. Note the very high levels of input price transfers in Ukraine and Poland, and of credit subsidies in Turkey. The negative values on input price support in Poland indicate that government intervention in tradable input markets (in the form of trade barriers on imports of agrochemical, machinery, equipment, and other inputs) taxed farmers heavily. In contrast, subsidized agricultural credit provides a significant transfer to farmers mainly in Romania and Turkey.

The net transfers from output, input and credit subsidies indicate that, relative to the size of the sector (agricultural GDP), the net effect of government support policies has been enormous. In some cases, government support has greatly increased sector income (by 72% in Poland, in 1996) while in others, the transfer from agriculture has been extremely large (up to 59% of agricultural GDP in Bulgaria, in 1997). Such high levels of income transfers are incompatible with improved market orientation and with an efficient allocation of resources within the sector and between sectors of the economy as a whole. In these countries, fluctuations in the income of the agricultural sector have been largely determined by government policy, primarily through output price support, rather than by the sector's adjustment to market conditions.

### **Part III: The Pattern of Intervention - Analysis at the Commodity Level**

We now proceed to examine the profile of nominal rates of protection for the principal importable and exportable commodities as presented in **Table 6.3**. These findings were captured in a related indicator in **Table 6.1** above, but in **Table 6.3** they are expressed as a tariff-equivalent rate of protection per unit of production.

With few exceptions, these figures reveal a very high degree of price intervention. NPRs (positive or negative) of 20% - 30% are common, and several commodities are subject to protection or taxation exceeding 30% of the unit value of production (in world market prices). These NPRs are computed as "tariff equivalents," and therefore quantify not just the effect of tariffs but also the influence of quantitative restrictions on trade.

Table 6.2: Decomposition of Government Support to Agriculture (as % of agricultural GDP), 1993-97

		1994	1995	1996	1997
<b>Bulgaria</b>	output price transfers	-35%	-25%	-37%	-61%
	input price transfers	1%	1%	1%	0%
	fiscal transfers	4%	3%	3%	3%
	<i>Total transfer (% of ag. GDP)</i>	-30%	-21%	-32%	-59%
<b>Romania</b>	output price transfers	15%	1%	14%	-3%
	input price transfers	-2%	-2%	-4%	-4%
	credit subsidies	7%	12%	11%	0%
	other fiscal transfers <sup>a/</sup>	0%	0%	0%	0%
	capital costs transfers	0%	0%	0%	0%
	<i>Total transfer (% of ag. GDP)</i>	21%	12%	21%	-6%
<b>Turkey</b>	output price transfers <sup>b/</sup>	15%	23%	24%	
	input price transfers <sup>c/</sup>	3%	2%	3%	
	credit subsidies <sup>d/</sup>	15%	16%	6%	
	fiscal transfers <sup>e/</sup>	2%	1%	1%	
	capital cost transfers	0%	0%	0%	
	<i>Total transfer (% of ag. GDP)</i>	35%	43%	35%	
<b>Poland</b>	output price transfers	29%	30%	15%	
	input price transfers	-37%	-25%	-6%	
	intervention by AAM <sup>f/</sup>		0%	0%	
	credit subsidies		4%	6%	
	production de-coupled support (PDS) <sup>g/</sup>		54%	57%	
	<i>Total transfer excl. PDS (% of ag. GDP)</i>	-8%	9%	15%	
	<i>Total transfer incl. PDS (% of ag. GDP)</i>		63%	72%	
<b>Ukraine</b>	output price transfers	-100%	-35%		
	input price transfers	39%	37%		
	credit subsidies	11%	3%		
	transfer via direct payments	1%	0%		
	research, extension, training losses by state farms				
	<i>Total transfer (% of ag. GDP)</i>	-48%	4%		
<b>Germany</b>	output price transfers	9%	8%	6%	5%
	input price transfers	4%	4%	3%	6%
	other transfers	51%	52%	53%	55%
	<i>Total transfer (% of ag. GDP)</i>	65%	64%	62%	67%

a/ Other fiscal transfers in Romania include a voucher scheme, subsidies for calamities (in 1997), the Wheat Fund for the 1997 harvest, storage subsidies for wheat and financing of agricultural works (Fund and debts).

b/ Output price transfers are based on OECD estimates (which assume CSE transfers are equal to market price support transfers).

c/ Input subsidies include disaster payments, debt write-offs, direct payments, incentive premia, and general services and infrastructure provided by state-owned enterprises.

d/ Credit transfers through concessional loans by the agricultural bank (to farmers and ASCUs) and central bank.

e/ Includes expenditures on agriculture through the Ministry of Agriculture and Directorate of Rural Affairs (for current and investment costs, agricultural research, extension, and hydraulic works).

f/ Cost of market interventions by the Agency for Agricultural Markets (AAM) that stabilises prices and sets a minimum price.

g/ Production de-coupled support is the sum of transfers through differential income tax treatment, and pension and health insurance support policies.

In some cases (e.g. Ukraine), NPRs also capture the implicit effect of excessively high margins in trade and agroprocessing, since part of the high cost of trading is in essence an implicit tax on farmers. For example, due to the high risks involved in exporting grains, Ukrainian traders charge very high margins on exports (20%), as compared to the average international trading margin for grain in developed countries of 5%. In Hungary, a country with an infrastructure base more similar to Ukraine than to western Europe or the US, the margin charged by traders is 10%.

Hence, a portion of the traders' commission (10%) was treated as an implicit tax on exporters caused by inefficiencies in the market structure and anti-export biases in public policy. This can happen, for example, when the government controls the transportation system and gives priority to the transport of products purchased by state-owned enterprises. By doing so, they create uncertainty as to the time privately exported commodities will actually be delivered. To compensate for this uncertainty, traders charge higher margins.

The surprisingly low NPR for crops in Germany is partly the result of using an import parity situation, which implies trade reversal in a situation under no (or low) protection.

We are currently obtaining the information on actual tariff levels for importables in order to compare these to tariff-equivalent NPRs. The difference between the NPRs and actual tariffs can be attributed to the above mentioned market structure inefficiencies.

In order to determine the effect of interventions on the productive structure, we turn to the measures of effective rates of protection (ERPs) (see **Table 6.4**). If the ERP is negative, domestic returns to primary factors (land, labor and some capital services that can be considered value added) are less than those obtained on the international market. Effective protection displaces nonspecific resources from activities receiving a relatively low rate of effective protection to those receiving a high rate (the actual degree of displacement depends on the rate of factor mobility). An "efficient" productive structure in agriculture implies a net price (or value added) approximately equal to zero. If a country applies a uniform tariff on imports (say 10%) across the board, the effective protection would equal the nominal rate of protection for all import-competing products. As an illustration, consider two activities. For product A, the import duty is 50%, the tariff on inputs is 10%, and the share of tradable inputs is 50%; the resulting ERP is 90%. For product B, the corresponding parameters are 10%, 20% and 20%, respectively; the corresponding ERP is only 7.5%. However, the resulting ERP would be negative for exportables because imports of intermediate inputs are subject to the 10% import duty. The exact magnitude of the implicit tax on exports is determined by the tariff on inputs and by the share of tradable inputs in production costs. For example, a 10% tariff in an exportable in which tradable imports represent 50% of the unit cost results in an implicit export tax of 10%.

Note that some ERPs are negative and absolutely greater than 100% (for example, beef in Germany), which indicate negative value added at border prices. The low NPR for crop production - in particular barley - influence the ERP of animal production. For example, in Germany, in 1996 and 1997, the negative NPR for barley led to unexpectedly high ERPs for meat and milk production.

Table 6.3: Summary Table of Nominal Protection Rates <sup>a/</sup> by Commodity <sup>b/</sup>

Country	NPRs by Commodity											Average NPRs			
	Wheat	Maize	Barley	Rye	Sun-flower	Potato	Sugar-beet	Rape seed	Pork	Beef	Poultry	Milk	Importable	Exportable	Total
Romania <sup>c/</sup>	1994	-6%	32%	4% M					86%		86% M	-22% M	-4%	33%	14%
	1995	-7%	16%	22%					91%		32% M	-38% M	-26%	33%	1%
	1996	5%	60%	14%					80%		61% M	-25% M	-10%	49%	15%
	1997	13%	32%	11%					37%		29% M	-25% M	-18%	25%	3%
Ukraine	1994	-49%							-17%					-55%	-55%
	1995	-34%							-19%					-34%	-34%
	1996														
	1997														
Bulgaria	1994	-30%	15% M						-195%	-18%	-42%	-38%	18%	15%	18%
	1995	-37%	-8% M						-197%	-15%	-17%	-30%	63%	-8%	48%
	1996	-6%	-12% M						-198%	-43%	-55%	-53%	16%	-12%	12%
	1997	37%	-6% M						52%	-13%	-21%	-62%	18%	-47%	-12%
Poland	1993	15% M			-1% M	68%	33%	27% M	3% M	5%		-11%	6%	22%	14%
	1995	28% M			117% M	24%	32% M	12%	5%	-17%		-5%	44%	5%	12%
	1996	-9% M			39%	-13%	21% M	3%	39%	-27%		8%	-3%	8%	5%
Germany	1994	42%		71%	62%	-51% M	28%	-7% M	-17% M	175%	-5% M	91%	-15%	88%	44%
	1995	10%		40%	61%	-62% M	28%	-16% M	-17% M	145%	-7% M	56%	-15%	56%	28%
	1996	-15%		-10%	7%	-37% M	38%	-12% M	-4% M	142%	-11% M	59%	-6%	38%	23%
	1997	-18%		-13%	7%	-32% M	39%	-11% M	0% M	109%	-9% M	69%	-2%	38%	23%

a/ NPRs are weighted averages.

b/ All commodities are exportable except for those labeled by an M, indicating an importable.

The ERP estimates are rough approximations (currently being revised) because the data initially obtained for this study was not reliable enough to yield precise estimates. For example, the estimation of cost flows for machinery and equipment (including the costs of maintenance and repairs), border price equivalents for a heterogeneous set of agrochemicals, fuel costs, and other input costs require regional data that in most cases was not available. Moreover, the estimation of production costs does not take account of the possibility of substitution. This may bias cost estimates because farmers tend to substitute lower-priced inputs for higher-priced inputs as relative prices change due to trade liberalization or the removal of interventions.

As shown in **Table 6.4**, values for ERPs above 20% are common, and this fact implies enormous income transfers between farmers and the rest of the economy (both positive and negative). The other notable finding is that the countries studied differ significantly in the commodities that they subsidize or tax. For example, wheat has been taxed heavily in Ukraine, Bulgaria (before 1997), and Poland (in 1996). In Poland and Germany, in 1996, sugarbeet and rye production have been subsidized, while in Poland, potatoes, beef, and pork have been heavily taxed. This finding is striking if we look back at the positive NPRs for pork (implying high tariff equivalents for feed grains and feed supplements).

**Table 6.4: Summary Table of Effective Rates of Protection (%)**

		ERPs by Commodity										
Country		Wheat	Maize	Rye	Sun flower	Potato	Sugar beet	Rape seed	Pork	Beef	Poultry	Milk
<b>Romania</b>	1994	-6%	59%						-265%		314% M	-80% M
	1995	0%	28%						-294%		58% M	-103% M
	1996	25%	96%						-343%		177% M	-104% M
	1997	20%	55%						45%		30% M	-70% M
<b>Ukraine</b>	1994	-54%			-83%		-75%		422%			
	1995	-47%			-25%		-579%		51%			
<b>Bulgaria</b>	1994	-40%	-10%		55%				-16%	-6%	-44%	-33%
	1995	-46%	0%		41%				-2%	-4%	-9%	-22%
	1996	-30%	-20%		-75%				(+)	(-)	-62%	-61%
	1997	17%	-42%						-28%	4%	-5%	-1%
<b>Poland</b>	1993	20% M		-21% M		(-)	(+)	124%	(-) M	1%		-191%
	1995	(+) M		(-) M		(-)	126% M	14%	-4%	-22%		-80%
	1996	-11% M		72%		-30%	28% M	(+)	-112%	-30%		-49%
<b>Germany</b>	1994	67%		105%		-51% M	36%	-7% M	-52% M	(+)	-53% M	(+)
	1995	14%		109%		-62% M	35%	-16% M	-45% M	(+)	-48% M	(+)
	1996	-19%		9%		-37% M	48%	-12% M	-1% M	(+)	-35% M	(+)
	1997	-24%		9%		-32% M	49%	-11% M	14% M	(+)	-25% M	(+)

a/ (+) and (-) indicate the signs of outliers that are currently being reviewed and recalculated.

b/ All commodities are exportable except for those labeled by an M, indicating an importable.

**Table 6.5** summarizes the producer subsidy equivalent (PSE) calculations by commodity, expressed as percentage of agricultural GDP (not value of output, which is traditional the measure used). Whereas **Table 6.2** provided a picture of aggregate transfers made to or from the agricultural sector, **Table 6.5** deepens the analysis by examining PSEs at the commodity level as percent of the sector income. In all of the countries, transfers made to producers of different crops vary greatly, and there is no single story that applies to all of these countries. While wheat producers in Ukraine earned 9% less than they would in the absence of government intervention, sugar beet producers received transfers that exceeded 16% of the value of the agricultural GDP. Bulgaria is the only country that has consistently taxed all commodities (except wheat in 1997, maize in 1994 and pork). The fact that each government ascribes greater priority to particular commodities has likely to do with concerns about food security. Based on a PSE criteria, as distinct from ERP estimates, wheat producers have been generally, though not consistently, slightly protected in Romania and Poland, and have been taxed in Ukraine and Bulgaria (although in 1997 wheat producers were surprisingly protected). Livestock products have been subject to the most generous support (pork and chicken in Romania, and pork in Bulgaria) and also the most severe taxation (chicken and beef in Bulgaria and milk in both Bulgaria and Romania).

In the case of Germany, aggregate transfers to agriculture represented between 30% and 37% of agricultural GDP during 1995/97. Total payments include direct payments (set-aside and per hectare/heard premiums), social policy, research, income compensation and input subsidies (weighted by producer value) and exclude payments by the German Laender and common programs between the federal and the Laender governments (computations are in progress to include such payments). However, these figures are considerably lower than the total budget expenditures for agriculture (including structural aid). One of the difficulties here is deciding which expenditures affect farmer's income while considering the high bureaucratic costs of managing the government agencies dealing with agriculture.

#### **Part IV: Trends in Real Producer Prices**

In order to track the evolution of agricultural incentives in the countries studied, we next examine the trends in real prices faced by producers at the farm level during the period 1994-97. These trends help us to develop an explanation of the observed changes in domestic farm prices, in particular the impact of changes in both the exchange rate and world market prices on producer prices.

Real producer prices were derived to capture the evolution of the purchasing power of the price of a ton of a commodity. Specifically, the real farm price is defined as the current domestic farm price deflated by the consumer price index. Annual changes in real producer prices are presented in **Table 6.6**.

Table 6.5: Summary Table of PSEs by Commodity as % of Agricultural GDP a/.

PSEs by Commodity													
Country		Wheat	Maize	Barley	Rye	Sun flower	Potato	Sugar- beet	Rape seed	Pork	Beef	Chicken	Milk
Romania	1994	-0.4%	2.5%	0.1%						9.0%		4.0%	-6.7%
	1995	0.2%	1.9%	0.4%						10.9%		3.4%	-12.6%
	1996	1.0%	7.7%	0.3%						8.0%		4.0%	-11.4%
	1997	1.2%	3.2%	0.2%						2.6%		0.6%	-9.3%
Ukraine	1994	-22.6%				-12.1%		-22.3%		9.0%			
	1995	-9.1%				-1.7%		16.2%		-1.0%			
	1996												
	1997												
Bulgaria	1994	-7.9%	1.6%			-2.2%				42.1%	-2.4%	-5.0%	-10.0%
	1995	-8.3%	-1.0%			-2.2%				48.1%	-1.5%	-1.2%	-6.0%
	1996	-1.3%	-1.7%			-0.5%				46.8%	-6.8%	-9.9%	-16.4%
	1997	13.1%	-2.0%			-5.0%				27.6%	-3.4%	-5.0%	-58.5%
Poland	1993	1.7%			-0.9%		16.5%	0.6%	0.4%	-8.8%	0.4%		-11.7%
	1995	3.5%			4.0%		6.9%	0.7%	0.2%	1.4%	-2.4%		-6.7%
	1996	-2.1%			2.2%		-6.3%	1.1%	0.4%	11.5%	-4.5%		3.2%
Germany	1994	-0.2%		-0.3%	-0.1%		0.0%	-0.1%	0.0%	-1.7%	-0.5%	-0.8%	-8.5%
	1995	-0.1%		-0.2%	-0.1%		0.0%	-0.1%	0.0%	0.2%	0.2%	-0.5%	-6.2%
	1996	0.1%		0.1%	0.0%		0.0%	-0.1%	0.0%	1.5%	1.7%	0.2%	-4.2%
	1997	0.2%		0.1%	0.0%		0.0%	-0.1%	0.0%	1.1%	2.2%	0.3%	-4.4%

a/ Normally, PSEs are transfers expressed as a percentage of the value of production for each commodity, in domestic prices.

b/ All commodities are exportable except those labeled by an M, indicating an importable.

As shown in **Table 6.6**, real producer prices are very unstable, with no apparent upward or downward trend. Real declines or increases are large, yet a dramatic decline in one year is frequently followed by a dramatic increase in the following year. For example, in Romania, a 54% increase in the real price of maize from 1995 to 1996 was followed by an equivalent decline (53%) from 1996 to 1997. Another finding is that domestic producer price for the same commodities do not move in the same direction across countries. While the real prices of all commodities fell significantly in Romania from 1996 to 1997, real prices for most commodities rose dramatically in Bulgaria. If we focus on the change in wheat prices between 1995 and 1996, real prices rose dramatically in Bulgaria, and to a lesser degree in Romania, but fell in Ukraine and in Poland. Relative to the other countries, real producer prices in Poland in recent years have become increasingly stable (except that of wheat). Ukraine has experienced large price fluctuations and equally large differences among commodities in the same year.

For example, in Romania, farm prices have been most unstable in real terms, experiencing alternative decreases and increases. In 1996 (the year of presidential elections), real producer prices increased for every commodity, then fell significantly in 1997. For example wheat producers experienced a drop in real wheat prices of 18% in 1995, followed by an increase

of 35% in 1995, and again a decline of 26% in 1997, while pork and milk producers faced relatively more stable prices until 1996. Then pork faced a decline of 25% in 1997.

**Table 6. 6: Changes in Real Producer Prices, 1994-97**  
(% change over previous year).

Country	1995	1996	1997
<b>Romania</b>			
Wheat	-18%	35%	-26%
Maize	16%	54%	-53%
Pork	3%	13%	-25%
Poultry	-6%	16%	-16%
Milk	7%	10%	-9%
<b>Bulgaria</b>			
Wheat	-12%	182%	56%
Maize	-8%	99%	70%
Pork	6%	-2%	309%
Chicken	-12%	23%	154%
Cow Milk	-3%	4%	151%
<b>Poland</b>			
Wheat		-17%	35%
Sugar beet		9%	-6%
Pork		-7%	-4%
Beef		8%	-4%
Milk		13%	-3%
<b>Ukraine</b>			
Wheat	64%	-37%	
Sunflower	-1%	14%	
Sugarbeet	33%	15%	
Pork	31%	-30%	
<b>Germany</b>			
Wheat	-8%	3%	-10%
Sugar	-4%	0%	0%
Rape	-12%	7%	7%
Pork	4%	14%	2%
Beef	-9%	-13%	1%
Poultry	-6%	0%	2%
Milk	-2%	-3%	-2%

We can identify the direct source of these large fluctuations in Romania by decomposing the cause of the evolution of real farm prices into three variables: changes in international prices, changes in the real exchange rate, and changes in domestic price interventions. The methodology for this decomposition analysis is discussed by Valdés (1996). The decomposition provides rough estimates of the magnitude and direction of change in the relevant variables. These decompositions in **Table 6.7** are not exact estimates.<sup>1</sup>

**Table 6.7a: Decomposition of Real Producer Prices for Selected Commodities - Romania (% changes).**

	Wheat				Pig Meat		
	1995	1996	1997	1997/94	1996	1997	1997/94
% change in $P_d$	-19	30	-30	-19	12	-29	-13
% change in $P_w$	16	5	-24	-3	9	-2	11
% change in RER	-5	12	-7	0	12	-7	0
% attributable to trade policies	-30	13	1	-16	-9	-20	-24

Source : E. Tesliuc (1998) where  $P_d$ ,  $P_w$ , and RER represent the domestic price, the border price, and the real exchange rate, respectively.

**Table 6.7b: Decomposition of Real Producer Prices for Selected Commodities - Poland (% changes).**

	Wheat			Pig Meat		
	1993/95	1995/96	1993/96	1993/95	1995/96	1993/96
% change in $P_d$	-14	33	19	-2	0	-3
% change in $P_w$	-8	67	60	21	-16	5
% change in RER	-16	-2	-18	-27	-2	-29
% attributable to trade policies	10	-32	-23	3	18	22

Note: Computations by the authors. Where  $P_d$ ,  $P_w$ , and RER represent the domestic price, the border price, and the real exchange rate, respectively.

To facilitate its interpretation let's follow the case of wheat in 1997, in Romania. The observed 30% fall in the domestic real price of wheat in Romania from 1996 to 1997 is explained by a 24% decline in the border price, a 7% decline (appreciation) of the real exchange rate, and a 1% increase in protection. The period 1995-96 is especially interesting, since the 30% increase from 1995 to 1996 is explained, not by the appreciation, but rather a 12% depreciation in the real exchange rate, a 13% increase in protection, and a 5% increase in border prices.

The case of pig meat is similar to wheat. The increase in real prices in 1996, in Romania, was followed by dramatic declines in 1997. The decomposition analysis estimates that the 29% decline in real prices between 1996 and 1997 was due to trade liberalization (responsible for 20% of the real price decline), appreciation of the real exchange rate (causing the domestic price to fall by 7%), and declines in border prices (accounting for the remaining 2% decline in domestic prices). The results for Poland suggest that the appreciation of the currency was a major factor explaining the slight decline in real producer prices observed during 1993/95, although less so in 1996.

<sup>1</sup> The effect of trade policy is computed as a residual and thus captures both domestic trade and price interventions as well as the interaction effect of the three variables. Moreover, the computation is logarithmic, and thus overstates the real change when this change is a very large number.

**Concluding Comments**

Agricultural policy in transition economies remains unfocused and, as a result, falls short in contributing to competitiveness in production, marketing, and agroprocessing industries. In those countries, fluctuation in the income of agricultural producers have been largely determined by government policy, primarily through output price support, rather than by the sector's adjustment to market conditions. Agricultural policymakers continue to avoid making the adjustments required for competing with (or within) the European Union and other markets, and for some countries (e.g. Turkey and Poland), this refusal to adjust has also become very costly to the Treasury. The benefits of a more competitive sector are indisputable, including increased farm income, lower overall prices to consumers, a reduction in government subsidies (and therefore in government expenditures), and an improved position for gaining accession to the EU. The private investment flows required to make agriculture more competitive are huge, which is why a proper incentive framework is so critical. Private investment will only be attracted if farming and agroprocessing is made profitable, and is guided by "true" prices, not by highly distorted ones.

While there may be no single story that characterizes trade and price interventions in transition economies, there are several important common elements. In all cases, we observe extraordinarily high levels of price intervention, enormous implicit income transfers to and from farmers, and a high degree of variability (which translates to instability) in key price and protection indicators. Ultimately, this instability has a severe effect on private investment prospects in the sector.

To facilitate and inform the policy debate at the country level, more empirical work needs to be done to document the net impact of agricultural price interventions, their impact on efficiency, and their distributive effects (e.g., who gains and who loses from the interventions).

**References**

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OECD (1997), Economic Surveys, Turkey, Paris.

## *Workshop Program*

**SATURDAY, JUNE 20, 1998**

- Arrival of participants to the European Youth Centre, Budapest (EYCB)

**SUNDAY, JUNE 21, 1998**

**9:00am - 9:45am**      **Welcome/Introductory Remarks**

*Welcome*

- *Mr. Csaba Csaki*, Lead Specialist, Rural Development and Environment Sector Unit, The World Bank

*Introductory Remarks*

- *Mr. Kevin Cleaver*, Director, Rural Development and Environment Sector Unit, The World Bank
- *Mr. Z.S. Karnicki*, Subregional Representative, Budapest Subregional Office, FAO

**SESSION 1: Regional Integration and EU Accession: 9:45am - 4:00pm**

*Chairperson, Mr. John Nash*, Principal Economist, Rural Development and Environment Sector Unit, The World Bank

9:45am - 10:45am

*CEFTA, BFTA, and Rural Policy in the CEEC*

- *Mr. Tim Josling*, Professor and Senior Fellow, Institute for International Studies, Stanford University
- *Mr. Stefan Tangermann*, Professor, Department of Agricultural Economics, University of Gottingen
- *Mr. Henning Twesten*, Doctoral Student, Department of Agricultural Economics, University of Gottingen

10:45am - 11:00am

Coffee Break

11:00am - 12:00pm

*Individual CEFTA Country Experiences*

- Czech Republic - *Ms. Irina Slaisova*
- Hungary - *Ms. Judit Kiss*
- Poland - *Mr. Piotr Bajek*
- Slovak Republic - *Mr. Gejza Blaas*
- Slovenia - *Mr. Stefan Bojnec*

12:00pm - 12:45pm

*Discussion - CEFTA, BFTA and Rural Policy in the CEEC*

12:45pm - 2:00pm

Lunch

2:00pm - 2:45pm

*Lessons from Other Regional Integration Agreements*

- *Mr. Tim Josling, Mr. Stefan Tangermann*

2:45pm - 3:00pm

*Comments*

- *Mr. William Meyers*, CARD Center, Iowa State University

3:00pm - 4:00pm *Discussion - Lessons from Other Regional Integration Agreements*

4:00pm - 4:15pm Coffee Break

**SESSION 2 - World Trade and EU Accession (PART 1): 4:15pm - 6:00pm**

*Chairperson, Mr. Csaba Csaki, Lead Specialist, Rural Development and Environment Sector Unit, The World Bank*

4:15pm - 4:45pm *WTO and EU Accession*  
• *Mr. Jurek Michalek, FAO Regional Office for Europe*

4:45pm - 5:15pm *Role of Sanitary and Phytosanitary Trade Rules in EU Accession*  
• *Mr. Gregory Orriss, Chief, Food Quality and Standards Service, FAO*

5:15pm - 6:00pm *Discussion*

6:30pm Welcome Reception at the EYCB, hosted by The World Bank

<b>MONDAY, JUNE 22ND</b>
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**SESSION 2 - World Trade and EU Accession (PART 2): 9:00am - 12:00pm**

*Chairperson, Mr. Csaba Csaki, Lead Specialist, Rural Development and Environment Sector Unit, The World Bank*

9:00am - 9:45am *Pressures on, and Trends in, the Evolution of the CAP - Impact of Commitments in WTO*  
• *Mr. Michel Petit, Director, Agricultural Research and Extension Group, The World Bank*

9:45am - 10:30am *Implications of International Trade Rules for Domestic Adjustment*  
• *Mr. Alberto Valdes, Agricultural Advisor, Rural Development Department, The World Bank*

10:30am - 10:45am Coffee Break

10:45am - 11:00am *Remarks*  
• *Mr. Carro-Castrillo, EU - DG6 H4 - Enlargement*

11:00am - 12:00pm *Discussion*

12:00pm - 1:30pm Lunch

**SESSION 3 - Agricultural Inputs, Trade, and Regulatory Reforms: 1:30pm - 6:00pm**

*Chairperson, Mr. Michel Debatisse, Principal Agroindustrial Specialist, Rural Development and Environment Sector Unit, The World Bank*

- 1:30pm - 2:15pm *Inputs Industries During Transition*
- *Mr. David Gisselquist, Seed Industry Specialist, Rural Development and Environment Sector Unit, The World Bank*
- 2:15pm - 2:45pm *Presentation of Individual Country Case Studies*
- *Inputs in Romania - Ms. Luiza Toma*
  - *Fertilizers in Bulgaria - Ms. Stefka Grozdina*
- 2:45pm - 3:00pm *Coffee Break*
- 3:00pm - 3:30pm *Presentation of Individual Country Case Studies (continued)*
- *Machinery in Poland - Mr. Simon Gill*
  - *Livestock Inputs in Hungary - Mr. Istvan Feher*
- 3:30pm - 5:45pm *Discussions*
- 5:45pm - 6:00pm *Closing Remarks*
- *Mr. Michel Debatisse, Principal Agroindustrial Specialist, Rural Development and Environment Sector Unit, The World Bank*
- 6:30pm *Reception and Dinner at the Agricultural Museum of Hungary, Hosted by the Hungarian Ministry of Agriculture and The World Bank*

**TUESDAY, JUNE 23RD**

**SESSION 4 - How Can The World Bank Support EU Accession in the Rural Sector?**

**9:00am - 10:30am**

*Chairperson, Mr. Kevin Cleaver, Director, Rural Development and Environment Sector Unit, The World Bank*

- 9:00am - 10:30am *Presentation by Government Representatives of EU Accession Candidate Countries*
- 10:30am - 10:45am *Coffee Break*

**SESSION 5 - Conclusions and Wrap-Up Lessons: 10:45am - 12:30pm**

*Chairperson, Mr. Kevin Cleaver, Director, Rural Development and Environment Sector Unit, The World Bank*

- 10:45am - 12:30pm *Conclusion and Wrap-Up Lessons*
- *EU Commission*
  - *FAO*
  - *Country Representatives*
  - *World Bank*

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