STATE REGULATION OF AGRICULTURAL PRODUCTION

FINNISH-BALTIC JOINT SEMINAR
VILNIUS LITHUANIA 1992

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MAATALOUDEN TALOUDELLINEN TUTKIMUSLAITOS
AGRICULTURAL ECONOMICS RESEARCH INSTITUTE, FINLAND
RESEARCH PUBLICATIONS 68

ISBN 952-9538-24-3
ISSN 0788-5393

AGRICULTURAL ECONOMICS RESEARCH INSTITUTE
Research Publications, No. 68, 1992, p. 104

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Abstract. Agricultural economists from Finland and the Baltic countries had their third joint seminar in Vilnius, May 26-29, 1992. The seminar topic concerned the state regulation of agricultural production. The seminar was organized by the Lithuanian Research Institute for Agricultural Economics. This publication contains most of the presentations given in the seminar or summaries of them.

Agricultural economists from the host country examined the means and organisation of the agrarian reform in the Republic. Formation of the procurement prices, state policies for agricultural production and influence of East and West European markets were the most essential topics on the area of price policy. The taxation systems and function of the labour market in the countryside were other interesting subjects of Lithuanian economists. Attached to the joint studies of Lithuania and U.S.A. the American economists analysed privatization in policies for agriculture and modelling government policy for agricultural markets during the transition period.

Finnish presentations concerned the latest development of the agricultural structure and prejudged changes in it. Other topics dealt with the situation in the grain production in the country, features of efficient farms as well as taxation systems of Finnish farmers.

Latvian economists examined problems of small business and privatization and provided different approaches and possible ways of solution of the problems of privatization. The role of the Government in pricing, taxing and crediting was closely examined also from the Latvian point of view.

Estonian economists described the general situation of privatization in their country, agricultural taxation as well as the role of local municipalities in the process of privatization.

Index words: Agricultural policy, family farms, price, production, taxes, Finland, Estonia, Latvia, Lithuania

Photos by: Ossi Ala-Mantila, Juhani Ikonen and Maija Puurunen

Contents

LITHUANIAN AGRARIAN REFORM: LEGAL AND ORGANIZATIONAL ASPECTS

B. KUZULIS

Lithuanian Research Institute of Agricultural Economics
Vilnius, Lithuania

Alongside with the restoration of Independence on March 11 1989, the Republic of Lithuania has committed itself to restituing citizens' property rights which were lost after occupation. The principle of continuity in following the policy of the prewar Independent Lithuania largely influences the objectives and framework of the agrarian reform. Thus, the main goal of the reform is to restore social justice by returning the property nationalized by the communists to former legalowners or their heirs. Another basic objective is to transform collective and state farms into more efficient units, based on private property. The content of the agrarian reform involes the land reform, privatization of agricultural assests, dismantling state and collective farms and introducing market relations in the countryside.

The legal framework of the reform includes the programme of agrarian reform, approved by the Parliament and evolving basic areas and stages of the reform, four basic laws and subsequent regulations.

The Law on Restitution of Citizens' Owneship Rights on Survied Real Estate regulates returning the nationalized property in kind to citizens of the Republic of Lithuania, if that property is currently in the disposition of the state enterprises or collective farms. If restitution in kind is impossible or citizens don't want to get it back, compensations are paid. The law envisages returning the land, nationalized in 1940, to former owners or their heirs if they assume the obligation to establish an individual farm or contribute land to a partnership. In case land is occupied with buildings or it can't be returned for other reasons a corresponding plot of land of the same value in another location may be given. Moreover, at the request of the former owner and alongside with the availability of non-occupied land the plot may be given close to the current residence of the owner.

The Law on Land Reform regulates the procedure of land reform. The basic principles underlying the land reform are as follows:

- land may be in private or state ownership,
- land may be purchased by installments or returned to former owners, given they are citizens of the Republic of Lithuania,
- state land may be leased to legal or natural persons only for the purposes approved by the Government,
- the maximum acreage of purchased or returned land is limited to 80 hectares,
- state has a right to maintain land at it's disposal for defence, research and training purposes,
- former owners enjoy priority in acquairing land for cultivation.

The Law on Privatization of the Assets of Agricultural Enterprises regulates privatization through selling assets at auctions or purchasing property in the form of shares. To simplify privatization, the status of collective and state farms has been made uniform irrespective of former formal difference in the form of ownership. The farms are subdivided into smaller viable productive units which may be purchased by an individual or a group for the purpose of joint use or family farm establishing.

The assets of the state and collective farms are traded against special investment vouchers, issued either by the state or collective farm. Their amount per person depends on age, number of years worked at the enterprise. The value of these securities distributed among the employees corresponds to the asset value of the enterprise under privatization. In view of the fact that quite a large number of agricultural enterprises are indepted to Agricultural Bank, cash quotas have been set (5% of the total value of the assets sold) to cover the debts. Money is accumulated in the Agrarian Reform Fund of the Republic and is used not only to cover indebtedness but also for other expenses arising in the course of the agrarian reform.

Privatization of agricultural assets follows the scheme: state -private person - a group of persons. To encourage establishing of individual farms the machinery and animals currently belonging to state and collective farms are sold in proportion to the acreage of land at farmer's disposal.

On the basis of property acquaired at auctions or property shares acquaired by subscription individual farms, agricultural associations and agricultural partnerships based on joint management of assets opens good possibilities for better use of present material-technical basis, designed for large - scale farming. These may also serve a starting point for rapid establishement of individual farms. Organization and management of agricultural partnerships is regulated by the Law on Agricultural Partnerships.

The following institutional structures have been established to carry out the agrarian reform in Lithuania:

1. Municipal Agrarian Reform Service (local municipalities, smallest administrative units are in charge of 3-4 farms).
2. District Privatization Commissions.
3. Commission for the Agrarian Reform Under the Government of the Republic of Lithuania.
4. Central Privatization Commission.

The Central Privatization Commission coordinates the activities of all privatization institutions, controls the process of privatization and legal background and is in charge of the Agrarian Reform Commission.

The Agrarian Reform Commision is a provisional institution under the Government. It carries out proposals on implementation of legal acts and provides the Government with information on current developments of the agrarian reform.

District Privatization Commissions consider lists of objects under privatization in kind or shares made by Municipal Agrarian Reform Commissions and submit them for confirmation to District boards of agriculture, make land survey projects schedules and submit them for confirmation to the Ministry of Agriculture, investigate complaints against decisions of the Municipal Agrarian Reform Services.

Municipal Agrarian Reform Services have the status of a legal person. The employees, unlike those in other institutions, are fulltime workers for the period of the reform. The Services are financed by the Central Agrarian Reform Fund.

Municipal Agrarian Reform Services collect applications for land and look out possibilities of satisfying them. After the decision is made, the Services provide people with certificates confirming land ownership rights. Besides, Municipal Services register and analyse applications for agricultural assets and set forth proposals on privatization forms of particular objects, organize auctions and subscription for shares, reappraise assets which failed to be sold at auctions or any other way, put forward proposals on the issues concerning land survey projects, arrange discussions with land users on these land projects.

Municipal Agrarian Reform Services are carrying out the bulk of practical work and the process of reform depends greatly on their competence. Besides, apart these autonomous institutions a great deal of work in connection with the reform is done by the Ministry of Agriculture and research institutions under the Ministry.

Consultancy groups including agrarian researchers and officers of the Ministry of Agriculture have also been formed, seeking to inform population about the legal acts concerning the reform, and work out programmes for the privatization of the assets of agricultural enterprises. These groups act as advisers for District boards of agriculture. Municipal Privatization Services and agricultural enterprises which had been privatized on the pilot stage of the reform. This pilot privatization which had been carried out on 12 farms, enabled to gain practical experience for overall reform in agriculture. So far as agriculture is concerned, Estonia, Latvia and Lithuania inherited the same problems and are aiming at the same goals, though the legal and organizational frameworks chosen are different. Therefore the experience accumulated on pilot stages will be of considerable value for all three countries in the extensive and uneasy process of reforms.

On the first day Deputy Minister of Agriculture Romute Naujoliene talked about the central aspects of Lithuanian agriculture.

At the meeting with the Deputies of the Supreme Council of the Republic of Lithuania the participants found out more about the problems of agriculture in Lithuania.

PRIVATIZATION IN POLICIES FOR AGRICULTURE

S. R. JOHNSON

Center for Agricultural and Rural Development (CARD)
Iowa State University

1 Introduction

The fall of centrally planned or command economies has raised a number of difficult and practical issues for those responsible for the design of the reformed economice systems and the transition. All are looking to markets and the expansion of the private sector as a basis for increased productivity, improved resource allocation and sustainable economic growth. However, just how the transition will be managed and what the structure of the resulting economic system will be remains a puzzle for most of the these nations. For agriculture, these issues are perhaps more difficult than for other sectors due to current structures that have developed based on large subsidies, and the importance of land and other fixed factors in production.

The first inclination of political leaders and those from the sector has been in many instances to break down the old system, with what would seem to be inadequate consideration of what will replace it and how the transition wil be managed. Partly in response to questionable advice from the nations with market economies, the approach has been to get the prices right and the land and fixed assets in agriculture into private hands. From the accumulating experience of the reforms, it is becoming all too clear that the issues of transition and design of economic systems are far more difficult than can be solved by adherence to a few appealing slogans.

Closer scrutiny of agriculture in western and developed nations shows that government and regulation are major factors in the organization of agriculture. If privatization and the essentials of market systems are all that simple, why is it these comparatively wealthy nations with a rich experience with markets and private property have agricultural sectors and agricultural commodity markets that reflect masive government and regulatory presence? And, why after the shift of political power to urban areas and the development of high technology agriculture are these interventions, albeit modified, still in place? There is much to be learned from this experience, the first lesson of which is that government public sector participation and intervention are important to the development and growth of agriculture.

2 Rationale

Careful analysis of agriculture in western and developed nations has shown that there are a number of sound economic and political reasons for government intervention and public

sector participation in agriculture. Space limitations permit only a listing of these, but even this overview should suggest that the design of modern agricultural sectors requires a strategic government presence. The reasons for government intervention are:

-Stabilization of income, prices or factor demand
-Compensation for societally beneficial reforms
-Security of property rights
-Management of change and transition
-Market failures
-Externalities, primarily environmental
-Insurance of competition
-Extranational objectives
-Industrial policy.

These justifications for the role of government are in a number of senses overlapping. All in one way or another involve national or sectoral initiatives, market failure and externalities. The more elaborated list has been used to suggest the kinds of more specialised arrangements that can provide for governmental presence in agriculture, and of course, other sectors.

3 Problems

The initiatives by government for agriculture, in market as well in other economic systems have drawbacks. That is, while there is a clear role for government in the developmnet of a private and market agriculture, misdesigned or poor strategies for involvement can lead to highly unproductive outcomes. This is a reason for careful and direct attention to the presence of government and not an ad hoc reactionary orisis management strategy. The role of government is important, with high potential for up-side benefits and down-side costs.

Among the possible problems for government intervention in agriculture are:

- Overmanagement, a potentially serious problem in reforming command economics, the market and entrepreneurship are the engines of economic activity, not the government
- Rent seeking, special interest groups identified with distortions affected by government intervention can cause a large misuse of resources, cutting up the economic pie rather than enlarging it
- The government as a special interest is important, bureaucracies have significant momentum and many redundant services may be supplied by governments in reforming political and economic systems.
- Inconsistency in transition reform without a clear vision of the intended structure of agriculture may lead to inconsistencies and backtracking relative to the transition, resulting in ineffciencies and lack of communication of clear signals to the emerging private sector.
- Uneven approaches to deregulation and reduction of the public sector, retaining state monopolies while restructuring in other subsectors that results in restricted rights for exercise of monopoly power can have highly detrimental impacts on the emerging private sector.

- Privatization without appropriate consideration of the legal and regulatory systems for enforcement of property rights can blunt entrepreneurial incentives, slow the development of capital markets and the flow of investment into agriculture, and limit entrepreneurial activity.

- Inadsquate attention to safety net measures for attending to dislocated resources, primarily labor. Any of the state enterprises are responsible for an array of public and municipal services. Slowness of reform may be related to inadequate planning for alternative supply of the services and importantly, public and private risk sharing arrangements.

There are other problems with government intervention that is uninformed, inconsistent, and unpredictable. A key to effective development of the private sector in emerging market economics is a clear and well understood context in which the economic activity can occur. Unfortunately, this is almost always exactly the thing that is absent from reform packages. Consistency of the context and the plan for evolving the system is critical to assuring broad participation in aconomic activity. Broad participation is, in turn, a key to the efficient functioning of markets.

4 Comprehensive reform

The paper will address the issue of expanding the context of economic reforms to include a rationalized and systematic role for government. This role must be clearly articulated and may be especially difficult to organize, given the fact that the existing government bureaucracy and public sector presence has evolved for support of an alternative economic system. Institutions that are a part of the successful functioning of market-oriented agricultural sectors in other nations will be described. The importance of these institutions and public sector services will be assessed. And, a more general and comprehensive package for the economic reforms of agricultural sectors from a plan to a market basis will be offered for discussion and comment. This proposal will relate both to the transition or process of change and to the establishment of governmental and institutional systems that can support this sustained growth and development of agriculture.

The third seminar of Finland and the Baltic countries was held at the Lithuanian Institute of Agrarian Economics in Vilnius.

The official languages of the seminar were English and Russian. Ms. Ruta Sustaviciute and Mr. Kestas Sadauskas took care of the simultaneous interpretation very successfully.

PROBLEMS OF PRIVATIZATION OF AGRICULTURE IN ESTONIA

VALDEK LOKO

Scientific Research Institute of Agriculture and Land-Reclamation
Saku, Estonia

There are two laws regulating the privatization of agriculture in Estonia: law on Peasant Farming and Law on Land Reform. At present the Law on Property Reform in Agriculture is under the second reading in the Parliament.

On the ground of the Law on Peasant Farming approximately 7000 peasant farms have been established, the total area of them being 180 000 ha , i.e. 9 % of the land which is at the disposal of agricultural enterprises. The majority of farms are part-time ones. At present creation of new peasant farms has been suspended with the Law on Land Reform. The main principles of the Law on Land reform are as following. Priority rights are given to the former owners and to their heirs.

The term for submitting the application to return or compensate the land expired on Jan. 17, 1992. As the mechanism of compensation has not been worked out, the majority of former owners will have their land returned. All applications will be computerized, but most probably it will take 2-3 years. This year the body of local government may allocate land for temporary use.

The land which have already been allocated to establish peasant farms according to the Law on Peasant Farming is not subject to returning. If a person owns a house on the land of another person, he is entitled to 2 ha of land. March 1, 1992, which was the primary date for submitting the application for an increase or replacement of the landholding, has been changed. The main principles of the Law on Property Reform in Agriculture are as follows.

Collectivized property will be returned or compensated. Compensation may occur in form of substitution of property for another equivalent property, in form of a fixed share of the property of a collective farm or in form of money. The value of collectivized property is determined by the regulations of the Estonian Government. The share of collective farm property which has been acquired with government means belongs to the Estonian Republic decides on the use of this property. Objects of land improvement are transferred together with land property free of charge. The property of a collective farm necessary for the satisfaction of social and cultural demands of local population is transferred to municipal ownership.

The rest of collective farm property should be privatized and transferred to cooperatives as indivisible property. The order foor calculating a labour share from the property of a collective farm will be enacted by the government. At the moment there are two possible variants under discussion, either to calculate labour shares according to the length of service or according to summary wages. A labour share can be realized by allocating

property in kind, by investing into created enterprises or by transferring it to other persons free of charge or against payment.

The future operation of the collective farm will be decided after the property division by an assemby in which the members and permanent workers of the farm, old-age and disability pensioners of the farm and the family farmers whose last job was on the farm participate.

The property reform in agriculture is administered by the first-stage local government, which forms on the principles of parity a reform commission consisting of representatives of the collective farm, local peasants, former owners of illegally alienated land and collectivized property (or their descendents) and of representatives of the local government itself. Also a representative of the government participates in the work of the commission.

Still, the above-mentioned principles leave several problems unanswered, the decisions on which should be made by the Estonian Government. In economic sense the main problem is related to the question of which forms of entrepreneurship will according to these laws be dominating in Estonian agriculture.

Estimating present laws and drafts, it seems, that a free competition between different forms of entrepreneurship is guaranteed. As to the economic efficiency, it is the best variant. But as the material-technical basis meets the requirements of large-scale farms can be expected in the future. In political sense a dissatisfaction among small farmers can, therefore, be expected. If the Parliament gives in for small farmers and allocates a lot of means for supporting small farms, the importance of small farms will naturally increase.

The decisions made during privatization determine the future of Estonian agriculture for a long term, but unfortunately, there are no ready-made recipes for which decisions would be the best. Therefore, we must be ready to make new decisions in the future in order to find out the best way of development.

PRIVATIZATION PROCESS AND ISSUES OF SMALL BUSINESS IN LATVIA

ALEKSANDRS PUGACEVS

Scientific Research Institute of Agricultural Economics
Riga, Latvia

Though there are no stable social strata in our society at present, it is ready to start the process of building market economy. However, the process of giving free rein to the representatives of small business, who are the major acting subjects, by offering all kinds of incentives, by lifting groundless prohibitions and restrictions, is going on so slowly that an observer might take it for giving up the announced economic reforms. The liberal acts adopted by the government are not supported by corresponding changes effecting economic activities (see diagram 1).

An investment crisis is in progress already for the forth year: standard of living the most part of population has dropped and pessimism sets in.

Small business as a major economic and social problem is actually vanishing from the government's field of vision. In fact it has been given access neither to financial and material resources nor to the means of production, and this is why all efforts have been directed towards middleman activities instead of production.

Everybody is perfectly aware, that market should be saturated both with victuals and consumer goods. But in calculating profits it turns out, that the government "shears" equally those trying to set right the production of food and those acting as middlemen. But a middleman can earn the same profits in 3 months, which a businessman arranging matters in food production will manage at best in 2 or 3 years. Without governmental financial and bank support the orientation of small business to production is questionable or even impossible.

To my mind, the whole trouble is in our slow progress to marketeconomy, and that destructive processes are developing at a quicker pace than the movements to the progressive direction. There also exists a danger that the initiated reforms might result in nothing due to the fact that the reform policy actually lacked a realistic conception as well as development programme for entrepreneurship and small business.

Lately in West European countries small business has been firmly supported by governments and has become a significant element of economic policy and now it is becoming an essential factor for economic and national development.

Yet, this is not the case in our country. We are talking that support is needed, that structure is indispensable, and so on. But the fact is that market begins with small business. Not with a separate governmental structure, not with abolishing the structure of state planning, but with a smallscale producer and a tradesman, which practically do not exist yet today.

There is an elite which formed under extaordinary situation, there is also a barely alive small business, but neither can be considered to be a market element. Yet, this is absolutely

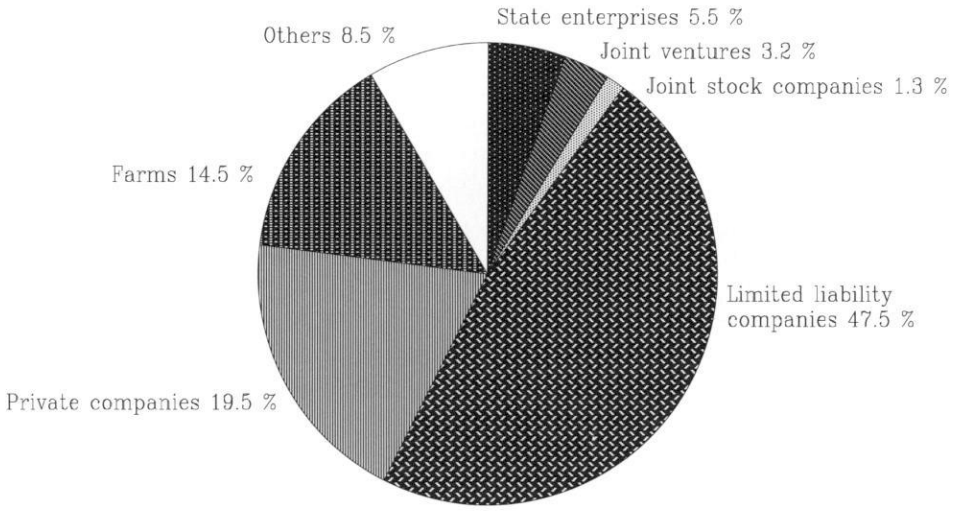

Diagram 1. Enterprises in Latvia according to the types of entrepreneurship.

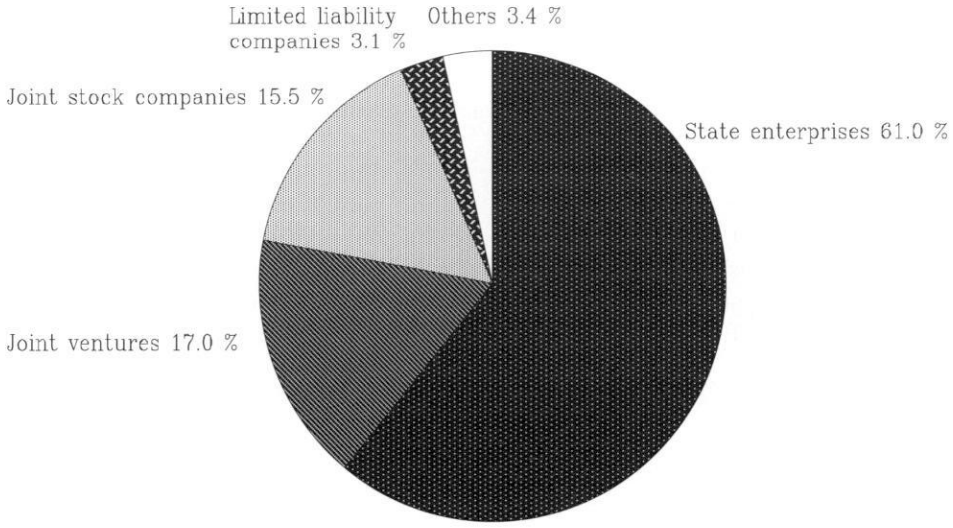

Diagram 2. Enterprises in Latvia according to the types of assets (the situation by May 1, 1992).

essential! Elite is sure to survive under the new circumstances. Entrepreneurs on a large scale can appear only if there is a support from the government and, if there is an appropriate state policy. But if there is none and while, the Government of the Republic does not realize, that small business is an indispensable structural element of the reforms and requires a special taxation, financial, structural and some other kinds of policy, we shall never see a real movement towards market.

At present the production sector practically remains state-owned due to delay in the process of privatization (see diagram 2). Regardless of the innumerable statements as to this matter, the production capacities have been inaccessible for private capital so far. The entrepreneurs are not in a hurry to invest money in industry, for the present inflation rates make these investments ineffective.

The activeness of entrepreneurs in trade and as middlemen, which arose in the beginning of 1992, has also diminished by now. A vivid example for this is the fall in sales in all Latvian exchanges, not only in monetary terms, but also in volume. The reasons for deterioration of the situation, in our opinion, are the following: the consequences of price liberalization, drastic taxes and finance-credit regulations. Theory is something else than practice.

Under these circumstances it is essential to make use of the intellectual potential accumulated in the structures of society and the associations of entrepreneurs in order to help the government form a civilized policy, which should support small business. Disregarding this the policies directed towards market are doomed to failure.

I consider, that the main obstacle for development of small business is the abscence of state guaranties. Banks are reluctant to establish contacts with small business, for they might find themselves in some trouble, if they lend money to a small enterprise, which happens to go into bankruptcy.

I deem it necessary to raise and legatimate a fund for development of business, which would serve as a guaranty against the credits the entrepreneurs draw from the banks. A guaranty system between the bank and the credit drawers would be a major stimulus for the development of economy and small business.

At present in Latvia there is a taxing system which consists of 11 tax laws. However, in implementation, it turns out to be contradictorious and leaves an adverse impact on the development of small business.

In this situation the entrepreneurs should be interested in accumulating profits with the view of investing them in future by exempting this sum from any kinds of taxes. Income taxes should be differentiated according to the types of entrepreneurship, thus orientating small business to production.

To my mind the economic activeness is largely hampered also by the high social tax. It would be more appropriate to divide the tax, which is 38 %, in two parts, where 30 % is paid by the employer and the remaining 8 % - by the employee.

Besides, in order to develop the movement of commodities between different countries, it is important to work out and create favorable prerequisites for specific types of income and flow of goods and to sign bilateral conventions with the regard to taxation between Latvia and other countries. Taking all this in consideration, I think it is necessary to create an information basis, which would enable to analyze the impacts of taxation system on entrepreneurship.

Altogether 17 presentations were given at the seminar. The topic of Prof. S.R. Johnson (Iowa State University) was the privatization in policies for agriculture.

M.Sc. Juhani Ikonen (Finnish Agricultural Economics Research Institute) talked about the taxation system in Finnish agriculture.

FEATURES OF EFFICIENT FARMS IN FINLAND

MAIJA PUURUNEN

Agricultural Economics Research Institute
Helsinki, Finland

1 Objectives of agricultural production

At present the objectives for agriculture in Finland are determined by the farm population, the state and consumers. In addition, there are external pressures, which concern all parties involved, either directly or indirectly. Recently, in particular, there has been a lot of discussion on the competitiveness of agriculture in Finland, if part of import protection must be abolished as a result of international integration. Usually, the objective of entrepreneurial activity is to reach maximum profit. Economically profitable activity forms the only solid basis for continuous entrepreneurial activity in agriculture as well, although farm families often have other targets and objectives.

The state has set objectives for agriculture concerning e.g. securing the settlement of rural areas and the production of foodstuffs. The interests of consumers mainly concern the quality and price of agricultural products and the services in the countryside. Some of the objectives contradict each other, but one common factor is the vision of profitable agriculture that producers income and a living countryside. Neither the state nor the consumers should have anything against farmers who receive a reasonable livelihood from agriculture. The disagreements are mainly caused by the means for achieving this.

An individual farmer adapts his actions to the surrounding society and the current situation. In the present situation it is in the farmers' interest to try to keep their present income level mainly by reducing costs. Raises in the target prices do not seem very likely, and the target prices have not even been reached in the case of all products. Due to various restrictions on production, the only possibility farmers have to increase incomes is to cut down on costs.

2 What is an efficient farm?

In this case, efficiency refers to about the same as in the case of success in a competition: not necessarily winning, but, for instance, an average performance or a little better. The principal features of an efficient farm are that it producers income, is profitable, the farm family enjoys living on the farm, and the meaningfulness of life, which can be understood as e.g. the relationship of the labor and capital input invested in the enterprise to the results of the activity and the existing resources. On successful farms the livelihood must be earned, at least in normal years, by means of reasonable investments of labor and capital with regard to the resources of the farm family.

How, then, do farmers in general succeed, and what are the most efficient farms or farm groups? When it comes to the income formation and profitability of agriculture, Finnish farms differ from each other a great deal. On the basis of statistics, this diversity can be examined mainly according to classifications based on the farm size, production line and region, as well as groupings related to the full-time or part-time nature of agriculture and the age of farmers. In the following, the return and costs of agriculture and the incomes of the farm family have been examined by means of taxation data on farms owned by private individuals. Due to the delay in the taxation, the most recent data on individual farms dates from 1988. The profitability of agriculture and unit costs have been examined on the basis of the bookkeeping farms, and in this stage the most recent data is from 1989.

3 Profitability of agriculture

The profitability of agriculture improves along with the farm size, because on small farms the use of labor and capital is higher with regard to the incomes. On the bookkeeping farms, income of the farm family that corresponds to the average hourly wages of agricultural employees and a 5% interest on the total capital of agriculture has been set as a calculatory profitability objective. In very good years the objective has been reached even on bookkeeping farms with over 20 hectares. In bad years, however, the objective has been reached only on the largest farms, if at all.

The following table presents the profitability coefficients of the bookkeeping farms in the different farm size classes in the past three accounting years, which were very different with regard to the production conditions.

Year	Under 10	10-20	20-30	30-50	Over 50 ha
1987	0.51	0.63	0.72	0.82	0.75
1988	0.54	0.68	0.77	0.86	1.10
1989	0.75	0.91	1.03	1.28	1.61

Concerning the Finnish farm structure, which is dominated by small farms, it can be noted that about a third of all farms belong to the class of over 20 ha, and only a couple percentage points of the farms have over 50 ha. However, the results of the bookkeeping farms cannot be generalized as such because e.g. the yield level is higher on these farms than on the average. In bad years, in particular, higher yields have been reached on the bookkeeping farms than in the whole country in the average. On livestock farms the development of profitability follows quite closely the development of the yield level. On grain farms, even relatively small variations in the yield level affect the profitability a great deal.

4 Incomes in agriculture

In good years production can be quite profitable already on farms of average size as a result of the state support and other factors, but the farm must be large enough if the aim is that it should produce the whole livelihood of the farm family. On the basis of taxation data

it is possible to examine the income formation of the farm family more extensively. In the past few decades agriculture has changed very strongly from full-time activity to part-time activity. On about a third of private farms the share of the income from agriculture and forestry has been less than a quarter of the total incomes of the farm family. These farms can be characterized as free-time farms. Correspondingly, grouped on the basis of the share of the income from agriculture and forestry, the classes of part-time farms and subsidiary income farms both include about 15% of farms. In this connection, full-time farms are farms on which the income share of agriculture and forestry is over 75% of the total incomes. At present, only about a third of all farms are full-time farms.

When the agricultural income of full-time farms is compared with the average wage income of industrial workers it can be noted that, in a good year, the same income level has been reached in agriculture on farms of 30-50 ha, and in weaker years only on farms of over 50 ha. Agricultural income of full-time farms per person in relation to the average wage income of industrial workers (ratios) in the years 1986-1988, which were very different kinds of years with regard to the production conditions, was as follows:

Year	10-20	20-30	30-50	50-100	Over 100 ha
1986	61	83	107	139	166
1987	56	73	96	111	148
1988	56	69	86	106	125

During the years in question, the average wage income of industrial workers has increased from FIM 70,600 to 83,900. Income earners can spend their wage incomes on paying their housing debts and private consumption, whereas a farmer has to pay, in addition to the housing and consumer expenditure, the installments of the debts of agriculture from the agricultural income. On the other hand, the total agricultural income cannot be considered only as compensation for the labor of the farm family, but part of it is compensation for the own capital invested in agriculture. The development of incomes in the past few years is not yet available in taxation data, but due to the strong measures to restrict production and the increased marketing charges, development of incomes in agriculture is likely to be weaker than that of wage earners. This is the case in spite of the fact that in the past few years the production conditions have been exceptionally favorable.

With regard to farmers' age, it can be noted that the farms of the oldest farmers are usually smaller, but they produce income quite well. The average farm size of full-time farms is about 20 ha, independent of farmers' age. As a result of pensions and other incomes, the majority of the oldest farmers have been included in the classes of part-time farmers. In general, agriculture practiced by older farmers is more profitable, mainly as a result of smaller depreciation and interest costs.

The generation that is giving up production very often leaves at least the higher investments to the descendants, which increases the investment pressures of young farmers who are already burdened by purchasing the farms and the shares of the other heirs. Consequently, the amount of debts of the youngest farmers on full-time farms is 1.2 times in relation to the total return on agriculture, and in the case of established farmers the debt are 3/4 of the total return. The debts of the oldest full-time farms are only about a quarter of the total return. Farms that are considered profitable when they are left to the

descendants are entitled to state subsidies and interest support, if the price of the farm is not too high. Recently the risks caused by the too high prices of land and farms, too high building costs, overmechanization and indebtedness have received a lot of emphasis. Agriculture is very capital intensive activity, in which income formation is in practice quite limited.

5 Unit costs

Ultimately, the profitability of production and the competitiveness of an enterprise are determined by the unit costs. On the basis of the bookkeeping farms, it has been possible to find out how much producing e.g. a liter of milk or a kilo of grain costs and, on the other hand, how much has been paid for them. In unit cost calculations, solutions have to be made concerning how the main products or the other products produced in addition to the main one are taken into account in the calculation. In these calculations, the value of secondary products as such has been deducted from the costs. On the other hand, the compensations and direct subsidies from the state have been taken into account as an addition to the producer price of milk in the returns.

The effect of the farm size on the production cost of a liter of milk can be examined mainly for the part of farms with over 10 hectares, because very few smaller farms participate in the bookkeeping. On farms with 10-20 ha the production cost of a liter of milk has been about FIM 3.65 and on farms with over 50 ha FIM 2.75 in the year 1989. When the dispersion of costs on individual dairy farms in Southern Finland is considered, the production cost of one liter of milk has been at the lowest a little under FIM 2.0, and at the highest FIM 4.5 or even more. On these farms the labor input of the farm family and the cost of purchased feed have been very high. As the number of animals has increased by one cow, the production cost of a liter of milk has decreased the average of FIM 0.05/ l. Correspondingly, concerning the effects of the average yield it can be noted that the production cost decreases the average of FIM 0.20/l when the average yield increases by 1,000 kg.

The production cost of a kilo of grain on farms with 10-20 ha in Southern Finland has been about FIM 2.50/kg, and on farms with over 50 ha FIM 1.65/kg. Consequently, the benefit of scale is FIM 0.85/kg, i.e. a little over a third. On grain farms, too, the most important factors causing the benefit of scale are the labor of the farm family as well as the value of the other production of the farm. At its lowest the production cost of a kilo of grain has been about FIM 1.00, whereas on some farms it has been FIM 3.00, and on some smallest farms as high as FIM 4.00. The farm size and the yield level influence the production cost of a kilo of grain very strongly. On farms with under 100 ha an increase in the farm size by one hectare has lowered the production cost of grain the average of about FIM 0.02/kg. There are very few farms with over 100 ha in Finland, and on these farms the decrease in the unit cost as a result of an increase in the farm size is smaller. When the yield level of the farm rises by 1,000 kg the production cost of grain has dropped by the average of FIM 0.40/kg.

Production conditions influence the results of crop production very strongly, and in this respect 1989, as well as 1990 and 1991 were exceptionally good years. In 1991, however,

mandatory fallowing, reduction of the target price of bread grain as well as the additional marketing charges collected in the prices of grain and fertilizers made the economic situation of grain farms more difficult. To compensate for this, all farms received direct income support in 1991. It can be estimated that, as a result of these measures, the profitability of grain farms in Southern Finland may have decreased at least a quarter.

By means of the results from the bookkeeping farms it is possible to evaluate the results of farms the productivity of which is above the average. When the profitability of the best farms decreases by a quarter or more, the losses may be great on farms that operate on higher costs and on smaller income margins than farms on the average. Recently there has been a lot of discussion on the profitability crisis of individual grain farms. However, grain farmers take a great risk if the livelihood is based solely on the income from grain. In the last years of severe crop failures the profitability of grain farms, including the compensations for crop damages, dropped to about a half of the results of normal years. The resulting decrease in agricultural income was more than a half. In 1991 the decrease in profitability was not caused by natural conditions, but largely by overproduction and the state measures required to deal with it. If the yield levels in the past few years had not been so high, there would have been less overproduction and the state measures could have been more moderate.

6 Variation between farms of the same type

Even if so far the significance of the farm size as a precondition for profitable agriculture that produces income has been emphasized, it is not always an absolute prerequisite. A skillful farmer on a farm of an average size may succeed by efficient management of the farm better than a farmer of a large farm who wastes production inputs. By means of a dispersion survey based on the bookkeeping farms it has been possible to examine the variation between farms of the same type more in detail. In this survey farms have been classified according to the relationship between the production costs and the total return. The costs needed to reach almost an equal total return vary a great deal in the different farm groups.

On dairy farms of about the same size with regard to the area and the number of animals the total return in the extreme groups according to the cost/return ratio has been about the same, but the costs differ by almost a third. Consequently, the agricultural income reached in the group with proportionally the lowest costs has been almost double compared with the agricultural income and over one and a half times compared with the profitability in the group with the highest costs. Correspondingly, there is an over 50% difference in the profitability of agriculture on pig farms between farm groups determined in the way in question.

For the part of grain farms, the cost/return ratio classifies farms mainly on the basis of return. The best profitability has been reached on grain farms representing the average among bookkeeping farms that have managed to keep the capital costs, in particular, relatively low. One notable feature on efficient grain farms is that their crop level and return level stay about the same from one year to another. It could be assumed that the farms with proportionally the highest costs would be those that are investing very strongly and

many of which have possibly undergone a change of generation recently. The times of ownership do not, however, directly support these assumptions. On farms with the least efficiency almost all cost items were the highest. Consequently, in addition to factors related to the farm and physical production inputs, personal characteristics and entrepreneurial skills of the farmer affect the differences in the economic results a great deal.

7 Successful farmers

Success in managing a farm is at present quite strongly dependent on the skills of the farmer, in addition to the relatively large farm size. A skillful, established farmer reaches the best results. However, even the best cannot succeed if the conditions make it quite impossible. If too high a price has been paid for the farm or other disproportionately high investments have resulted in a vicious circle of debt, improving the situation may prove very difficult or even impossible due to the present production restrictions. On an efficient farm investments have been planned so that it is possible to be very moderate in this respect if necessary.

A successful farmer follows continuously all costs of the farm, and even in good years considers and calculates the investments very carefully. In recent years agriculture in Finland has been forecast to run into difficulties in various connections. In the tightening competition a calculating attitude to the economics of the farm and taking advantage of the agricultural advisory services receive more emphasis. When risks are taken it should also be taken into account how they can be dealt with in the worst possible situation.

FINNISH EXPERIENCE OF FAMILY FARMING AND VIEWPOINTS FOR THE PRIVATIZATION OF COLLECTIVE FARMS IN THE NEIGHBOURHOOD OF FINLAND[1]

MATIAS TORVELA
Agricultural Economics Research Institute
Helsinki, Finland

MIKKO SIITONEN
Association of Agricultural Advisory Centres
Helsinki, Finland

1 Finnish experiences of family farming

1.1 Current situation

In the 1980s agriculture in Finland underwent drastic changes. In the past few years the share of agriculture in the GDP has been about 3 %, and it seems to continue to decrease. In 1990 about 173,000 people were employed in agriculture, which is about 7 % of the total labor force. However, agriculture and forestry, which is connected to it, have a central position in rural industries, and they secure that rural areas stay inhabited. The average age of farmers is about 50 years, the average age of full-time farmers 46 years and that of part-time farmers 52 years. Farmers over 65 years of age own about 15 % of farms.

At present there are 172,000 farms of over 2 hectares, and about 138,000 of these were privately owned. Over 24,000 farms are in the possession of heirs. Active agricultural production was practiced on about 130,000 farms. About 30 % of farmers reported dairy production as their main production line. Grain production was the most important on 23 % of farms and pig production was practiced on 5 % of farms.

In addition to agriculture, farmers have income from other sources. According to taxation data and some other sources in 1988, the share of agriculture in the incomes of a farm family was, on the average, 45 %, the share of forestry 10 %, wages and salaries 28 %, pensions 12 % and other incomes 5 %. The significance of wages and salaries for farmers is on the increase.

1.2 The development of the structure in the next few years

In the next few years the structure of agriculture will continue to change. The objective is to cut production, which has expanded too much, the structure of agriculture must be made more efficient, and an attempt must be made to reduce production costs, which would make it easier to take care of farmers' income level. The pressures in the domestic

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[1] This paper has been presented in the FAO/ECE Workshop on "Spesific Problems of Transformation of Collective Farms into Variable Market-oriented Units" in Gödöllö, Hungary, June 22-26, 1992.

market as well as international considerations require developing the structure of agriculture.

In the structural program for agriculture and forestry that was completed recently it has been estimated that if agricultural policy was managed so that production decreased from the present overproduction of 25-30 % to the self-sufficiency level and growth of the farm size was favored, by the year 2000 the number of farms would drop by over 50,000 farms. In this case there would be about 70,000 active farms left, including about 23,000 dairy farms, 4,600 pig farms, 1,600 chicken farms and 21,500 grain farms, as well as 25,500 farms engaged in other production lines, e.g. beef production (11,500 farms) and garden and greenhouse production (3,500 farms). There would be about 12,000 actual forestry farms. This development would lead to an increase in the average farm size to 19.5 ha (14.5 ha at present) and in e.g. the number of dairy cows to 14.6 (10.5 at present). In this option the arable land area that would remain in agricultural production would be about 1.5 mill. ha.

The structural program also includes a more powerful development option. According to this, through measures of agriculture policy the total number of farms could be 44,500 by the year 2000. As a result, the average farm size would grow more strongly than in the other option, and self-sufficient agricultural production could also be maintained in this case.

Like at present, in the future, too, part of the farms would provide full employment and be the main source of livelihood, and part of the farms would be smaller part-time farms. It has also been calculated how large farm normal farmfamily can manage in different cases. Even if the study was made in the mid-1970s, it illustrates the current situation quite well. With modern production technolo-gy in dairy production it is possible for a family farm to have 35-45 ha arable land and 30-40 dairy cows. However, this requires some hired labor in the early part of the summer. In pig production it is possible to have 260-340 pigs and, if feed is mainly produced on the farm, the arable land area should be 65-85 ha. In

Estimate on the development of the number of farms by 2000.

	1990		By 2000
	Total number of farms	Main prod. line	estimate
Dairy farms	46,764	43,564	23,000
Pig farms	10,819	7,083	4,600
Chicken farms	14,978	2,223	1,600
Grain farms		39,912	21,500
Other farms		36,334	25,500
-Beef production		11,500	
-Forestry farms		12,155	
-Garden production		3,525	
-Other		9,154	
Farms, total		129,114	76,000

this case, too, outside labor would be needed during sowing and harvesting. In grain production the arable land area could be 80-100 ha, and outside help would be necessary in the spring and fall. This survey on the farm size is based on the sufficiency of the labor of the farm family.

The figures indicate that technically it is possible to increasethe farm size quite freely. The development of the structure can be influenced by means of agricultural policy. The policy is partly dependent on whether Finland will be more closely connected with the rest of Europe.

1.3 Farm size and production costs

With regard to the rationalization of production, the farm size clearly affects the production costs. According to the calculations, in e.g. milk production the production costs decrease considerably as the farm size increases. If the costs are indicated by 100 in a cattle of 8 cows, they are about 80 in a cattle of 16 and 70 in a cattle of 32. The trend is similar in beef production. Similarly, if the production costs on a farm with 70 pig places are indicated by 100, they are about 90 on a farm with 150 pig places and 85 if the number of pig places is 300. Correspondingly, if the production costs on a grain farm of 20 ha are 100, thay are 90 on a farm of 40 ha and 75 on a farm of 80 ha. The figures refer to results of model calculations made on the basis of the bookkeeping farms. They are partly theoretical, but they indicate clearly that on large farms production costs are a lot lower than on small farms.

However, it must also be taken into account that increasing the farm size costs a good deal. Acquisition of additional land, buildings and new machinery alone costs significant amounts of money. It is usually necessary to take loans for investments, and the amount of costs is largely dependent on the interest level. It can be noted that on new farms that have been established recently the cost level is clearly higher than on older farm of the same size. This must be kept in mind when increasing the farm size considered.

1.4 Livelihood of farm families

Farm sizes are so small that they often do not provide livelihood for a whole family. Therefore most farms under 10 hectares, and nearly 50 % of all farms over 10 but under 20 hectares, can be considered part-time farms or sources of subsidiary income. In many studies, farms earning less than 50 % of the total income of the farming couple from agriculture and forestry are classified as part-time farms. The corresponding proportion for subsidiary farms is 50 % to 75 %. The review is based on tax data on the farming couple. An average farm is inhabited by 1.8 farmer and spouse, for some 20 % of all farmers are single. About ten years ago more than 50 % of all farms were full-time farms, with the farming couple making more than 75 % of their total income from agriculture. Today full-time farms represent less than one third of all farms.

'Spare time farms' have increased most in proportion to the others: the farming couple earn their livelihood in other occupations, with agriculture accounting for a minor proportion of their income. Part-time farms usually concentrate on plant cultivation or diversified production, while full-time farms focus on livestock. Part-time, subsidiary and full-time farms are distributed fairly evenly around the country.

One of the goals at agricultural policy is to safeguard equal income trends for all farmers in the various parts of the country. We can say that we have been successful in this policy of supporting farmers, for income differences are fairly small between farms of equal size with the same production line in various parts of the country. For example, the financial result of the small cattle farms in northern Finland may exceed that of their southern equivalents. Larger farms, too, may achieve the same results in the north as they do elsewhere in the country.

The results of taxation statistics show that the net income from livestock farming is higher than that from plant cultivation (Figure). We must keep in mind, however, that on livestock farms both farmer and spouse work full-time throughout the year. On plant cultivation farms one or both earn elsewhere for most of the year, thus increasing the family income.

A look at the achievements of farms of equal size reveals that some part-time farms have reached even a slightly higher income level than full-time farms. Since most part-time farms are smaller than full-time farms, however, their incomes average slightly below those of full-time farms (Figure). Comparable part-time farm earnings are proof of the fact that income formation in other fields is relatively good compared with agriculture. On the other hand, part-time farmers often have to do agricultural overtime work alongside their main profession.

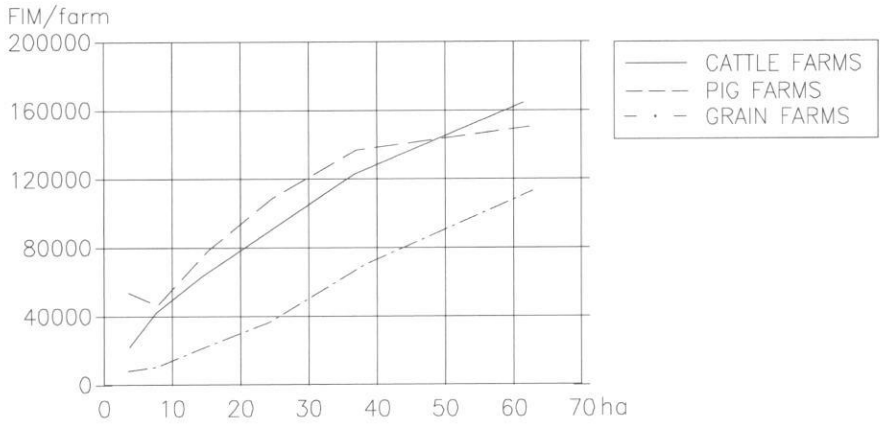
1.5 Developing agriculture and forestry and rural areas

Because farms are in general small in Finland, an attempt is made to increase the farm size. Until 1991 a so-called Farm Act was in force, on the basis of which financing to farmers to develop the structure of agriculture was facilitated. According to the act, it was possible for a farmer to receive low interest loans from the state for purchasing a farm, buying additional land, construction and renovation. In addition to the low interest loans, in certain cases farmers could receive subsidies, too. It was also possible to get loans from private banks, in which case the state paid part of the interest. Small-scale rural industries were also subsidized from the state funds, but this activity was separated from develo-ping agriculture.

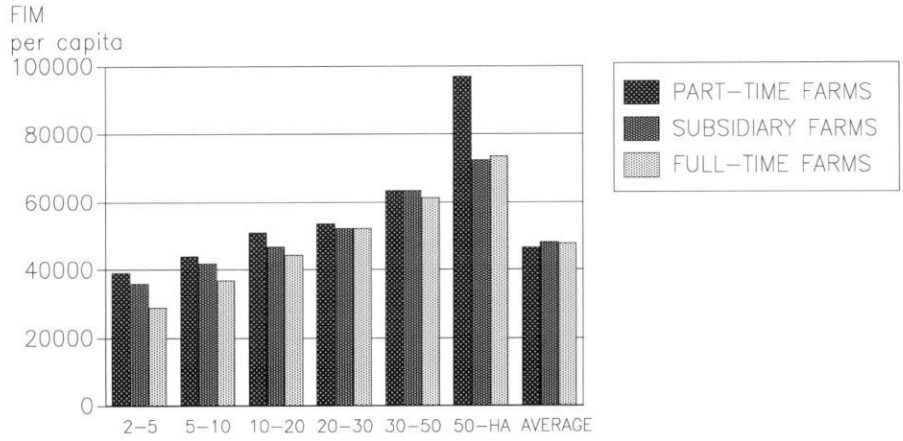
In 1991 a new act came into force, which aims at developing, apart from agriculture and forestry proper, small-scale entrepreneurial activity in rural areas as well. Consequently, both activities are performed within the framework of the same act and organisation.

According to the new act, it is possible to support agriculture and forestry and small-scale entrepreneurial activity in rural areas. The purpose is to pay attention to, in particular,

- improvement of productivity, rational use of production inputs, promoting cooperation, economy and expediency of projects in terms of production policy
- improvement of capital structure and reducing the need for financing
- balanced regional development of agriculture and forestry and other rural industries
- improvement of the age structure of farmers and promoting transfer of farms to descendants
- improvement of housing conditions as well as the residential and working environment
- environmental considerations
- keeping rural areas inhabited



Farm income (FIM/farm) by farm size and production line, 1988.



Total net income of farming couples (FIM per capita) by farm size for part-time, subsidiary and full-time farms, 1988.

1.6 Financing agriculture and forestry and small-scale entrepreneurial activity

Farmers under 35 years of age may be granted a start subsidy for purchasing a farm. Investment subsidy can be granted to farmers for the investments in agriculture, protecting the environment and occupational safety and health. A loan for purchasing land may be granted for buying a whole farm or additional land for the maximum of 75 % of the price. The investment loan for construction and renovation of a farm may amount to the maximum of 80 % of the costs.

In principal, small-scale industrial activity is supported in the same way as agriculture and forestry. An entrepreneur may receive an investment subsidy for the acquisition and repair of fixed assets (not for the real estate) for the maximum of 55 % of the costs. In addition, it is possible to receive a so-called start subsidy for the wages of the first three years, the maximum being 55 %. Similarly, subsidies can be granted for marketing, training and protecting the environment. An entrepreneur may also receive low interest loans for the maximum of half of the acquisition costs of fixed and current assets.

2 Viewpoints to the privatization of collective farms in the neighborhood of Finland

The Finnish Agricultural Advisory Services have taken part in developing agricultural production and family farming in Estonia, the Republic of Karelia and the Oblasts of St. Petersburg and Smolensk. Therefore, this paper approaches the problems from the point of view of an observer and a consultant.

There is no panacea to solve the numerous problems which these regions are facing in the new situation after the collapse of the former Soviet Union. The basic situation is the same everywhere, but every region has also special features of its own, because their historical backgrounds are different. Still, the economic and other changes in the ne republics are very rapid and the situation may be very different in late June from that in the beginning of March when this paper is being written.

2.1 Results of the economic collapse

As a result of the economic collapse of the former Soviet Union there is a lack of food and other goods, because the production and the trade have stagnated. Naturally, there are many reasons for this development. One of them is the rapid inflation, which has caused that the new republics are more interested in getting payments in hard currencies than in the Russian money. On the other hand, there are feelings in many regions that their natural resources and their products are deprived in too low prices.

The new way of thinking has gone through the society. The enterprises are not willing to sell their products, because they are waiting for higher prices. The malfunctioning of the transport and distribution system and the presence of black markets are also of importance. The agricultural production for its part is hindered by the lack of the essential inputs needed in the production process. The bad circle is closed.

There is a lack of food in the northern and western parts of Russia and to certain extent in the Baltic countries, too. This situation is a result of the shortcomings in the food deliveries and the stagnation of agricultural production because of the lack of feed and other inputs.

2.2 Solutions for food production

It is only natural that people living in a region in need want to solve the problems they are suffering from. It was already during the soviet regime that the privatization of unprofitable kolkhozes and sovkhozes was seen as a solution in promoting food production. It seems so that the new administrations of the new republics are even more eager to continue in this direction and a transformation is seen as a must. But there is a threat: if the old structure is demolished before the new one is functioning, the result will be a collapse of production.

The problem of lacking agricultural inputs is partly seen as a result of wrong decisions made during the communist era. To take an example, then the production of coarse grains was thinned away from the north and moved to the south, were it was to be cultivated more profitably. Because the distribution system does not function satisfactorily in the new situation, something must be done in order to overcome the difficulties. The answer has be seen in diversifying crop production in the north, because the extent of animal production is thought to be maintained only by means of the own feed production.

Guaranteeing the supply of the most important commodities necessary for agricultural production can be seen in a larger framework, too. Raising the level self-sufficiency does not concern only commodities, services and modern technology but also the level of agricultural production as a whole, which is a more and more prevalent concern in our neighboring countries. Increasing import is no solution in the current situation, because the economy cannot afford it.

2.3 Lack of determination at the political level

The most important hindrance for the agricultural transformation seems to be the inheritance of the former system living in the human minds and a lack of a democratic tradition in the process of decision making. The influence of the old ideology cannot be wiped out in a coup, especially in this case when it has been the only one accepted in the course of 70 years in Russia and more than 50 years in the Baltic countries. It is not at all easy to learn to think in a new way. Especially difficult it is, if it means losing something that has guaranteed the necessities of life in the past.

There seems to be a lack of political will to solve the national problems. Sometimes one has a feeling that the parliaments and governments seem to be more willing to discuss about different problems than solve them. This may be explained partly by the lack of research-based information, which is needed to support the decision making. This for its part has led to a situation where many decisions remain at a level of corrections and do not reach a level needed for a more thorough reform.

The indecisiveness radiates through the society and causes uneasiness among people in the own country and prevent them from making decisions. But this is not all the thing. The unpredictable situation is also reflecting in the decision making of the potential

foreign investors, whose inputs are badly needed to promote different industries in their course toward the market economy.

When seen from the agricultural point of view the crucial question is, whether the new administrations can accomplish all what is needed for an agricultural transformation, create a new legislation, establish new service organizations and acquire the necessary funding for the reforms. There is an obvious need to create a legal framework for the ownership and different activities of private farms, reorganize the administration, research and education and establish advisory services. Financing the new farms is also of crucial importance.

2.4 Rebuilding the physical infrastructure

The old regime wanted to concentrate different activities into villages and towns. Consequently, small villages and lonely farms were abandoned and ruined in densely populated areas later on. At the same time also other facilities, as roads were deteriorated or destroyed. On the other hand, it has been difficult to keep up the necessary infrastructure in the villages, because these costs must have been paid mainly by the collective farms, which have had to keep up their own production system, too. So, the overall conditions are not very advantageous for an agricultural transformation at the grass root level either.

In a situation like this the rebuilding of the infrastructure requires enormous investments at the same time as resources are needed for paying the costs for privatization and founding new farms. Also some maintenance and reforming of the existing infrastructure is needed, while the former financiers, the collective farms are to discontinue their activities. Therefore, problems connected to the infrastructure cannot be solved without reorganizing regional or local governments in such a way as enables them to take responsibility to carry out the tasks needed.

2.5 Rebuilding new processing facilities and markets

One of the key problems of a new-started farmer is how to finance his or her various activities. The high inflation has deteriorated farmers' chances to make investments. The situation has worsened further, because the banking and credit system are underdeveloped and do not offer enough funding and services.

Different plants processing agricultural products or producing commodities for agricultural production are also facing financial problem. There is a need to renovate dairy plants, slaughter houses and other processing plants. Many of those are technically obsolete and do not fulfill the modern requirements for the conservation of nature and the environment.

At the same time there is a need to create a new distribution system for agricultural products and to guarantee the supply of necessary inputs, e.g. seeds and feeds to the farmers. A solution would be to find new forms for cooperation between farmers at the village, area and national level.

The basic problem is that the new private farmer cannot bear all the supplementary costs needed for the reorganization of all the industry in a situation, where all the resources are needed to start farming. Reorganization of the agricultural financing system is therefore one of the vital decisions to promote the future development of the agriculture

production and the processing industry, but the basic capital must be acquired outside of agriculture.

The development of agricultural technology has previously based on the requirements of large enterprises. Building materials and other commodities are also scarce or almost lacking. In the new situation factories have not been able to reorganize their production and the result is that the needs of family farms are more or less neglected. A quick solution for this problem would be that foreign enterprises could relay on the economic development in these countries and establish their affiliate plants there.

2.6 Rebuilding the service organizations

The old administration was more or less carrying out a state firm consisting of all the collective farms and processing plants. In the new situation the agricultural administration must be seen as a service organization by the side of other organizations. It should create general potentialities for the farming industry and allocate resources for it.

When reforming the administration one should avoid creating a big new organization but study, if a part of tasks could be delegated to other organizations. One of the principal responsibilities of the agricultural administration would be to supervise that the official resources are used in a legal way and all the citizens are handled equally.

Agricultural research and higher education have been orientated to serve the old production system and collective farms and have had difficulties in following the new trends in the farming society. Researchers have been working mostly with production-based problems. The former research work in the field of agricultural economics and politics do not serve the needs of private farmers.

Reforming agricultural research and higher education is one of the most important tasks to be carried out as soon as possible. In the new situation the research work should be intensified in the fields of marketing and farm management without neglecting the work in other critical fields either. The reform of research and higher education can be hurried by means of establishing a cooperation with western countries. A starting point would be re-education of researchers and teachers who are willing to adapt to new market economy.

Agricultural schools for their part have educated specialized workers, not skilled farmers who have enough knowledge in farm management. The reform of the schooling system should have a target that graduated young people should have readiness to take the responsibility of managing their own farms. The training can be organized e.g. in a form of successive learning periods.

Today it is also important to organize basic courses for the new-comers who do not have an education for managing a farm and the activities could be started by organizing special courses for newly established farmers. Also the reform of the schooling system should be started by means of training the teachers, perhaps in cooperating with western countries. Many of whom have taken part in courses abroad.

The agricultural advisory services are also waiting to be founded. Some organizations have already hired advisors. The advisory work is carried out more or less systematically and is not necessarily integrated to the rest of the farming society. When founding a new advisory organization one should take into consideration the needs of the potential farmer-customers and the objectives of the society. This is significant, because the funding of the services is a most crucial part in carrying out the activities.

On the other hand, the advisory services should establish all the connection needed for giving the farmer-customers research-based information and advice, which is fitted to the actual needs of the farm. The starting point once again is to train the advisors who are now starting their work. In this case, too, the cooperation with western countries is important, because it is the quickest way to get the advisors' skills updated so that they can work in the line of private farming. Later on the in-service training of advisors must be organized on a regular basis.

Private farmers have founded Farmers' Unions. They are as strong or weak as their members, who are today a small minority in the society. At least some of the unions get a part of their funding from the government, which may drive them into a very difficult situation in case of conflicts between the interests of the farmers and the ones of the society. Therefore the financial independence of a farmers' Union should be a most important goal for them.

2.7 Founding new farms

Though there are innovators, who want to support the change, there are also people who resist the changes toward an market economy. Sometimes both of these features may be seen in the same person. Often it is said that the directors of collective farms are against the reforms, but it does not explain all the difficulties that private farmers have to meet today. When speaking about founding new private farms these two groups of people meet.

Many a starter has a background of a skilled worker or a specialist on a collective farm. The former ones may not know enough about the production processes and farm management. Though the latter ones may have a good education in their own field, their problems may be very much similar to the others.

A common thing for the starters is that they have a strong will to become farmers, but is far too often that they have only their own working power, their savings and a lot of land received from a collective farm or taken back as a inherited property. Therefore it is easy to understand that many a new farmer has a temptation to start with a subsistence farm only, which may be cause many difficulties later on when it will be the time to extend the farm.

Many a director of a collective farm may be interested in giving land to the future farmers. It is not seldom that the new farmer gets land from the most remote corner, which has been too difficult or expensive to cultivate for the collective farm. Often the land area is too small and the fields are situated inconveniently and the farm lacks possibilities to grow.

Often the new-comer stay alone, because the others get land from other directions. In this way all the costs will remain high, because there is no way for an economic cooperation between private farms, not to say what is the importance of the mental and intellectual support from the peers. Though the collective farm may help the private one in many ways, this support cannot compensate the basic mistakes made when the new farm was founded.

In order to minimize the basic costs for roads, electricity, telephone, children's school,transport and so on, the colonization should be carried out in grouping several farms in the same neighborhood. At the same time one should not forget that the size of a farm is of importance and creating too small units should be avoided. These principles remain the same, whether the farm is a new one or is taken back on as a former property.

2.8 Group farming

Though the collective farms may be dilapidated, they have a lot of facilities, which can be used in the years to come. In every case, the lack of capital is a serious one and there is no reason to waste existing resources. It is therefore important to study, if it is possible to establish such groups of new farmers who are able and want to utilize big production units, which will be available in the near future after having left unused by the collective farm.

The legal form of farming is not the most important thing and can vary from companies to cooperatives, but this kind of enterprising may offer an useful solution to keep up agricultural production today and an effective way to compete on the markets in the future.

2.9 Some final remarks

The new republics have a enormous amount of problems to solve. The crucial question is that they are reforming the society for themselves and they have to make the decisions by themselves. They are also responsible for their decisions. In order to reach their goals as a society they have to design their objectives, allocate the available resources and carry out the necessary tasks. A foreign aid is and will be a temporary solution, but it is needed at the starting point to make it easier to go over to a new system. No foreign system is to be adapted as such.

In the seminar program one day was reserved for visiting the Girele State Poultry Farm near the town of Kaisiadorys.

The Girele State Poultry Farm's specialty is egg production. The competent staff packs the eggs very rapidly.

MODELLING GOVERNMENT POLICY FOR AGRICULTURAL MARKETS IN TRANSITION

WILLIAM H. MEYERS
Center for Agricultural and Rural Development
Iowa State University

NATALIA KAZLAUSKIENE
Lithuanian Research Institute of Agricultural Economics
Vilnius, Lithuania

1 Introduction

As the Baltic States of Estonia, Latvia and Lithuania enter the transition to a market economy in food and agriculture it is necessary to consider and evaluate alternative mechanisms that may be used in the regulation or stabilization of prices and incomes in the food and agricultural industry. In principle, governments of the Baltic states want to deregulate food and agricultural markets but are faced with continuing pressure from consumers to control price inflation and from farmers to increase prices. These are the same pressures faced by governments all over the world, so the new Baltic states can learn from the experiences of other countries, while considering the special conditions in these transition economies.

Modelling transition economies is especially difficult because the underlying structures of production and distribution are changing in ways that cannot always be foreseen, and historical data is of limited value in estimating the behavior of economic agents during and after the transition. Thus greater reliance on stylized models, synthetic behavioral parameters, and expert approaches are necessary.

This paper reviews the initial conditions in these transition economies, describes a few alternative policy approaches that are used on other market economies, proposes an analytical framework for evaluation of policy options for food and agricultural markets, and provides results of one such option for Lithuania.

2 Initial Conditions

The purpose here is to review briefly the conditions in the former command economy during the Soviet period and the recent changes in the economic system so that alternative policy issues can be identified and related to modelling approaches.

2.1 Production Sector

The production sector in the Soviet system was characterized by subsidized and centrally allocated inputs, subsidized output prices, and production quotas for delivery to the government processing and distribution system. Since investment decisions, production plans, and quotas were not generally driven by economic optimization, output for any particular commodity could be higher or lower than what would occur in a market economy.

In 1991 and 1992 the governments of the Baltic states removed many of the regulations and constraints that existed during the Soviet period. While these cannot be truly called free market policies, virtually all of the government subsidies and many of the government constraints on producers have been removed. Input prices are rising rapidly toward world market prices, and output prices are generally rising in response to these higher costs. The structure of production is only now beginning to change in response to economic incentives, land reform, and privatization measures. Producers are generally free to sell wherever they wish, but in reality have limited options due to the still poorly developed marketing infrastructure. The Lithuanian government still purchases up to 60 percent of some commodities to provide supplies for state institutions and export agreements.

2.2 Intermediate Sector

The processing and distribution of food and agricultural products was also subsidized in the Soviet system. These subsidies supported large inefficiencies in this sector as well. The inefficiency costs include poor equipment, high energy use, and wastage and spoilage in the handling of raw materials and processed products. In the absence of subsidies, the inefficiency of this sector causes higher consumer and lower producer prices than would occur in a well functioning market economy. This situation leads to greater political pressures on governments from producers and consumers to continue subsidies or controls. It also reduces the competitiveness of products in world markets.

As of now there has not been sufficient time for the kind of restructuring and efficiency gains that would reduce processing costs. Most of the processing is still state owned, but little if any budget support is provided to the sector. Nor has there been time for significant competition to emerge that would push processing firms to cut costs.

2.3 Consumption Sector

In some cases, consumers in the Soviet system benefitted from subsidies that exceeded processing costs. That is, the retail price of food was even below the producer price of an equivalent unit of the good. The low food prices combined with the lack of alternative goods, led to food consumption levels and dietary patterns that approached those of consumers in the West, where much higher incomes exist. Actual rationing and/or lengthy queuing at food shops was not uncommon under these policies.

With price liberalization that has occurred in 1991 and 1992, virtually all of the consumer subsidies are gone. This has led to very large price increases, which have to some extent been offset by wage increases and direct income transfers. Varying degrees of

rationing and queuing still exist for a few basic foods and the availability of non-food goods has not increased significantly. The portion of household income spent on food has increased substantially.

2.4 Trade

State trading was the norm in the Soviet period, so the level of trade did not generally reflect the excess demand and supply conditions. Exports could be subsidized by the state to generate hard currency, and imports could be restricted to conserve hard currency. The result could be seen in further rationing of domestic consumption.

Although there appears to be few import barriers, there is still a significant degree of export control for the purpose of protecting the domestic market and moderating price increases. Governments still engage in state trading, but enterprises have more freedom to conduct direct trade with enterprises in the former Soviet Union or other external markets. Export licensing is used to a considerable extent as a mechanism to control food and agricultural exports, but these requirements are gradually being softened or eliminated so that enterprises have more incentives to export.

2.5 Conceptualization of Initial Conditions

The conditions during the Soviet period and the current period are compared in Figure 1. This figure assumes constant supply and illustrates why consumer prices have to rise so much during the transition from the Soviet system to a market economy when input and product subsidies are removed. In a well functioning market economy, processing costs would be lower, reducing the gap between farm and retail prices. Comparisons of current internal prices to world market prices are still obscured by uncertainty about the exchange value of the ruble. However, since the prices of imported inputs from both East and West are approaching world market prices, output prices are also moving closer to world market levels.

3 Policy Options

As the governments of Estonia, Latvia, and Lithuania proceed with the early stages of transition to market economy systems, there are differing ideas about what kind of policy regime should be developed for the future. Should farm price supports or input subsidies be used to insure adequate farm incomes? Should import or export restrictions or border tariffs be used to protect the domestic market? Should free trade be the basis for pricing inputs and domestic products? These are difficult choices faced by governments and citizens in all market economies.

Democratic governments around the world have chosen different kinds of policy regimes. Frequently, higher income countries have adopted various forms of support or protection for farm prices and incomes, while lower income countries have tended to subsidize consumers at the expense of farmers. Measures to support farm prices or incomes with government intervention lead to either high consumer prices, high government

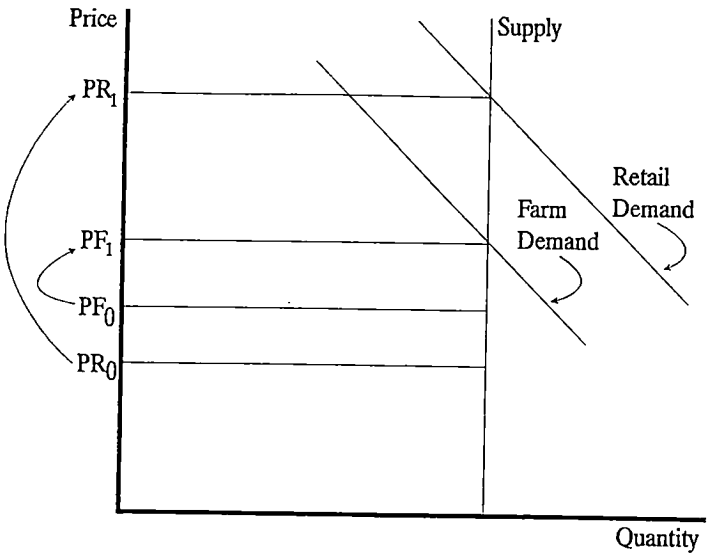


Figure 1. Price impacts of removing input and product subsidies.

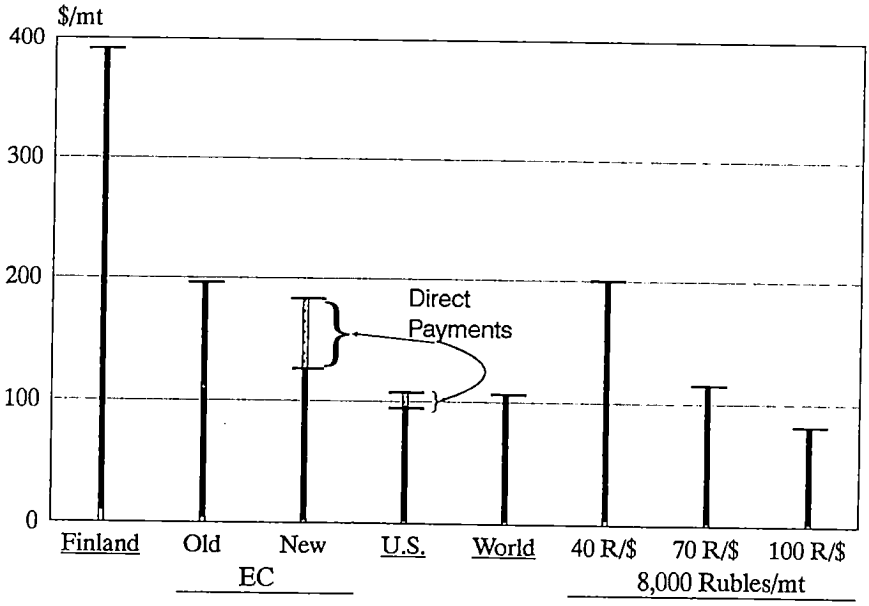


Figure 2. Comparison of Barley Price Policies.

budget costs, or both. Thus, during the last decade economic pressures and budgetary problems have led to a moderation of many of these price and income policies; and further liberalization reforms are continuing to occur in many countries.

As an illustration of differing policies, Figure 2 compares support prices for barley in Finland, EC, and US to the world market price and a Lithuanian support price of 8000 rubles/ton at different exchange rates. Three types of policy regimes are illustrated by the different approaches of Finland, EC, and US. Finland uses support prices which lead to very high food prices to consumers. The EC also has used support prices but lower than those of Finland. Because of rising surpluses, EC policies have lead to high export subsidy costs to the government as well as high food prices. In May of 1992 EC agriculture ministers approved a new policy regime which lowers support prices and compensates farmers with direct payments. The United States uses direct payments to support most crop farmers, while livestock producers and consumers face prices close to world market levels. The US and new EC policies also use land set asides to reduce surplus production.

4 Modelling Policy Options

The approach used is a short-run model of agricultural commodity markets in transition in order to provide a simple, partial equilibrium framework built on supply and use data. This model can be used to generate short-run market outlook projections and evaluate the impacts of alternative structural changes and alternative policy regimes.

4.1 Production Sector

Even if farm structure remains the same, the removal of government controls and subsidies, the adoption of new technology, changing management and incentives systems, etc. will have significant impacts on production. Given the possibility of substantial changes in the ownership and management structure, the potential changes are even greater. Thus the price effects in a typical supply equation are likely to be overwhelmed by structural and technology changes taking place during the transition period. Therefore, the supply equation needs to contain structural and technology shift variables that can be manipulated to generate alternative supply scenarios.

4.2 Intermediate Sector

Representation of the handling and processing margin and its evolution over time is important in linking the production and consumption sectors. The level of any government subsidies to processing or distribution should be included in this relationship. If a detailed model of this sector is not needed, simple linkage equations between farm and retail prices could be constructed with explicit variables for the processing margin and government subsidies. Scenarios on the time paths of these costs or subsidies could be used to trace the impacts of reducing subsidies and processing costs. Processing costs in similar sectors of existing market economies could be used as a benchmark in this analysis.

4.3 Consumption

In all of these countries household expenditure data have been routinely collected, although the quality of the data is questionable. It may be feasible to estimate demand systems with this data while also designing improved data collection methods. An alternative is to construct demand systems with subjective parameters while awaiting better quality data.

4.4 Price Determination and Policy

Alternative policy regimes will determine how prices and trade are represented in the model. As examples, four policy options are listed below along with specifications of price determination that would be appropriate:

1. If producer prices are fixed, the model is recursive and net exports or net imports are the residual.
2. If free trade is assumed, an exchange rate assumption is needed as well as the internal cost of handling commodities between the border and the farm gate. Prices are determined by the world market, and net exports or net imports are the residual.
3. With fixed tariffs, domestic prices move with world market prices of tradable goods but with a price wedge determined by the tariff rates. Prices are determined by the world market plus the wedge, and net exports or net imports are the residual.
4. If the domestic market is protected by import and export quotas, trade levels are fixed; and the model must solve for equilibrium internal prices.

5 Analytical Example

A model of the type described above was developed for Lithuania by Kazlauskiene, Devadoss and Meyers(1). More recently it was updated and revised by Kazlauskiene and Klimavichiute (2) to evaluate a scenario for 1992. The motivation for the scenario is that the difficult trade relations with the East have led to a decline in markets for meat and dairy products and the necessity to import feed ingredients from the West. Thus, except for limited grant assistance from the West, feed imports require hard currency, which is very scarce. Moreover, domestic consumption of meat and dairy products is declining; and new markets in convertible currency areas will be difficult to develop in the short run.

The assumptions of the scenario are that imported feed grains are not available, and livestock numbers and production must decline to the level that can be sustained by domestically produced feeds. Prices are assumed to increase from 1991 to 1992 at the same rate as inflation.

The results of the analysis indicate that under these conditions Lithuanian meat production and exports would decline from 1991 to 1992 by 18.3 percent and 47.3 percent, respectively. Milk production would decline by nearly 22 percent, and the export of milk and milk products would decline by 57 percent. Feed use would decline by 17 percent, and the only grain imports would be for human consumption--a decline in grain imports of over 60 percent. While this result is not a forecast of what would happen without

imported feed grains, it does provide an internally consistent outcome that would achieve the assumed policy objectives.

6 Conclusions

There are many problems and limitations to be encountered in the modelling of food and agriculture in transition economies such as Estonia, Latvia, and Lithuania. It may not be possible to model the transition process itself, but modelling the transition at various stages and evaluating alternative policy impacts does seem feasible and useful. Such simple and stylized models will provide useful tools for analysis and for learning about market behavior in these economies.

References

(1) KAZLAUSKIENE, N., S. DEVADOSS, and W. H. MEYERS. "An Adaptive Policy Simulation Model to Analyze Price Reforms for Lithuanian Food and Agricultural Products," Technical Report 91-TR-20, Center for Agricultural Development, Iowa State University, Ames. June 1991.

(2) KAZLAUSKIENE, N., and RAUINTA KLIMAVICIUTE. "Lithuanian Agriculture: Wishes and Reality," Lietuvos Aidas, "May 26, 1992.

The participants had the opportunity to learn about the past way of life in Lithuanian countryside as they visited the Ethnograpic Museum in Rumsiskes.

The participants made an excursion as far as Kaunas. Kaunas, which is the second largest town in Lithuania, was the capital of the independent Lithuania in 1918-1939.

GRAIN PRODUCTION IN FINNISH AGRICULTURAL POLICY

OSSI ALA-MANTILA

Agricultural Economics Research Institute
Helsinki, Finland

1 Overview of agricultural policy in Finland

Agricultural policy practiced in Finland has many objectives, and they have a direct effect on the economy and decisions of farmers. Through measures of agricultural policy, an attempt is being made to direct production so that it would correspond to the domestic consumption (production objective). Farmers should be guaranteed a development of income and social security that correspond to that of other population groups (income objective). An attempt is made to improve the structure of production in order to secure the preconditions for agricultural production (efficiency objective). In addition, agricultural policy includes objectives like reasonable consumer prices, pure foodstuffs, the settlement of rural areas and protecting the environment.

Agricultural policy is realized in practice by means of acts and statutes as well as decisions and directions of the government and other authorities. The most important acts concerning agricultural policy are the Farm Income Act, the Act on Rural Industries, the Act on Directing and Balancing Agricultural Production and the Act on Directing Livestock Production.

The Farm Income Act is a means of income policy. The act includes the general objectives of production policy in the form of production and export ceilings for different products. The objective of the Act on Rural Industries is to improve the structure and preconditions of agriculture and forestry as well as to promote and diversify industrial activity in the countryside. On the basis of this act it is possible e.g. to finance agriculture and forestry and rural small-scale industries. The Act on Directing and Balancing Agricultural Production provides the framework for the government to make annual decisions on various measures to restrict production.

There has been and still is in use numerous different kinds of programs and measures to control and direct agricultural production in Finland (Table). From these measures the licenses for the establishment of livestock production, dual price systems for milk and eggs as well as the land clearing charge are mandatory state measures to restrict and direct agricultural production. By means of legislation, in practice fallowing was also made mandatory in 1991.

2 Grain production and the profitability of production

Since the 1950s grain production has increased very strongly in Finland (Figure 1). The reason for this is the structural development in agriculture, which has led to specialization:

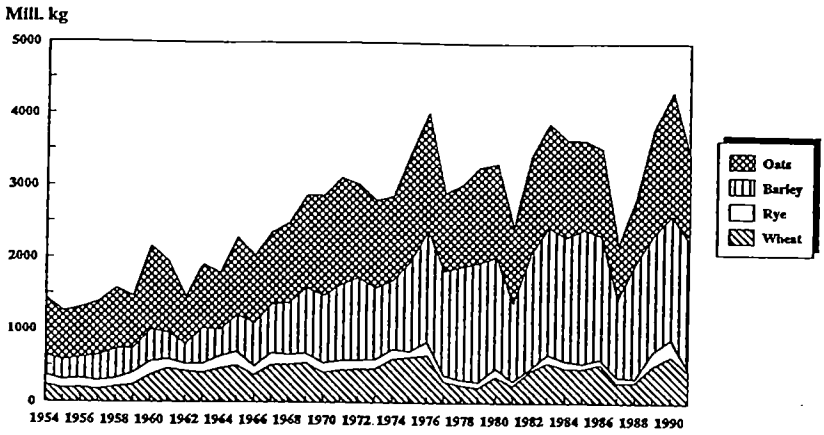


Figure 1. Grain production in Finland in 1954-1991.

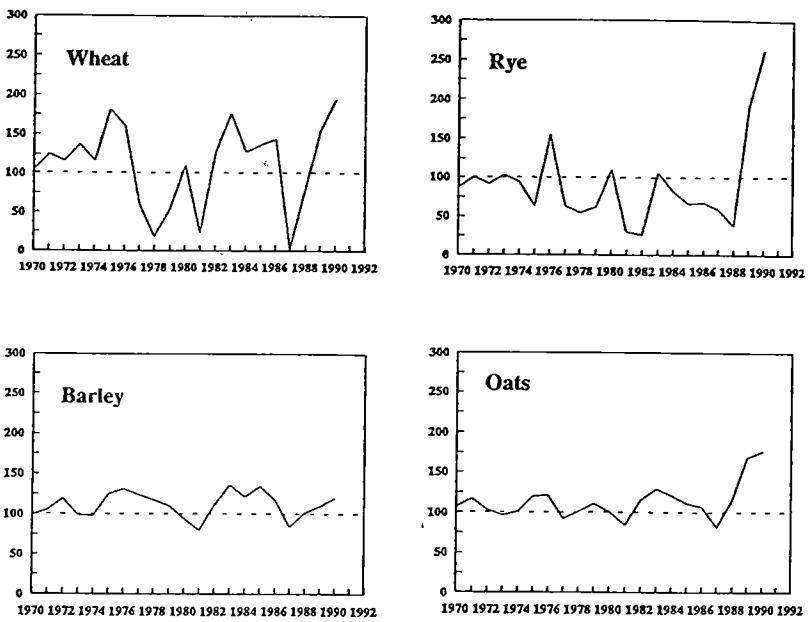


Figure 2. Self-sufficiency in wheat, rye, barley and oats in 1970-1990, %. (Sources: Kettunen, L. 1985 and Food Balance Sheets 1984-1990).

after giving up livestock production many farms have continued with crop production. The specialization has also led to a situation in which a larger and larger share of the grain crop has been sold outside the farm.

Since the 1970s, in particular, grain production has been characterized by great annual variations. Consequently, in some years there has been oversupply in either all grains or a certain kind of grain. On the other hand, in some years it has been necessary to import large quantities of grain. These annual variations are reflected in the self-sufficiency degrees (Figure 2).

The profitability of grain production at the farm level can be examined by means of results from the bookkeeping farms. The profitability of dairy, pig and grain farms in different farm size classes in Southern Finland in 1970-1990 has been compared in Figure 3. The ratio used in the comparison, the profitability coefficient, indicates the realization of the wage demand and interest demand on the capital invested in agriculture set for the farm family. If the profitability coefficient is 1.00, the target income has been reached. The figure indicates clearly how the annual variations in the economic results are a lot

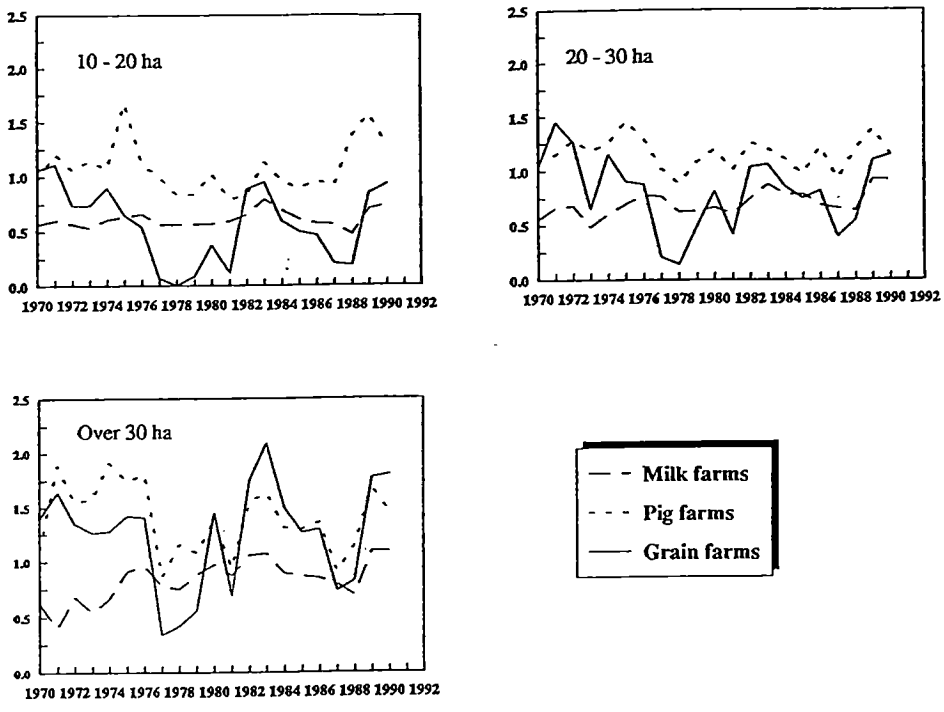


Figure 3. Profitability coefficients for grain, milk and pig farms in different farm size groups in southern Finland in 1970 - 1990.

greater on grain farms than on dairy or pig farms. Even in the conditions in Southern Finland, the economy of farms specialized in grain production clearly involves more risks than that of livestock farms.

In this connection it should be emphasized that examining the profitability of agriculture alone does not necessarily tell the whole truth of the incomes of the farm family and the livelihood of the farm. Especially on small grain farms incomes from other sources than agriculture and forestry play a central role in the livelihood of the family. For example, at the end of the 1980s on the bookkeeping farms specialized in grain production in Southern Finland the share of the net money income from agriculture of the total net money income of the farm was the average of 14% on farms with 10-20 ha, 36% on farms with 20-30 ha, 55% on farms with 30-50 ha and close to 60% on farms with over 50 ha. Almost 60% of farmers of grain farms with less than 20 ha are part-time farmers. A little over 65% of grain farms have less than 20 ha.

3 Measures of agricultural policy directed to grain production

When examining the measures of agricultural policy that aim at affecting grain production, it must be kept in mind that the most important factor determining the balance of grain production in Finland is the weather conditions. Variations in the crop caused by the weather conditions can either contribute to the measures and objectives of agricultural policy or make them more or less ineffective.

Partly as a result of the agricultural policy practiced in the 1960s, there was overproduction in bread grain at the beginning of 1970. In this situation a marketing charge was determined for wheat, and this was in force in 1971-1975 and 1977-1978. At the same time, the target prices for grain decreased in real terms. However, reducing overproduction proved very difficult because the increase in the average yields of grain partly eliminated the effects of the price policy. As record yields were reached in 1975 and 1976, the situation became critical and grain surpluses started to pile up. As a result, the increases in the prices of grain continued to remain small, and a marketing charge was determined already in 1976 for the wheat crop of the following year.

In 1977 the situation changed completely. As a result of the price policy, the profitability of bread grain had weakened considerably during the whole 1970s. When the marketing charges were added to this, grain producers reacted as expected and the area under wheat decreased by almost a half. As the weather was unfavorable in 1977 and 1978, the self-sufficiency level of wheat dropped from 160% to 20% in a couple of years. At this stage, measures were taken in agricultural policy to improve the profitability of bread grain production in the form of production premiums and by correcting the price relations of the target price products in favor of bread grains.

High grain yields were reached again in 1989 and 1990. In addition to the increase in the total grain surpluses, the increase in bread grain production caused problems. In these years the domestic consumption was exceeded proportionally the most in rye production: when the crop of 1990 had been harvested, the rye stocks in Finland corresponded to about four years' consumption. In this situation, export cost charges were introduced for grains, as grains received more and more emphasis in the marketing responsibility of agriculture.

Earlier grain producers participated in the export costs only through the tax on fertilizers. And this tax on fertilizers has in fact affected more livestock farms than grain farms because in the cultivation of grass it is used relatively heavy fertilization.

In the act concerning the export cost charge for grain, FIM 0.20/kg was set as the charge for wheat and rye and FIM 0.10/kg as the charge for oats and barley from August 1990.[1)] In 1991 the export cost charge for rye was raised to FIM 0.80/kg, that for wheat to FIM 0.50/kg and for feed grains FIM 0.30/kg. In addition to the attempt to increase the share of grain producers in financing the export support of agricultural products, the raises also aim at affecting the areas under rye and wheat. The measures were successful: in 1991 the area under wheat was 38% and the area under rye 88% smaller than in the previous year.

As a detail, it can be noted that in 1991 the decision on the raises in the export cost charges of feed grains were made after the sowing had already been completed. In this connection, a FIM 0.20 decrease in the target prices of bread grains was also agreed on. These decisions naturally led to a decrease in the profitability of production and caused a lot of discontent among grain farmers.

4 Prospects for the future in grain production in Finland

The factors that have the greatest effect on grain production as well as agriculture as a whole in Finland in the future are the settlements in the GATT negotiations on trade and tariffs and Finland's participation in the European integration. Instead the agreement of the economic area between the EC and EFTA has no direct effects on agriculture because, according to the EEA agreement, the parties have the right to practice independent agricultural policies. This EEA agreement was signed at the beginning of May.

The government of Finland made a decision at the end of February that Finland applies the membership of EC. This decision was accepted by the Parliament in March. Membership in the European community would have a great impact on agriculture in Finland. In practice, the possibilities for an own national agricultural policy would be a lot weaker because the member countries have a common agricultural policy, in which e.g. the prices of products and support of agriculture are determined in a uniform way for the whole community. According to studies, the problems would be the greatest in grain production. The reason for this is, simply, the yield level in Finland, which is considerably lower than in many EC countries. The costs of producing a kilo of grain are much higher in Finland than in Central Europe. If grain production were possible, grain prices should be a lot lower than they are at present. In Finland the producer price level is, in general, about twice as much as in the community. In grain prices the difference is even greater. Consequently, grain production has been forecast to decrease considerably if Finland joins the EC.

[1)] Target prices of grain:

Rye:	3,10	FIM/kg,	from 1.9.1991	2,90 FIM/kg
Wheat:	2,51	-"-	from 1.9.1991	2,31 -"-
Feed barley:	1,80	-"-	from 1.3.1991	1,82 -" -
Feed oats:	1,75	-"-	from 1.3.1991	1,72 -"-

Table. Measures applied to regulate and balance agricultural production in Finland.

MEASURE	APPLIED IN
Soil Bank	1969-1974
Afforestation premiums	1969-
Slaughter premiums for dairy cows	1970,1980
Marketing fees:	
milk	1971-1987
wheat	1971-1978, 1990-
rye	1990-
barley	1990-
oats	1990-
rape for oilseed	1991-
starch potato	1991-
pork	1975-
Additional marketing fees for large enterprises in pork and egg production	1972-
Pension systems for farmers giving up	1975-
Establishment permits:	
pigs	1975-
poultry	1975-
dairy	1978-1984
beef cattle	1978-
Slaughter premiums for hens	1976
Fallowing contracts	1977-1980,1986-
Contracts to change the production line	1977-1982
Restrictions on hatching	1977-
Licence system for poultry breeding animals	1977-
Production premiums for bread grain:	
wheat	1979, 1982
rye	1979, 1982-1983
Production contracts for beef	1980-1983, 1985, 1987
Contracts to reduce milk production	1981-1984, 1988, 1990-
Contracts to reduce egg production	1981-1984, 1987, 1989-1990
Contracts to reduce pork production	1983
Contracts to reduce agricultural production	1983-1984, 1986-
Contracts to reduce animal production	1984
Production quota system for milk	1985-
Production quota sytem for eggs	1986-
Land clearing charge	1987-
Production interval in egg production	1991-

TAXATION SYSTEM IN FINNISH AGRICULTURE

JUHANI IKONEN

Agricultural Economics Research Institute
Helsinki, Finland

1 General

Until 1968 the taxation of agriculture was based on an average pure return calculated per hectare of arable land. The government confirmed the returns used as the basis in taxation annually for each municipality. This system was based on the assumption that all farms within the municipality had the same yield per hectare, but the production capacity of agricultural land was also taken into account in the taxation classification of arable land. Cultivation practices of individual farms could be taken into consideration in taxation only if they differed considerably from the level prevailing in the region. Deviations were also possible in the case of crop failures, if the damages on an individual farm were a lot more severe than on the other farms within the municipality. In other respects, the differences between individual farms were not taken into account. As a result, the taxation of efficient farms was proportionally lighter than in the case of less profitable farms with weaker tax-paying ability. This became obvious, in particular, when agricultural production started to specialize very strongly. This resulted in abolishing the taxation of agriculture based on the area, and in the development and introduction of a new taxation system. The taxation of forestry is still based on the area, but recently there has been discussion on whether taxation of forestry should be based on the income from sales.

2 Pure income from agriculture

According to the tax acts, agriculture was made accountable from the beginning of 1968. The primary function of the tax bookkeeping is to find out the taxable income from agriculture during the taxation year, the expenditure from acquiring and keeping it, as well as to indicate the pure income from agriculture as the difference between the incomes and the corresponding expenditure. Another function of the bookkeeping is to distinguish the business activity of agriculture from forestry and other entrepreneurial activity of the farm family, as well as from the private household.

In tax bookkeeping the farmer has to keep accounts of the income and expenditure of agriculture which indicate his taxable income from agriculture and the corresponding expenditure. Each income and expenditure item must be based on receipts. Entering the incomes and expenditure in the books is cash-based. This means that the item of income is included in the incomes of the year when it is received and, correspondingly, expenditure items are included in the expenditure of the year when they are paid. This is an expedient method from the viewpoint of the entrepreneur, because it makes it possible for him to

balance the annual variation in taxable income as well as the taxes to be paid by timing the incomes and expenditure.

When the deductible expenses, according to tax acts, are deducted from the taxable income, the difference indicates the pure income or loss of agriculture. If necessary, the farmer may deduct a so-called balance reservation from the pure income, by means of which it is also possible to balance the annual variation in taxation. The result is an item of income which is included in the taxable income of the whole farm enterprise in taxation.For the most part, the income from agriculture and forestry is money income. The intermediate products of agriculture are not included in taxable income. For example, the animal feed produced on the farm does not as such increase the taxable income, if it is not sold. It is included in the taxable income only as sales income from livestock products.

The deductible expenditure of agriculture includes the money expenditure of agriculture as well as the depreciations of machinery and implements, agricultural buildings and subsurface drainage. The value of timber from own forest for the needs of agriculture as well as the so-called partly deductible expenses are also included in expenditure. The latter include e.g. the share of agriculture in the costs of a private vehicle and telephone, if they have been used in agriculture. The depreciations of taxation are determined from the remaining undepreciated acquisition cost of the property shares according to depreciation percentages stipulated in the tax acts (see the Tables). The tax acts give the possibility to balance the taxable income also through regulating the depreciations within the limits of the depreciation percentages. The balancing of the result of agriculture in taxation is highly significant because, as a result of the weather conditions, there are great annual variations in the production conditions of agriculture, which naturally causes considerable variation in the business result of agriculture.

3 Pure income from forestry

As was noted earlier, the taxation of forestry is still based on the forest area. The forest land of each farm has been classified into four taxation classes according to the productivity of the land. For the purposes of taxation, the average returns used as the basis are confirmed annually, the central factors being the taxation class of the forest, the additional growth of the forest in each class in tax cubic meters (m^3/ha) a year, and the composition and price of a tax cubic meter. The government confirms annually the price of the tax cubic meter for each municipality. The pure return from forest land is calculated according to the method described above, and after certain deductions made in the case of individual farms we arrive at the pure income from forestry.

4 Pure income from agriculture and forestry

The pure income from forestry is added to the pure income from agriculture, the interests on the debts of agriculture and forestry are deducted, and the result indicates the pure income from agriculture and forestry. This includes both earned income and capital income. If the farmer and spouse practice agriculture and forestry together, the share of

the pure income from agriculture that is considered earned income can be divided between the spouses to be taxed as their personal income. A precondition for the division of the earned income is that the spouse has taken an active part in the work of agriculture and forestry. In the taxation of 1991 the maximum of FIM 230,000 of the pure income from agriculture and forestry can be considered earned income and divided between the spouses, and the part exceeding this is included in capital income.

In taxation the shares of the spouses are considered private income and taxed separately. Capital income as a whole is considered taxable income of the entrepreneur, and it cannot be divided between the spouses according to the ownership. However, this is subject to the condition that the farm is in the joint ownership of the spouses. Similarly, the pure income of the farm as a whole is considered taxable income of the entrepreneur if the conditions for dividing the earned income between the spouses do not exist.

5 The state income and property tax, municipal tax, church tax and other fees collected in connection with taxation

The tax scales of 1991, according to which the income tax and property tax paid to the state are determined, are presented in the table. The tax scales are progressive, which means that the balancing of the annual variation in the taxable income and the division of the earned income of agriculture and forestry between the spouses is advantageous from the viewpoint of the taxpayer

The livestock raised for agricultural production, stocks produced on the farm as well as seeds, fertilizers, feed and other implements acquired for agricultural production are free from property tax.

In addition to the state taxes, farms also pay taxes to the municipality. The tax is determined from the taxable income according to a percentage determined separately for each municipality. There is considerable variation in the tax percentages between the municipalities. Certain other charges are collected in connection with the municipal tax, e.g. church tax and pension and sicknessinsurance fees included in the social security system.

Tables. State income tax scales in 1991.

Taxable income Fmk	Tax Fmk on the lower limit	Tax % of the income over the lower limit
40 000 - 56 000	50	7
56 000 - 70 000	1 700	17
70 000 - 98 000	3 550	21
154 000 - 275 000	24 550	33
275 000 -	64 480	39

State property tax scales in 1991

Taxable property Fmk	Tax Fmk on the lower limit	Tax % of the property over the lower limit
1 100 000	500	0.9

Depreciation percentages in the taxation of agriculture and an example of calculating the depreciations.

Capital type	Depreciation % of the expenditure balance
Machinery and implements	0-25
Production buildings	0-10
Greenhouses etc.	0-20
Drainage (from 1982-)	0-20
Drainage (-1982)	0-10
Dwelling houses	0 - 6
Example:	
Value of machinery and implements on Jan. 1st	250 000
+ Renewing	40 000
- Sold	15 000
Expenditure balance	275 000
- Depreciation (25 %)	68 750
Value on Dec. 31st	206 250

LATEST REFORMS IN PROCUREMENT PRICES AND TAXES IN LITHUANIAN AGRICULTURE

I. KRISCIUKAITIENE, G. KULIESIS AND A. STADNIKOVA

Lithuanian Research Institute of Agricultural Economics
Vilnius, Lithuania

Pricing and taxation system is a crucial component of the agrarian policy framework. Until October, 1990 the state procurement prices system had been based on price differentiation through bonus premium for animal husbandry production and through zonal pricing for farm groups situated in different natural - economic conditions. The basic criterion for zoning was the quality of soil measured by land quality points. Under this system in 1989 the differentiated price bonuses in the first and seventh price groups ranged from 2% to 20% for milk, from 30% to 75% for cattle, from 4% to 60% for pigs as compared with respective list prices.

The system was aimed at levelling farming conditions for all economic units irrespective of different natural and climatic conditions. At that time the system proved positive in redistributing income within the regions and agricultural enterprises and in ensuring satisfactory social development in the regions with poor farming conditions.

The system had its limitations, though. To begin with, it allowed "speculation", i.e selling agricultural products to farms in the higher price group. Secondly, it was too complicated and difficult to manage and control in the liberalized economic situation.

Thus, the main objective of the new system was to set uniform procurement prices for all agricultural products of the same quality throughout the Republic of Lithuania. Besides, the system had to stimulate agricultural production on relatively poor soil. The average production costs of 20% of enterprises on such land was taken as the basis and the level of procurement prices was meant to guarantee these farms possibilities for at least simple reproduction during the transition period.

Finally, the balance of agricultuaral procurement prices settled long ago had to be maintained seeking to preserve the traditional structure of production in the Republic before turning over to relatively free prices. To protect Lithuanian consumers, prices were adjusted in view of those in neighbouring countries.

Besides, prices were periodically revised in accordance with the increase (9-11% per month) of material inputs prices in order to maintain parity of agricultural procurement prices. Consequently, in 1991 the procurement price for milk was revised 4 times and ranged from 369 to 1045 roubles per ton, for beef 4 times within the range from 3110 to 9793 roubles per ton, for pork 5 times, from 2777 to 12027 roubles per ton.

Recent introduction of a new procurement prices system has changed the situation essentially. By the begining of 1991 procurement prices for the farms in the first price group increased by 83% for cattle, 70% for pigs, 55% for milk as compared to 1989 prices. Meanwhile, the increase in the seventh price group made only 38%, 9.5% and 4.3% respectively.

Since the increase in production costs was almost the same in all category farm groups, farms on better soil began to receive additional differential income with the introduction of uniform procurement prices. Under the system of differentiated prices the income of agricultural enterprises had been distributed utside the state budget. Thus, the introduction of uniform procurement prices brought about a need for a new taxation system.

It was assumed initially that the taxation system should be based on two taxes, i.e. profits tax and capital tax, the latter including land tax. So, the taxation system had to resemble that in market economy countries. Unfortunately, the implementation of such a system in Lithuania is burdened by the lack of basic elements of market economy, such as labour market, land and capital markets which form the real value of basic factors of production.

In unstable transitional economy the profits of agricultural enterprises are hardly predictable and, therefore, can't make a permanent source of state budget. In 1991 the Parliament of the Republic of Lithuania adopted the 5% profits tax for agricultural enterprises, which didn't influence agricultural production and served for enlarging state budget only.

Since the true price for capital is lacking and enterprises are insolvent the tax on capital wasn't introduced though the 7% tax on capital acquired on state means had been adopted by the Government decree.

At present land remains the basic object of taxation since its quality and quantity are the most stable indicators currently and the absent market price for land can be successfully substituted by another indicator of its value, quality of land, expressed in land quality points. In 1991, therefore, the land tax was the basic tax in agriculture. It ranged from 30 roubles per hectar of the lowest quality land to 185 roubles per hectar of the highest one and made respectively 2% and 6.5% of enterprises total income. In 1991 this tax made 250 mill roubles, i.e. 17% of all taxes paid by agricultural enterprises.

By the middle of the second quarter, 1991 the economic situation in Lithuania became critical. Uniform procurement prices and land tax deepened the differentiation of farms on good and poor soils. To level the farming conditions and stabilize the rural situation agricultural procurement prices were increased and a new tax introduced. The superprofits tax was to be paid by enterprises, situated on land with the bonitet not lower than 36 points. In 1991 119 mill roubles were withdrawn through this tax. In 1992 the tax was cancelled.

In 1991 the total sum of taxes (including social insurance taxes) paid by agricultural enterprises made 1050 mill roubles, i.e. 23% of gross income.

To stimulate development of market relations in agriculture and protect home market a new system of setting agricultural procurement prices was introduced. Contractual prices on one hand and state support prices for basic agricultural products on the other made the basis of this system. As a matter of fact, these prices are being set at the level ensuring 60-70% of agricultural producer's demand and become valid only if market and contractual prices fall behind the support prices. Recently a provision has been made that subsidies are paid only in cases production is sold within the system of state procurement. As yet, this system doesn't include milk which has a fixed price.

In accordance with the rapidly changing situation a monthly indexation of support prices has been foreseen. It depends on the index for material inputs and services but should not be lower than 1.2.

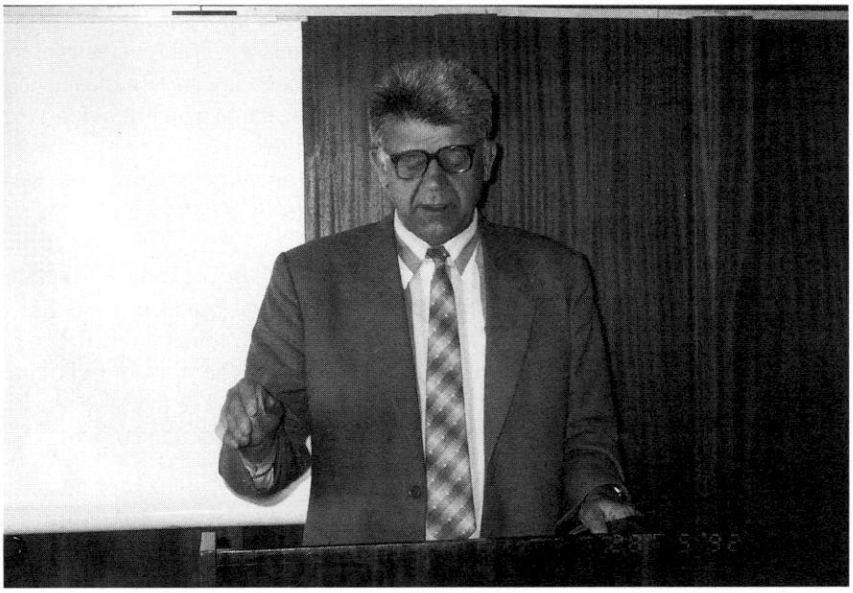
In practice procurement prices of the first decides of 1992 exceeded set support prices by 2 times for beef and 2.5 times for pork.

To limit the increase of retail prices for foodstuffs the following rules of their formation have been set: the raw material costs and fixed costs of processing are summed up and the wholesale price calculated this way is increased by a trade charge which shouldn't exceed 10% of the wholesale price.

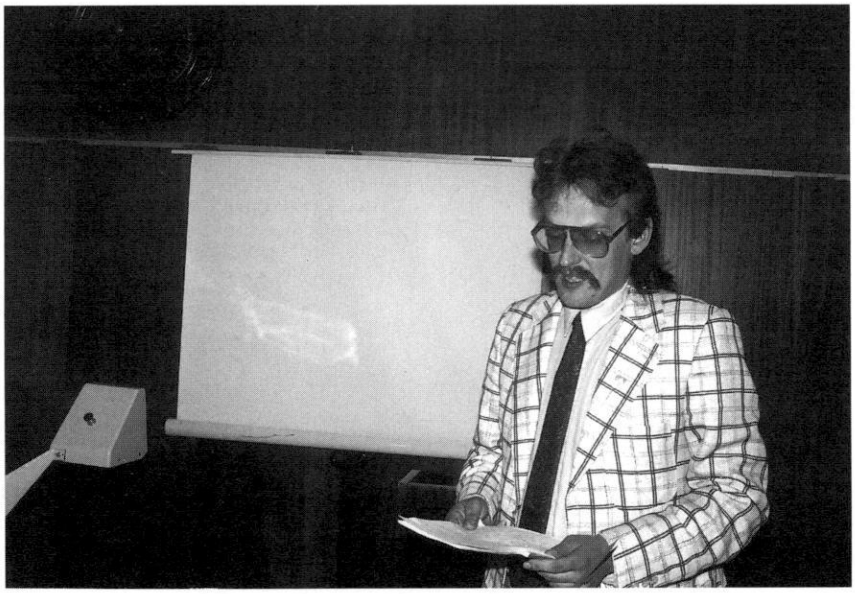
Preliminary estimations show that under the current increase of prices for material inputs and services it is necessary to increase sales returns by 8 billion roubles to ensure at least 20% profitability in agriculture.

Since consumers purchasing ability has been falling retail prices should be stabilized. For this an economic package on stabilization of agricultural producer costs has been worked out. The package includes 30% subsidies for acquiring mineral fertilizers, diesel fuel, electricity, combined feed, compensations for preserving the stock of milking cows and brook-sows till the end of the year, paid to producers on worse than average land.

These measures may ensure the reduction of agricultural production costs by 4 billion roubles.



Prof. Antanas Poviliunas (Lithuanian Institute of Agrarian Economics) dealt with Lithuanian agriculture under the influence of east and west european markets.



M.Sc. Robert Zile from the Latvian State Institute of Agrarian Economics told about the basic principles of agrarian reform in the republic of Latvia.

TAXATION OF AGRICULTURAL ENTERPRISES IN ESTONIA IN 1991

ENNO KOIK

Scientific Research Institute of Agriculture and Land-Reclamation
Saku, Estonia

In 1991 the number of taxes imposed in Estonia was quite big: there were 12 different taxes. In 1992 health insurance tax was established and there are plans to impose capital levy as well. The average tax burden of the Estonian economy was planned to constitute 38% of the gross domestic product (GDP). But due to high inflation the rates of several taxes were changed during 1991. Whenever possible, the tax rates are now bound with wages, producer prices or gross profits. The majority of tax rates are similar to all branches of national economy. Family farms are exempt from taxes for 5 years. It is a great government support to farmers who are just establishing their farms.

By Dec. 31, 1991 there were 7163 family farms in Estonia and they had 2.5% of the arable land at their disposal. Thus, large-scale farms, i.e. collective and state farms, agricultural firms and production co-operatives were still dominating in agriculture. They had 95% of the arable land at their disposal. The figures given below characterize the situation on those large-scale farms.

In 1991 the large-scale farms paid totally 394 million roubles for taxes into state and local budgets, i.e. 25% of the gross income (Table 1). Together with personal income tax the sum amounted to ca 530 million roubles, i.e. 33% of the gross income in agriculture. Thus the taxation in agriculture was somewhat lower than the average tax burden of the republic.

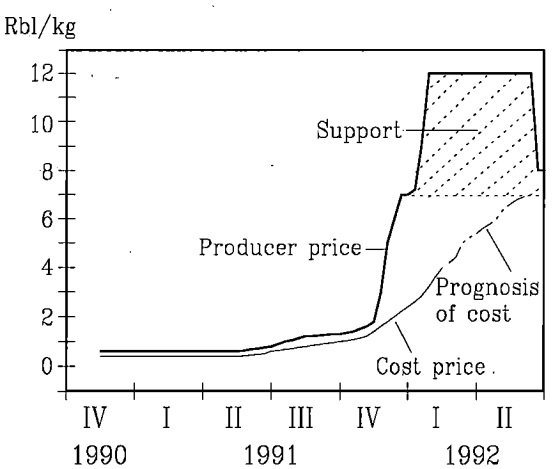


Figure 1. Cost and producer price of milk in the large-scale farms in Estonia.

Table 1. The total turnover, gross income and taxes of large-scale farms in Estonia in 1991.

	Million roubles
1. Total turnover (production in current prices)	2985,8
1.1. Turnover tax	90,0
1.2. Excise tax	25,3
2. Costs	2293,2
2.1. Materials and commodities	1068,1
2.2. Fuels and electric energy	203,2
2.3. Transport	23,7
2.4. Other material costs and services	93,2
2.5. Wages	657,7
2.6. Depreciation	187,8
2.7. Social security tax	132,3
2.8. Land tax	27,0
2.9. Charges on natural resources	2,1
2.10. Pollution tax	6,2
2.11. Other taxes	0,4
2.12. Other costs	7,1
2.13. Decrease in stores	121,1
3. Gross profit (3=1- (1.1+1.2+2))	576,3
4. Gross profit taxable with income tax	605,8
5. Enterprises income tax	111,0
6. Other costs (losses of social share etc.)	98,0
7. Net profit	396,8
8. Farm's gross income (8=1- (2.1 to 2.4))	1591,7
9. All taxes paid by farms (9 = 1.1 + 1.2 + (2.7 to 2.11) + 5)	394,2
10. Personal income tax from wages	~ 136

The rates of taxes paid by large-scale farms were as following: Social security tax is 20% from wages paid to workers. Enterprises' income tax is, depending on the profit in million roubles, 15-30% of the gross profit.

Turnover tax is 10% of the value generated in agriculture. In some months of 1991 agricultural produce was exempt from turnover tax. Land tax is very much differentiated by the site of farm and soil fertility. Large-scale farms paid 5 roubles per ha of the total area. In addition the arable land was taxed separately, the rate varied between 2 and 32 roubles/ha, depending on the fertility. The arable land of very low fertility (on assessment scale below 32 points) was tax-exempt. The lie of lands in relation to towns was also considered. The average tax rate was thus 27 roubles per 1 ha of arable land.

Excise tax was paid by wine, beer end fur producers, a fixed percentage of their selling price.

Pollution tax was paid in case of polluting water, air or soil. In addition to the above-mentioned taxes producers had to pay small charges on natural resources (water, peat, sand, etc.), state administrative fee, customs levy, conveyance tax.

All those taxes were paid by large-scale farms. In addition, workers on farm's payroll had to pay personal income tax. In 1991 100 roubles out of the monthly salary were tax-exempt, the rest was taxed at the rate of 16-33%. In 1992 a monthly income of 1000 roubles is tax-exempt. 394 million roubles paid by large-scale farms was distributed between different taxes as following:

- social security tax 33.6%
- enterprises' income tax 28.2%
- turnover tax 22.8%
- land tax 6.8%
- excise tax 6.4%
- pollution tax 1.6%
- charges on natural resources 0.5%
- other taxes 0.1%

According to the data from 23 large-scale farms taxes increased the production costs of cereals by 5.2%, of potato by 2.7%, of milk by 4.5% and of pigs and cattles (live weight) by 2.4%. In comparison with 1990, the average cost prices of different products increased 2.2 - 2.9 times. Thus, the main reason for the increase in cost prices was not the establishing of new taxes, but the abrupt increase in the price of production resources (fuels, fertilizers, machines, etc.) caused by inflation.

The soil fertility in Estonia varies considerably in different counties. The fertility is lowest in Hiiumaa, 33 points, and highest in Järvamaa, 47 points. The more fertile soils the higher yields per ha. Therefore before 1991, while there was neither land tax nor enterprises' income tax, more fertile soils yielded a considerably higher net profit. It was expected that the introduction of new taxes in 1991 would level the profitableness of different soils. Table 2 shows the gross income and net profit (roubles/ha) of large-scale farms in 13 counties (2 counties are missing). The results of the whole production activity of farms (agriculture, forestry, industrial production) are given. In spite of the low soil fertility the gross income per ha in Hiiumaa and Saaremaa was high, because the industrial output on these farms is more advanced than in other counties. But the grouping of counties according to the soil fertility indicates that the net profit (roubles/ha) of farms located on fertile soils was still 35 - 66% higher than that of farms situating on soils with low fertility. Consequently, even the tax system of 1991 did not entirelly level the difference in profitableness caused by natural conditions.

Another question is how much of the additional gross income, which is gained thanks to better natural conditions, should be redivided with the help of taxes. Some scientists consider 30 - 50% to be sufficient, others suggest 70 - 90%. But as on more fertile lands more capital has been invested per ha (land itself is more expensive), also the net profit (roubles/ha) should be higher. And production extention should be stimulated particularly on more fertile soils, where costs per production unit are lower. Therefore the total additional income must not be taken away with taxes.

To the society land is a special, limited production resource. Up to now Estonia has not managed to produce enough cereals, rape, sugar, beet, flax, vegetables. Therefore a more intensive use of land should be stimulated by all means. One possible way of

Table 2. Taxes and net profit in roubles per ha of arable land in Estonian agriculture in 1991

County	Soil fertility, points	Gross income	Taxes total	Taxes among this land tax	Net profit
1. Hiiumaa	33	1353	454	17	121
2. Saare	36	1101	293	20	445
3. Voru	37	517	230	20	20
4. Lääne	37	952	270	17	412
5. Pärnu	38	1169	270	17	412
6. Polva	39	1376	295	17	315
I West and South Estonia	37	1078	302	18	288
7. Harju	39	1271	359	19	269
8. Rapla	41	1600	479	30	389
9. Lääne-Viru	45	2186	549	31	506
II North Estonia	42	1686	462	27	388
10. Viljandi	43	1712	372	27	516
11. Tartu	44	1486	320	29	300
12. Jogeva	46	1552	369	35	444
13. Järva	47	1937	414	34	650
III Central Estonia	45	1672	369	31	478
The average of Estonia	42	1540	397	27	384

stimulation is the land tax on arable land. Land tax together with enterprises' income tax also helps to redivide the additional income resulting from better natural conditions. The rates of land tax (roubles/ha) were worked out in 1990 and land tax was temporarily imposed in 1991. This year a new land tax has not been established yet. In the beginning of 1991 the production costs in agriculture were still low and the land tax constituted 0.7 - 0.8% of the cost price of cereals and 0.3 - 0.4% of the cost price of milk. Towards the end of year the production costs abruptly increased due to high inflation (figure 1), but the land tax remained on the same level and the proportion of land tax to production costs fell below 0.1%. The stimulative effect of land tax on the intensification of production practically stopped. It indicates that in case of high inflation it is necessary to bind the rate of land tax also with land price and producer prices.

Up to now land cannot be sold freely. On the basis of land reform the majority of descendants of the former owners will claim their lands to be returned to them. But a great number of those descendants live now in urban settlements and they will not cultivate the land themselves. There is a risk that in the near future a part of the present fields will remain uncultivated. Therefore the land tax should be relatively high in order to stimulate

production. In case of a high land tax the gross profit will diminish and the price of land fall. That motivates the land owners who reside in towns to sell their land to rural inhabitants. Many scientists therefore suggest that the rate of land tax should constitute 2 - 4% of the land price, if necessary the tax on other capital and profit should be reduced.

At the present moment land is not freely sold, land lacks price. According to the valid law the price of land could be determined only by the Estonian Government. In the drafts presented to the government it has been suggested to set an average land price equal to the producer price of the rye yield of 5 - 7 years. It is one possibility of how to bind land tax with the constantly growing producer price.

But when the rate of land tax is being fixed, many other factors should also be taken into consideration. The land tax is an important income for local authorities, thus their needs should also be taken into account. And of course the rates of other taxes (enterprises' income tax, capital levy, etc.) should be considered, as well as the gross income and net profit of the whole agricultural production.

In conclution it can be said that the tax burden of 1991 was not higher in agriculture than in other branches of economy. But the tax burden of 33% of gross income was still higher than in Finland, Latvia and Lithuania.

GOVERNMENT ORDER AS AN ECONOMIC REGULATOR IN TRANSITION PERIOD

L. KALINAUSKIENE AND O. ANAPOLSKIS

Lithuanian Research Institute of Agricultural Economics
Vilnius, Lithuania

Government order has been introduced in Lithuanian agriculture since 1989 after new agrarian policy was declared. As a matter of fact, though obligatory for agricultural producers and bearing legal force it differed from state procurement only in title.

The situation continued till the economic reform in the Republic was begun. It takes quite a period of time to establish market economy and its legal framework and change production relations. Currently Lithuanian agriculture is undergoing transition to a market economy.

At present stage both home and foreign economic strategies influence the agrarian economy. In order to accumulate centralized stocks of agricultural products, provide special state institutions with food, the state has to purchase a certain amount of agricultural products. Besides, since the state has commited itself to control the scope of trade and ensure the execution of interstate trade obligations with the states of the former Soviet Union it has to distribute trade quotas among agricultural producers.

Thus, the government order for agricultural production should be retained, though its binding character, the form and the volume should be changed. The fact that this order will be distributed on competitive basis and bilateral agreements will be made might quarantee that the only function of it will be purchasing necessary amounts of agricultural production.

The role of the state could be hardly overestimated in the transition to a market economy period. The state as a large - scale purchaser with stable guarantees can be competitive in market economy. The methods of optimal distribution of government order, analysed in this paper, is one if the factors increasing the efficiency of measures, pursued by the government within the agricultural policy.

It should be noted, however, that the term efficiency in this paper is used in the context of the transition period and is, therefore, of an ambivalent character. On the one hand, it has to do with the legacy of the so-called "labor distribution" in the planned soviet economy, expressing itself in the fact that Lithuanian agriculture was made a large livestock farm. On the other hand, with the future imbalanced demand/supply situation resulting from the absence of market relations.

Thus, the role of government order lies not only in stimulating and supporting agricultural production but also in conducting structural changes and levelling the imbalanced demand/supply situation for staple agricultural products in transition.

As follows, both the economic efficiency and peculiarities of the transition period underly the methods developed by us. It is based on the optimization method and peculiarities of agricultural production.

The main advantage of any optimization method is possibility to achieve best results. It corresponds to the main principles of efficient economy, i.e. maximum results with minimum costs. Since the principal structure and volume of production to be purchased has been set, the main aim of the government order distribution methods is to minimize cost of production.

The government order distribution method is based on simplex method of linear programming as the best algorithm including many versions for computer calculations, which makes the practical implementation of the method easier.

Besides, any economic mathematic method needs initial data reflecting economic essence of the real process. The initial data for computing optimal distribution of government order might be divided provisionally into three groups:

1. production inputs, such as agricultural land, labor resources, livestock numbers, etc.
2. indices of technological processes, i.e. production capacity, production costs, productivity, etc.
3. established technological relations between crop and livestock production, such as feed consumption.

Another advantage of the simplex algorithm is possibility to estimate different values in their natural expressions. It ensures balancing of estimations from the point of view of volume variety and enables the researcher to avoid mistakes while calculating different production into standard units.

The limitation of land acreage as the main factor of production makes agriculture a specific branch of economy. In transition, with the increase of disproportions in agricultural production structure and high variability of particular products profitability a danger of ceasing agricultural production on poor soils or in other non perpective areas occurs. Taking into account the role of the state in averting the negative concequences of variations resulting from market imbalance the assertion of land use enabling the government to include low profitability production into government order has been included into the model. Consequently, the abrupt fall in agricultural production in unfavourable agricultural areas is restrained and a possibility of agricultural restructuring is brought into being.

Thus, the above method quarantees minimal costs for the purchaser (state) in the course of implementation of agricultural policy. It is especially important during the transition period when a market economy is being introduced.

It should be mentioned that for the above mentioned methods the factual figures of agricultural production covering last three year period should be used. On the one hand, this enables us to approximate the model to reality (make it not too abstract) and on the other hand, to lower the influence of incidental factors, such as weather conditions, market situation, etc.

The computer estimations help us to foresee different variants of government order distribution. In order to ensure the goal oriented decision making by experts, the output is made easy for analysis. Though any model gives a somewhat idealized picture of reality, this method seems to us effective when used by experts for working out the substantiation of a clever agricultural policy. It enables the state to maintain the definite level of profitable agricultural production at minimal costs.

In transition, when the market of means of production is not functioning properly, money isn't performing its function as a real equivalent of commodities value, inflation

is rapidly increasing, purchasing ability for agricultural inputs is diminishing, there is a need to stimulate agricultural producers to sell products within the state procurement system or to fulfill quotas of interstate trade obligations.

In the process of introducing private relations and private farms an objective decrease of agricultural production takes place, to say nothing of subjective reasons. The forecast estimations for 1992 indicate that agricultural production in Lithuania will fall from 10 884. 12 thousand tons of production calculated into milk to 9613.88 thousand tons, i.e. 12%, including the decrease of livestock production, which makes 19%. Therefore, the state can't quarantee purchasing necessary amount of foodstuffs and has to adopt measures for stimulating the process. This need has been made even more acute with the introduction of procurement price limitations. Selling scarce agricultural inputs at set prices against agricultural products and setting trade rates for them might serve an example of such stimulation.

State could provide partial price subsidies for the inputs traded against agricultural production from the budget of the Republic. For this pupose the demand for the main agricultural inputs (constructing materials, machinery, mineral fertilizers, fuel, mixed feed) was calculated on the basis of progressive normatives of 1990. The estimations show that the demand for inputs necessary to ensure the estimated level of agricultural production might be covered only by 5.4%. It might be concluded that with the present level of production efficiency the estimated volume of production does not seem reasonable. Thus, only a package of consecutive measures of the agrarian reform alongside with the abovementioned ones could provide for the balanced agricultural development in the Republic, quarantee fulfillment of interstate obligations which will lead to economic stabilization.

THE BASIC PRINCIPLES OF AGRARIAN REFORM IN THE REPUBLIC OF LATVIA

ROBERTS ZILE

Scientific Research Institute of Agricultural Economics
Riga, Latvia

The economic life of Latvia entered a new phase after the restoration of independence in August of 1991 and after the disintegration of the USSR. This period is characterized by a decrease in gross national product, by deterioration of living standards, by essential structural changes, by hyperinflation caused by monetary emission by an alien country, etc. The economic reforms should be based on acquisition of strategical targets, altough this would prolong the crisis for a certain period of time. The economic reforms in Latvia are so closely linked with legal, political and demographic problems as it hardly is in any other post - socialism country in Eastern and Central Europe.

In accordance with the Hague convention and other international agreements, the re-birth of the Latvian Republic as an independent state claims to observe the principle of inviolability of property rights during the Soviet occupation. It means that in the Latvian Republic one should respect the property rights of Latvian citizens and other persons whose property had been nationalized or illegally expropriated after June 17, 1940.

A decree "On Land Nationalization" issued on the 22nd of June 1940 in the Latvian SSR followed by other acts of nationalization and illegal confiscation had a major impact upon property rights. But a distinctive feature of processes that took place in Latvian agriculture was forced collectivization under which people's property rights were taken over the state, but by a limited rural comune, thus depriving the owner of the right to act freely. It was presented as if carried out on a "voluntary" basis. As a result of this, the socialist way of management has led to a decrease in the acreage of agricultural lands by 1 million ha (see Figure 1), to destruction of the traditional rural environment, and in recent years, to the drop of production (in 1991 the gross agricultural product dropped by 15% compared with 1990, see Figure 4). It might be interesting to note that before the year 1940 agriculture was the most important branch of the national economy. According to many indices Latvia was one of the leading countries in agriculture.

Because property was expropriated both through collectivization and nationalization, property conversion should be conducted in the Latvian Republic in two ways:

I. Restitution of nationalized property rights (having restored the rights to land use, land tenure can be restored in accordance with the decree "On Land Reform in the countryside", as Figures 2 and 3 demonstrate the difference in land distribution between land users in 1991 and farm operators in 1935). Property rights can be restored if the formerly owned property is given back or if compensation is paid, including also the property equal in value (to the expropriated property). All property preserved in agriculture as well as nationalized or illegally expropriated property is subject to conversion only after the term of feasible demands for the property has expired.

II. Personalization of collectivized property (in Latvia the collectivization process that took place in 1949 - 50 was not judicially based). This collectivized property may be considered as one of the constituents of our farming property (since only the methods of collectivization are acknowledged to be illegal). Hence, it is unnecessary to carry out the property restoration, but property rights for part of the fixed assets of an enterprise. The above concepts form the basis for the agrarian reform with regard to ownership.

The Supreme Council has passed the following laws in order to carry out a conceptual agrarian reform in the Latvian Republic:

1. Law of Land Reform in Rural Areas (10-07-90),
2. Law of Privatization of Agricultural Enterprises and Collective Fisheries (21-06-91),
3. Law of Land Use (15-06-91),

as well as several acts (including those of the Presidium of the Supreme Council) dealing with separate issues mostly concerning the first phase of the agrarian reform (i.e. the period until the year 1996).

New Legislation and the First Step of Land Reform

The basic law in this sphere is the law "On Land Reform in Rural Areas". It was a highly disputed law because it was the first law about ownership conversion in Latvia. Next, the Supreme Council accepted the law "On Land Use" and then began to consider the next law "On Compensation for Land Property".

What is the substance of the land reform legislation? - The land reform is divided in two phases: the first takes place in the years 1990 - 1996, the second, in a period of 10-15 years, starting January 1, 1993.

In the first phase, all land petitioners: legal owners (who possessed the land before the occupation of Latvia in 1940), the present users and the new land petitioners handed in their requests for land allocations before June 20, 1991. All the district land use projects had to be developed and ratified, and the land had to be assigned by January 31, 1992. In the second phase, the land users can obtain or renew (legal owners) their land ownership rights.

Both the most important and the most disputable item was a point in paragraph 12, where the priorities for satisfying land petitions were determined:

> Priority Number 1, to the legal owner, except when on his previous land holding or a part there are:
> - developed farms or subsidiary plots
> - obtained or built residential homes
> - situated environmentally protected objects, historical, cultural and archaelogical monuments etc. appointed by the Republic
> - autonomously requested land
> - land necessary for the needs of selection and trial
> - situated constructions, buildings or orchards with production of social significance belonging to other owners (collective farms and state farms inclusive) with acreage defined by the regulations, if the beneficiary of priority Nb. 1 does not compensate the owner for his real estate value throuhg mutual agreement.

Priority Number 2 in the following sequence:
- for expansion of existing individual farms and subsidiary plots if the petitioner has a residential home on the plot and if he has none
- for the construction of individual homes
- for the needs of inhabitants
- to legal entities - the present users of the land.

The following situation with land requests has developed after applying this law in practice:
- the total acreage subject to land reform is 6.3 million ha, 3.9 million ha of agricultural lands inclusive
- collective farms and state farms have petitioned for 2.7 million ha. This comprises 74% of the acreage, these farms are using at present 43% of the land subject to the reform
- 77 thousand individual farms have reserved land for the year 1996, the total acreage being 1.8 million ha, 35 thousand individual farms have requested land for the year 1992 in order to establish medium size (24 ha) farms, the total acreage of these farms is as much as 607 thousand ha
- 100 thousand subsidiary plots have been requested with total acreage of 616 thousand ha. The average size of a subsidiary plot is 6 ha
- 100 thousand plots for home workshop needs have been requested with total acreage of 240 thousand ha. The average size is 2.4 ha
- the former landowners, or their heirs, comprise 101 thousand or 36% of all the land petitioners. The city dwellers comprise 29 thousand or 29%, those living abroad (mostly in the USA, Canada, Sweden, Germany) 1.400 or 2%.

The total acreage of requested land is 8 million ha which exceeds the average submitted to land reform 1.27 times. The amount of land in the rural areas that has not been requested by anyone is insignificiant. If the land user who has been allocated the land according to the decision of the land comission does not till the land for a year, it can be alienated.

The draft law "On Compensation for Land Property" envisages compensating the former landowners for the unclaimed or unallotted land plots. Evidently, the compensation will take the form of securities which may later be used in the privatizing process of other branches. At present, it is impossible to judge on the size of compensation, but the main idea is to compare it to rye yield from the particular plot of land and its price at the moment when the process of compensation begins.

What is the prognosis of the results of the land reform? Currently no one knows how many of the requests will be satisfied and how the land will be distributed between the groups of requestors. However, the experts forecast that the average size of private farms and plots will be approximately 12 - 15 ha, but former collective (state) farms will have an average size of approximately 1500 ha. When the former collective farms (new company) distribute their assets in the future, this 1500 ha will be distributed among individuals who buy cattle sheds or cow farms, etc. and the acreage of these private farms will range from 50 - 500 ha each.

The basic problem in the future will be small plots whose total acreage will be 15 - 17% of the agricultural land. Requestors for small plots mainly think from an economic point of view. Interests of these requestors are:

- to get small plots for family food and the "black" market,
- to keep the former collective farm because this is a place from which these requestors can obtain cheap resources for home workshops,
- to keep food prices high because they produce work intensive and expensive food.

The perspectives of these plot owners can be forecasted from the analysis of changes in the number of peasant farms in neighboring lands such as Finland, Sweden and Denmark.

Privatization of State and Collective Farm Assets

The conversion of nationalized and illegally expropriated property in rural areas will be regulated by the law adopted in the Latvian Republic "On Land Reform in Rural Areas", the legislation "On Conversion of State Property" and "On Denationalization of Real Estate", sections of legal acts on nationalized property and the norms of judicial acts on denationalization. The law "On Privatization of Agricultural Enterprises and Collective Fisheries" envisages to regulate the process of privatizing movable property and real estate, which were not nationalized. The objects of this law are collective farms and state agricultural enterprises that have been set up on the basis of peasants' expropriated property.

Taking into account the contradictory legal status of the present day Republic of Latvia and the political socio-economic and demographic situation, the law "On Privatization of Agricultural Enterprises and Collective Fisheries" contains the mechanisms for regulating the privatization process so that it can correspond to the varied aspects of the problem. The economic principles of the law are the following:

1) while changing the character of entrepreneurship and ownership in agriculture, it is necessary to maintain the existing production capacities,

2) the principle of publicity should be observed when the property of an enterprise is being privatized,

3) gradualness must be observed in the transition from collective (with limited liberty) business activities to private businesses (farms, service enterprises and so on),

4) owing to the fact that the methods of collectivization are illegal and some other considerations it is admissible to buy the capital certificates with the current currency and other means of payment,

5) specific articles from the collective farm property (tractors, cattle, buildings) can be obtained in one's private ownership if the holder of the certificate becomes an entrepreneur (in any form of private initiative), however, movable property has to be divided in the way necessary to manage the real estate (see Figure 5),

6) certificate is meant as a means to get free of charge property for starting entrepreneurship, not as a means for consumer payments (for there can be a situation in the process of privatization that the certificates of those who do not want to start private business activities can lose their initial value),

7) guaranteed rights to all shareholders to obtain in their possession or to participate in a closed auction (if there are other pretenders) when a technically or technologically integral object is being privatized, in other words, we cannot allow "the dog to sit in the manger".

The problem of estimating the privatizable capital has existed in all East European countries. Great attention is being paid to this problem in the Baltic Republics resulting in too much time and money being wasted. The following principle is well known: the privatizable property costs that much as it is paid for and how profitable it is for the state to privatize the enterprise, in other words how prepared the both sides are to sell and buy. In the Republic of Latvia this problem is deepened by the lack of its own money. The estimation of the capital of agricultural enterprises will be performed according to the laws existing in the Latvian SSR, which determine that the property of a collective farm belongs to its members. In Latvia the folloving order will be observed when estimating the property of the privatizable collective farm and that of the state enterprises being equalled to them:

- fixed assets are assessed according to the remaining value of the balance (i.e. without the sum of amortization),
- other assets according to the data of bookkeeping.

The total sum of these assets must equal the sum of the privatization certificates in the enterprises, since all assets are the property of the members of the collective according to the existing legislation.

Therefore the concrete fixed assets can be revaluated according to their real value in case the previously determined balance is being observed. The total capital is equal to the sum of the certificates. In the law "On the Privatization of Agricultural Enterprises and Collective Fisheries" it is envisaged that in case the property of the agricultural enterprises is being privatized by the entrepreneurs, the holders of the certificates, market relations will be used, including the prices. The essence is as folows:

- the shareholding company is founded on the basis of the collective farm according to the law its code of articles offers to this participants the property included onto the fixed assets,
- the offered initial price for the concrete property is the price which is obtained in the course of inventory and included in the calculation of the certificates,
- if the farmer or any other entrepreneur hands in the request to the executive body of the shareholding company, that he wants to acquire a tractor, a farm or any other thing and if in a month's time after the public announcement there are no other competitors, then this thing becomes his property, if he pays for it initially by the means of the certificates or in any other means of payment,
- if it has other competitors then the executive body arranges an auction, receiving certificates or any other means of payment including payments in the form of a loan from the shareholding company in auction prices (above the initial prices),
- if the shareholding company considers it necessary to privatize an unprofitable enterprise it can be announced for sale for a price which is lower than the initial price to arrage a diminishing sale.

As the sociological rating (by the end of 1991) of the collective farmers shows in the majority of cases, in the case of total privatization of the property of a shareholding company, the executive person receives a lower price than the assessed value received during the inventory (the real value of the thing is lower than its initial price).

However, taking into consideration the hyperinflation of the rouble at the end of 1991 and the beginning of 1992, this process will take a turn in the opposite direction and that might be a tremendous stimulus for privatization and for the speeding up of this process

in the countryside. If the basic means, and together with it the sum of the shares (certificates) of a company will be recalculated according to the rate of inflation, it is impossible to predict the actual speed of privatization of agricultural enterprises. The specific methods refer to the service and processing enterprises of the collective farm (mechanic shops, dry houses, meat processing shops and so on).

It must be guaranteed that in the course of privatization the entrepreneurs who are engaged in the basic agricultural production (cultivation of plants and animal husbandry) receive the right to obtain the control packet. The mechanism of their guarantees can be diverse: proportional to the managed area of land, proportional to the shares or other rights or to the value of the certificates, although while there are no mortgage solvent institutions in Latvia, when finishing the activity of the enterprise both in the case of bankruptcy and according to the decision of the owner the liquidators have to observe the agricultural specificity prescribed by law, including the fact that the certificates (shares) in this particular case serve to determine the liquidation quotas.

This specificity appears also in the following way: after the demand of third persons are observed, the property is auctioned so that the running of perspective real estate is preserved to the maximum.

The main task of the privatization of collective and state farms is to form within the borders of the pagasts (small rural districts) the following scene: 50-60 farms about 20-40 ha large mutually cooperated and specialized 5-10 share companies or private enterprises which run the big farms and produce fodder for sale on the land which is not asked for by the farmers and parties concernd on the basis of the former collective farms service enterprises (mechanical shops, dry-houses, shops for processing food-stuffs).

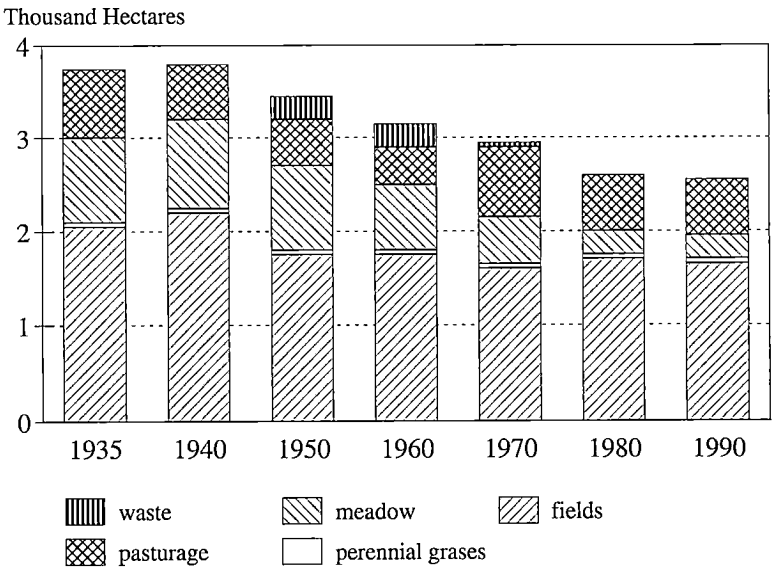


Figure 1. Dynamics of land resources.

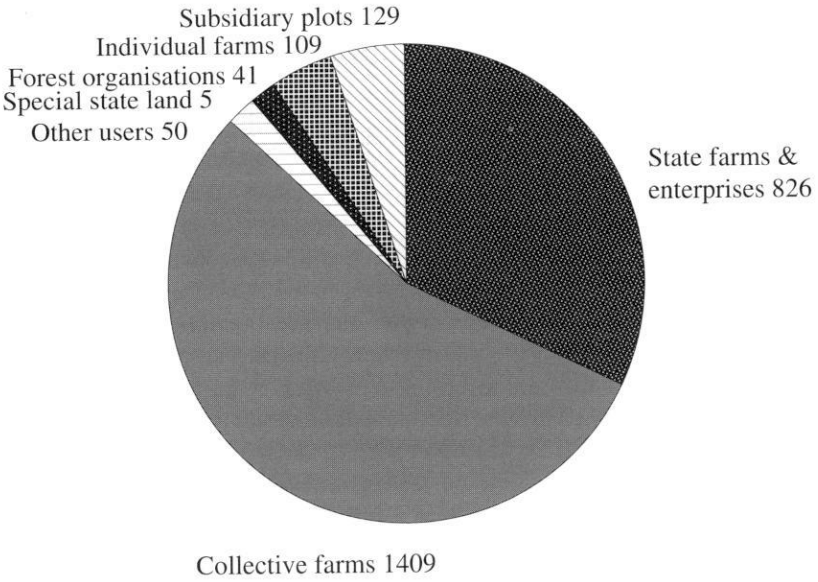


Figure 2. Agricultural land resource distribution among users.

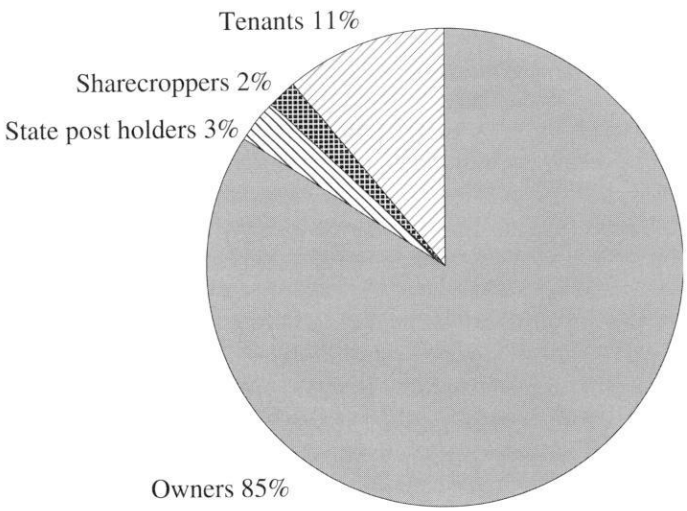


Figure 3. Farm operators in 1935.

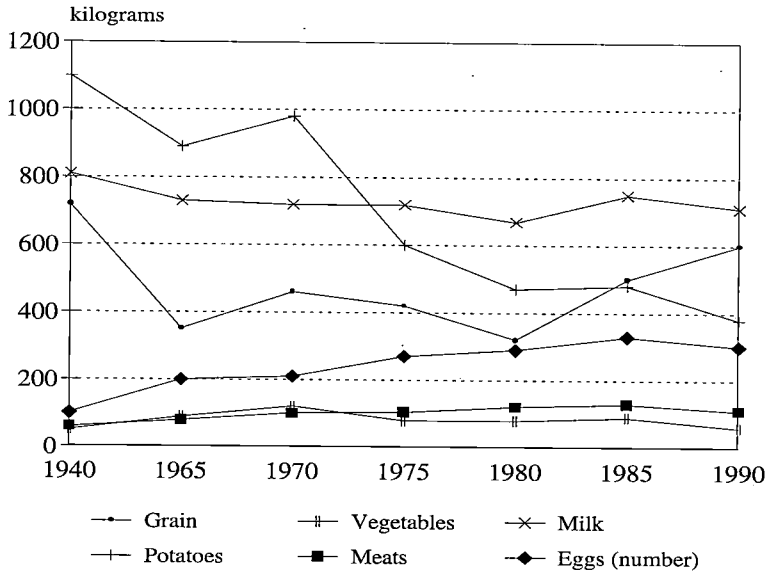


Figure 4. Annual per capita production of basic agriculture products in Latvia.

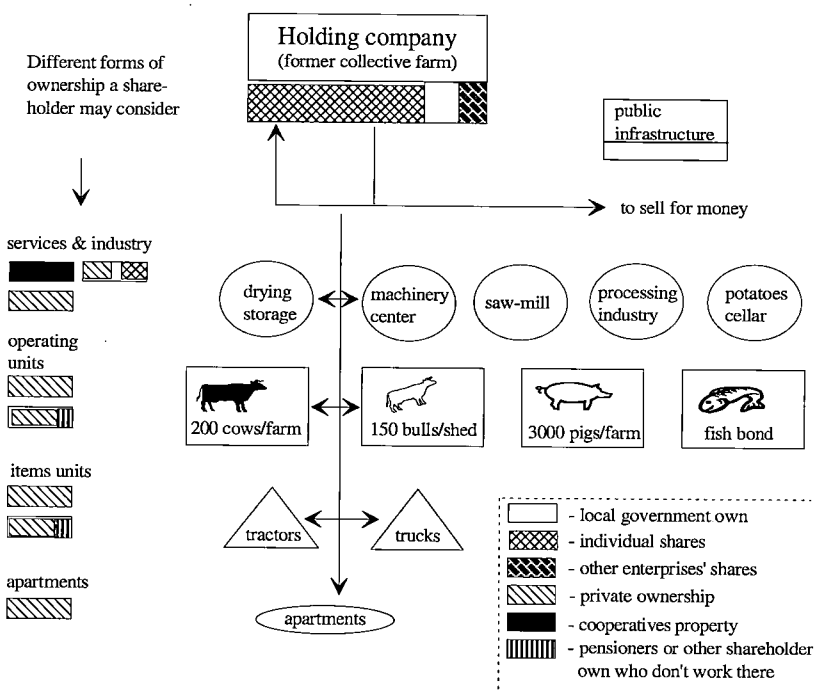


Figure 5. Opportunities for shareholders to manage their shares.

ISSUES IN PRIVATIZATION OF AGRICULTURAL ENTERPRISES IN LATVIA AND POSSIBLE WAYS OF SOLUTION

A. MIGLAVS

Scientific Research Institute of Agricultural Economics
Riga, Latvia

Any economic incentives for regulating production serve as a means for affecting the producer, the man envolved in production. The longer the chain of production management, the weaker it's influence on the producer, and the stronger should be the means for affecting him. In this aspect individual farms and state farms are direct opposites in agriculture.

In the period of transition to market economy one of the main tasks for the government is to establish a class of producers who would readily respond to market mechanism. Here are some figures to illustrate this numbers of labourers and farms in average:

	1920	1935	1950	1970	1988
Number of labourers	730 470	838 100	310 560	242 600	240 800
Number of farms	192 400	237 400	1 851	925	578
Labourers per farm	3,79	3,53	168	262	416

As we can see from this data, the total number of farms has decreased considerably with the growth of socialism, and their acreage has increased. This process was based on elimination of private ownership and led to exclusive employment of hired labour in agriculture. All this destroyed the basis of market mechanism, for it works efficiently only in the circumstances of private ownership and personal motivation based on it.

From the above said, it is necessary to privatize agricultural enterprises due to the following reasons:

- introducing economic methods of maintenance in production which proved to be impossible without changes in ownership (chronologically it was the primary reason);
- revival of individual farms;
- decentralization of production maintenance and production itself;
- implementation of an all- comprising agrarian reform which pursues the objectives of reviving individual farmers mode of production.

The work on privatization of agricultural enterprises in Latvia started in 1989 in some of the collective farms. Its primary direction was restricted only to the improvement of the existing collective- farm structure. It was due to the fact that the new economic legislation which should acknowledge private entrepreneurship, had not been worked out by then, and actually nobody offered special incentives to develop this process. As a result of this by the beginning of 1989 there were certain changes in this aspect only in about 40 collective

farms. However, none of these farms changed the type of entrepreneurship. Only after the Law "On Entrepreneurial Activities" was adopted there appeared the necessity for an ultimate decision as to the fate of agricultural enterprises, because the new law did not acknowledge the collective farms as a type of entrepreneurial activity, which would correspond to the present law. At the same time the Statutes of Collective farms had to be taken into account, and they stated that the property of a collective farm is a joint property of all its members.

Alongside with this an all comprising agrarian reform began, which consists of reform of economic relations, landreform and denationalization processes etc. A number of questions concerning collective farms and agricultural enterprises arose. Some of them have been answered by the Law "On Privatization of Agricultural Enterprises and Collective Fisheries" adopted by the Supreme Council on June 21, 1991, and in subsequent legislative acts. Let us discuss some of them.

1. Is it only the collective farms that are subject to privatization, or does it concern all the agricultural enterprises, including state agricultural enterprises? If the state enterprises (state farms), according to the present legislation, are the property of the whole nation, the collective farms already are a common property of collective farmers. The only task is to find out who are the owners and how large is each owner's share. Actually all the state farms are the former collective farms, which under the pressure of the previous agricultural policy were forced to transform themselves into state enterprises. This is the reason why it was decided to privatize all the agricultural enterprises in a uniform way. The only exception is specialized state enterprises, where the process of privatization will have specific features.

2. Will the above mentioned document be the only one with the regard to privatization of agricultural enterprises? The processes of denationalization and ownership restoration are in progress alongside with to process of all comprising privatization. Therefore it was agreed upon that the property of disputable ownership would not be subject to general privatization of collective and state farms. As to the rest of the property this will be the main document. This fact has largely influenced the contents of the law, which reflects both the privatization of the assets of an enterprise as well as of production itself.

3. Was the act of collectivization in 1948-49 a lawful one? Are then the collective farms legal? The decision of the Supreme Council of the Latvian Republic "On Agrarian Reform in the Latvian Republic" (adopted on June 13, 1990) acknowledges that only the methods of collectivization have been illegal. The law on privatization therefore is based on the principle that the collective farmer's ownership of the collective farm's property should be taken into consideration. Yet, a uniform order set as to the calculation of shares for each individual, which should be in proportion with the property they have invested into the collective farm this is envisaged to be a kind of compensation for their sufferings. In the further process of privatization these shares should be used in compliance with the chosen way of privatization (this will be discussed further).

4. Should the agricultural enterprises be privatized as separate objects? Perhaps they should be joined into an integrate state property, which should be subsequently distributed in such a way that everybody has equal conditions for starting entrepreneurial activity? The collective farm property is still the property of its members. Therefore the above suggested redistribution would only be possible after the current nationalization, which is absolutely inadmissible. Besides, it should be taken into account that collective farms

worked with diverse results. Redistribution would only be the current levelling for the benefit of those who have worked less and worse. That is why it was decided to consider the enterprise, as an integral unit of assets and individuals claiming for ownership, to be the subject of privatization.

5. Is it possible to privatize collective farms and state farms according to the same pattern, without taking into account the discrepancies in the types of ownership? As most of the state farms actually are forcefully tramsformed into impoverished collective farms, it was decided to privatize the sate farms under the same conditions as collective farms. Yet, there arose some difficulties, because there is no category of membership in the state farms. Therefore a paragraph was introduced in the law "On Privatization of Agricultural Enterprises", which explains how to equalize state farms to collective farms concerning both the assets and the individuals. The essence of this paragraph actually is denationalization of state property in the countryside.

6. How is it possible to privatize enterprises which throughout decades have been established as complete business units where most of the structural units are interrelated? As in each separate case there is only one enterprise and many owners, it is impossible to distribute property among them in such a way that production process is retained and ownership preserved. Therefore it was decided to determine ideal property shares for each candidate and afterwards to decide what to do with them.

7. Who will have the legal rights and responsibilities in the privatization process? Determining of the capital shares by itself does not yet mean anything, because they only represent ideal property parts which actually cannot be divided into units that small. These shares only entitle their owner to the rights to use them. This becomes possible only if there exists a certain mechanism. There should be a subject who would guarantee the implementation of the rights. The former collective and state farms cannot play the role of this subject, because their statutes and activities are based on indivisible property.

From the above said, as a result of privatization, there should appear something new instead of the former collective farms. The only possible way out is to establish business companies or a large number of small enterprises. However, the former agricultural enterprises as business units had partners -consumers, suppliers, banks. This is in connection with the contracts, outstanding bills and credits. It is clear that the business partners should not been put into jeopardy during the privatization of an enterprise, otherwise a chain reaction of bankruptcies might start. Only two possible ways for dealing with this issue are prescribed by the laws of the Latvian Rebpublic:

- The way of reorganization of the existing subject with distribution of all rights and liabilities among the acquirers of the former enterprise
- The way of liquidation, when all the mutual liabilities are anulled, however, in this case, as a rule, production is liquidated, too.

These two ways serve as a basis for the privatization of collective and state farms.

8. Are all the agricultural enterprises obliged to change their status according to the pattern described by the law? Or does it depend on the decision of individuals working in the enterprise, admitting that in some instances the enterprise would be liquidated? On the one hand, there can hardly be one universal recipe for all the 600 enterprises, on the other hand the process envolves all the collective farms and plenty of people whose property was invested into collective farm, as well as creditors. There should be some uniform approach. This is the reason why the present law comprises only the guiding principles for the process

of privatization should be carried out in each particular enterprise. This process could be divided in two stages:

- calculation of total assets of the enterprise by July 1, 1991, and determining the individuals who are entitled to capital shares, as well calculation of these shares. It should be stressed that at this stage only the rights to obtain shares are clarified, and not concrete objects.
- taking decisions as to the conception and transformation of the former types of enterprises into new ones they should be taken by the shareholders.

At this stage it should be decided whether statutory company would be formed on the basis of the former collective farms. In this case the statutes of the new enterprise will rule the shareholder's rights as to trading with his shares. The type of production does not change it remains public at this stage.

If the former collective farm is going to be liquidated, each owner gets his actual share either in cash (liquidation quota) or in kind (the acquired assets). In the latter case the owner is free to make this choice to join another company or not to do that. It should be remainded that liquidation is carried out by selling the assets only for cash.

9. What criteria should be applied for calculating the shares? Three aspects should have been discussed; land, property investments and labour investments. Yet, land has not been acknowledged as private property up to now and for the time being cannot be traded. Therefore its price has not been set. There are some other aspects, too, that should be considered. Due to all this, land is left out in the process of calculation of shares. There is hope that land issues, including land ownership, will be solved by the land reform. So only the two other aspects have been left; labour investments and movables & real estate.

10. What type of new enterprise should be formed if the way of gradual transformation has been chosen? The law "On Entrepreneurial Activity" presents an exhaustive list of types of entrepreneurial activity, and it should be complied with. Therefore, to transform the former collective farms, as a rule, one type of statutory companies is chosen; shareholding company, a limited liability company, a joint- stock company. The problem is that the objective of all the three is to preserve their integrity. But in the process of privatization the decentralization and privatization of production is extremely essential, and the above mentioned companies may serve only as a means of meeting the interests of separate owners. Therefore the law contains the rules which encourage the splitting of the present large agricultural enterprises. At the same time there is an attempt to preserve the producing capacities of the assets. There is a mechanism for keeping a permanent set of plant and machinery in enterprises, the so called inventory.

11. How to create an entrepreneur? The initial privatization, the results of which were joint stock or limited liability companies was not a solution of the problem. Production itself remained centralized where in fact all the workers are hired labour, though formally they are owners at the same time. It is no secret that the psychology of a hired worker differs tremendously from that of an entrepreneur, and it does not necessarily mean that a good worker would make a good entrepreneur. One cannot do anything by force here.

This is why there is a principle in the law which prevents the possibility to force someone to become an entrepreneur, but an individual should be given the opportunity to become an independent entrepreneur. In order to ensure this a special mechanism has been created which should be obeyed by all privatized collective and state farms irrespective

of the type of business company chosen. This mechanism comprises:

1) The so-called inventory of the assets of an enterprise, which includes the whole set of property according to the production objects with the basis price of this set. The inventory serves for two purposes:

- each member of the company is entitled to choose any item from the inventory and demand the company to sell it to him, and he can buy it for his capital shares
- each of the items can be obtained only as a whole set.

This is the way how economic prerequisites for reorganization of production and encouraging entrepreneurship are created.

2) The regulations for obtaining the chosen object. The regulations are based on:

- voluntary choice (nobody has the right to force somebody else to privatize an object);
- publicity (all the members should be notified if somebody has an intention to privatize one or another object)
- certainty (the company itself has no right to refuse the privatization of an object). Only another member with the same intentions can put obstacles in the process of obtaining an object.

Besides the above mentioned and shortly discussed issues of privatization of agricultural enterprises which need solution, there are plenty of other ones which need a solution, but this would be a much more extensive topic.

THE GOVERNMENT'S ROLE IN DETERMINING PRICES, TAXES AND CREDITS FOR INDIVIDUAL FARMS

BIRUTA ARNTE

Scientific Research Institute of Agricultural Economics
Riga, Latvia

1 General characteristics of individual farms

In Latvia land is being returned to its users. Within the framework of land reform by May 1st in 1992, there were already 41.3 thousand individual farms with total acreage 620 thousand ha. This comprises 14% of agricultural lands. The average size of an individual farm is 15 ha.

Individual farms gradually start to specialize in one type of farming. Two thirds of farms specialize in crop production, which requires less farm inputs and labour inputs. Only one third of farms want to specialize in cattlebreeding. In 1991 there were in average 4 head of cattle, 3 milk cows, 5 hogs and 3 sheep per farm.

The total yield from individual farms in 1991 was 7 thousand tons of milk, 1 thousand tons of meat (live weight) and 6 million eggs. It is respectively 4.2%, 3.3% and 0.6% of total farm products.

The unsatisfactory situation as to the material and technical resources is an obstacle to a more rapid development of agriculture. There are only about 33% of tractors and 20% of other agricultural machinery needed in individual farms. Thus by May 1st in 1992 there was 1 tractor per 17 ha of agricultural land in individual farms. This figure does not describe the actual state of each individual farm, because the distribution of machinery is uneven. To reinforce the material and techinical basis is a prime agents for further development of individual farms.

2 The role of prices in the development of individual farms

By the end of 1991 the Counsil of Ministers of the Republic adopted a resolution on liberalization of prices on all types of agricultural products. The objectives of the price liberalization were to establish the necessary prerequisites for further development of production with the regard to all types of agricultural producers, including individual farmers, as well as to equalize the income brackets of agricultural producers with those of workers employed in other branches of national economy. As the fixed producer prices of agricultural products considerably lagged behind the rate of price increase for industrial goods, the gap between the incomes of people working in these two separate branches widened.

However, it should be noted that the liberalization of prices in all branches of national economy still does not mean a transfer to market economy in the classical sense of the word, because the issues of privatization of land and real estate have not been solved yet, and the state monopoly on basic production means still exists.

At present the farmer has the right to participate in the procedure of determining the producer price for his products. The prices of milk and meat are being set as a result of negotiations and also agreement between the producers of agricultural products, processing enterprises and traders.

At the same time state guaranteed minimum purchase prices, which were set for the main agricultural products: crops 1000 roubles per ton , sugar-beet 250 roubles per ton; flax straw 2100 roubles per ton, milk 1050 roubles per ton, beef cattle 7300 roubles per ton (live weight), hogs 7600 roubles per ton (live weight).

Yet, the government has set a margin for profit relation to charges for the processing enterprises - the same for dairy factories and meat processing plants - it should not exceed 15%. The traders profit rate has also been restricted, so that it should not exceed 25% for bread, 20% for dairy products, and 15% for meat, meat products.

The pricing system of this type enabled the agricultural producers to defend their interests. There was a steep rise of producer prices and on March 1st in 1992 they exceeded average prices of 1991 7 times for milk, 4 times for beef and 6 times for pork.

At the same time the results of indexation for the first quarter of 1991 indicated that production costs in agriculture have increased during this period averagely by 10.8 times, however, profits have increased only by 7 times.

Agricultural producers suffer from lack of money for production development, and the volumes of production are confirming to decrease. If during the first quarter of 1991 the total product of cattlebreeding and poultry farming comprised 85% of that of the same period in 1990 and in dairy farming 82%, then the results for the first quarter in 1992 were 78% and 80% respectively.

In order to protect the producers of agricultural products under the circumstances of inflation, recommendations were handed in to revise the state - guaranteed purchase prices. From March 6th in 1992 the state - guaranteed purchase prices were revised, and they were set close to the actual prices which existed at that moment.

During the first three months of price reform the prices for agricultural products were not restricted by anybody: it was the producer who set them, expecially in the areas where the Farmers' Centre had a strong influence. Now due to limited market both at home and abroad, the big processing plants try to stick to the state - guaranteed purchase prices. However, the prices for material and technical resources raise continuity.

Thus, by May 1st in 1992 the price increase for electricity was 25 fold, for diesel fuel 46 fold, for fertilizers 24-93 fold, for agricultural machinery 10-20 fold if compared to 1991.

The forecast for this year as to the increase of production costs is 31 billion roubles or 7.2 times more in comparison with the last year. This means that the state - guaranteed purchase prices for the main types of agricultural products ought to be increased by 1.5 to 2 times. The result will be an inevitable rise of retail prices for foodstuffs.

By May 1st (compared with december of the last year), the retail prices had increased 2.3 times for milk, 3 times for beef and pork. It should be noticed that after the revision of the state - guaranteed purchase prices, the producers' prices and the wholesale prices

set by the processing enterprises became stable. The retail prices continued to grow. For example, in May they had increased by 1.2 times for milk and dairy products and by 1.14 times for beef and its products, if compared with March.

A new price increase for agricultural products began with June 1st in 1992, when the government lifted the restrictions on profits for processing enterprises and restrictions of turnover tax for traders.

With the view of the present situation of wages compared to the consumer prices, the purchasing power of the population has dropped considerably. A decrease in sales volumes testifies to the fact. Thus, during the first quarter of 1992 (compared with the respective period in 1991) the consumption of foodstuffs has decreased by 53% for dairy products, by 44% for meat and meat products, by 31% for bread and bread products.

During this period the retail prices have increased 2.5 times, but the wages have increased 2 times for industrial workers and only 1.6 times for agricultural workers. In order to bring closer the income level of agricultural workers to that of working in other branches of national economy, arrangements for price stabilization should be made, which would be impossible without state subsidies.

3 The regulation of individual farmers' income

If we compare agricultural production with other branches of production, its main features are a slow turnover of assets and seasonality. This means that producers' prices cannot be the sole source of income for agricultural producers. The income of agricultural producers should be regulated:

- by state - guaranteed purchase prices
- by tax exemptions
- by subsidies.

Especially the new individual farms who have just started farming need help, because they have money shortages for construction and they have to purchase material and technical resources.

3.1 Credits

Consequently a resolution was adopted in January of 1992 with regard to the condition for allotting credits to individual farmers from the state budget and to the terms of repayment. The annual interest rate for long-term credits envisaged for the purchase of agricultural machinery, buildings, for expansions or purchase of residential houses and production buildings as well as for buying cattle, has been set up to 7 per cent for individual farmers, and 12 per cent in average for all the rest entrepreneurs.

The resolution envisages also to draw money from the state budget in order to give a discount for the long-term credits for 50%, if the farmer has used them timely and purposefully.

The critical situation which has set in as to granting long-term credits for individual farmers might seriously detain the process of privatization and the agrarian reform. The individual farmers' demand for long-term credits 12 billion roubles in 1992.

The government has found possibility to grant only 25% of the sum needed by farmers by now. This means that a special stabilization fund for farmers should be founded. It should be built of:

- subsidies from state budget
- state and local government non-budget fund for privatization
- the money from commercial banks, companies and international finance institutions
- contributions made by individuals

3.2 Subsidies

In order to achieve a balance between the income of agricultural producers and solvent demand of population, it would be useful to subsidize the price increase for material and technical resources. This would promote the reduction of production costs. Producer should be subsidized in the process of purchasing material resources. Subsidies should be based on standards for resource expenditure per 1 ha of agricultural lands and the amount of land used. Taking into consideration the vital importance of crop farming, the subsidies could also be differentiated according to the amount of crops sold.

Subsidies for material resources will help to stabilize conditions for agricultural production and will restrict the steep rise of prices for agricultural products.

The subsidy policy should be closely linked with tax policy. This will make it possible to evaluate correctly the production conditions for each region and to state the income level of agricultural producers. Simultaneously a mechanism for collecting different rent from the producers who work under better conditions can be introduced. It should also be mentioned that the present tax policy is not flexible enough as to the economic conditions of individual farms, including soil fertility and favourable geographical position.

Taking in consideration the above said, it is almost sure, that many areas in Latgale and Vidzeme would not be able to compete with those in Zemgale and Riga district, where the cost of products is considerably lower. The farmers in the former areas will be forced to leave their farms because they will have gone bankruptcy. As a result of this there exists a danger to lose agricultural lands in great amounts. It has already happened in the recent past when due to an unsuccessful agricultural policy about 1 million ha of agricultural lands have been lost. It would be simply inadmissible in the present situation when our market is suffering from shortages. If developing individual farms is our objective, subsidies should be allotted to the individual farmers, who are under the worst farming conditions.

Conclusion:

- Government should support the establishing and developing individual farms by setting low interest rate on credits, determing small taxes, and by subsidizing the farms with bad farming conditions,
- the agricultural workers are expecting the Supreme Counsil of the Republic to adopt the law on privatization of processing enterprises. The law will promote the establishing of branch societies (for dairy processors, for sugar producers, etc.), where the farmer becomes the owner of processing enterprises and is interested in the final product.

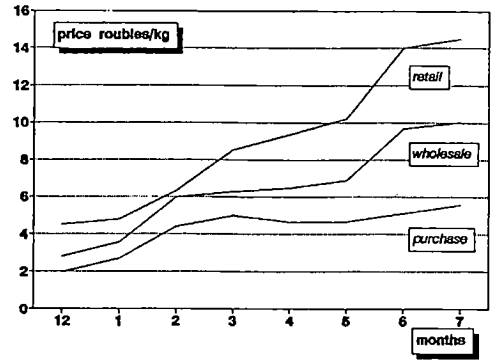


Figure 1. Dynamics of average price of milk in 1991-92.

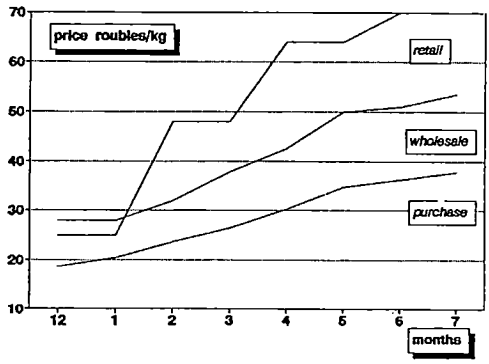


Figure 2. Dynamics of average price of beef in 1991-92.

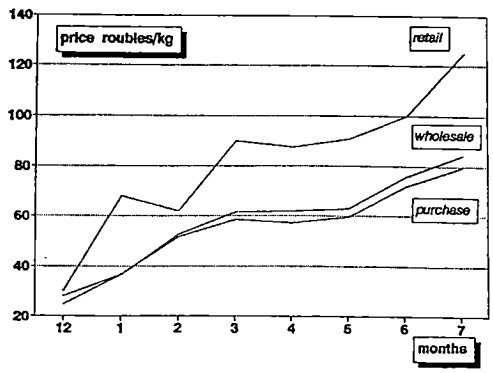


Figure 3. Dynamics of average price of pork in 1991-92.

LITHUANIAN ACRICULTURE UNDER THE INFLUENCE OF EASTERN AND WESTERN EUROPEAN MARKETS

A. POVILIUNAS

Lithuanian Research Institute of Agricultural Economics
Vilnius, Lithuania

Today, with a future Lithuanian countryside model glimmering in the perspective, it is high time to outline its development lines in view of the domestic and foreign economic situation. The main task of agriculture is to provide domestic consumers with those agricultural products which are most efficient to produce under existing natural and climatic conditions. Only then are we to look for foreign markets consistent with our marketing possibilities.

In practice, we can speak of Eastern and Western European Markets. We call Eastern European market the states, former members of the Council for Mutual Economic Assistance, namely, former republics of the Soviet Union, Poland, Czechoslovakia, Hungary, Romania and Bulgaria. Albania and Yugoslavian republics can also be mentioned in this group.

There are two communities in Western European market, i.e., EEC, including Ireland, Great Britain, Portugal, Spain, France, Italy, Greece, Germany, Belgium, Holland, Denmark and Luxemburg. European Free Trade Association, including Iceland, Norway, Sweden, Finland, Switzerland, Austria and Liechtenstein makes another group. These are the markets that might be attempted by our agricultural producers. With some agricultural commodities we may enter even more distant markets but this fact doesn't seem to have major influence on our agricultural production line and structure.

From the historical point of view these markets are not very alien to us, we have been marketing our farm products there. But it should be mentioned that throughout the past fifty years Lithuania has become agroindustrial country, as compared to the pre-war state, and trade volume and structure have changed. The share of agricultural production in the exports has been reduced considerably. The following figures illustrate the above-mentioned changes.

Demographic changes

In 1939 77% of total population lived in the countryside and in 1991 rural population made only 31%. In 1939 correlation between urban and rural residents made 1 to 3.4. In 1991 the correlation became quite the reverse: one rural dweller to 2.2 city inhabitants. In 1990 17.8% of total population employed worked in agricultural sector (against 79% in 1939), including 14.3% working on collective farms, 1.5% on state farms, 1.2% on private farms and 0.8% on personal subsidiary allotments.

Economic data

Unfortunately, we have no data about the gross national product and national income structure. In 1990 the share of agriculture in gross national product made 22.8% and in national income it was 29.1%. During the last fifty-year period, i.e., throughout 1940-1990 the total agricultural production increased by 2.4 times at 1983 compared prices and the increment of industrial output at factual prices made 84.2 times. Comparison of the growth rates in these two basic sectors of Lithuanian economy shows that the share of agriculture in gross national product and national income of the pre-war Lithuania was twice as high. Consequently, the share of this sector in Lithuanian export also changed.

It does't mean, though, that agricultural export quantitavely diminished. It has been increasing alongside with the production growth. In 1940 gross agricultural output per capita included 522 kg of grain, 927 kg of potatoes, 46 kg of meat, 470 kg of milk and was valuated at 635 roubles. In 1990 its monetary value increased to 1217 roubles (1.9 times increament) and it included 876 kg of grain, 422 kg of potatoes, 142 kg of meat (3.2 times increase), 847 kg of milk (1.9 times increase). 21% of grain, 35% of potatoes, 58% of meat, 52% of milk was used for domestic consumption.

The agricultural supply demand analysis indicates that our agriculture produced adequate amount of products both for domestic consumption and for exports. Here another problem arises, namely, to what extent the agricultural growth was reasonable in view of natural environment and interrelations between the prices of industrial commodities and agricultural produce (The issue of robbing Lithuanian economy is quite another one, reaching far beyond the subject matter of this paper).

Foreign markets

Entering foreign markets by pre-war Lithuania had its peculiarities. It happened immediately after the World War I, when a great demand and high prices for agricultural products were characteristic of West-European markets and traditional links with Eastern Europe were cut. There was no need for agricultural restructuring. The farming system was consistent with natural climatic conditions, biological peculiarities of production, it was based on socio-economical conditions, farmers' experience and traditions and the existing situation. Though high labor consuming, the system proved efficient enough in competition and managed to survive throughout the years of agrarian depression, war and other social upheavals. Difficulties arose in connection with slow urban growth, poor availability of jobs in cities, development of farmsteads system, introduction of new technologies, disbalance of prices for farm products and industrial commodities at the expense of farmers. Nevertheless, it was due to this system that a true owner and an entrepreneur, Lithuanian farmer evolved. Farmer was a reliable supplier of necessary agricultural products both for domestic and foreign markets.

All the goods produced traditionally by Lithuanian agriculture were in good demand. Only technologies aimed at improving quality, adapting to foreign markets were being changed. By that time Lithuanian farmers had mastered bacon production for London market. In 1932 its export made 41 thousand tons and farmers were able to increase the

production of bacon. Unfortunately, the government of the U.K. set import quotas for Lithuanian bacon and the exports fell by four times. In practice, dairy industry was developed anew: the stock of dairy cows, feed basis and milk processing were restructured. The demand for butter constantly increased and shortly before World War II the export of Lithuanian butter made 18 thousand tons. Lard pigs and geese were in good demand in Germany, though from time to time the German government used to apply restrictive measures for their import. Besides, grain, clover seeds and flax products were exported. In 1938 agricultural produce accounted for 64% of total exports, including butter which made 21%, meat 16%, livestock and poultry 12%, grain crops 12%.

After World War II Lithuanian agriculture was forced into Soviet agricultural system. The lines of development, growth rates as well as the structure of production were determined within the framework of the Soviet agrarian policy seeking to maximize the production of super-large agricultural enterprises throughout all the region of the Soviet empire. In all-union labour distribution Lithuanian producers were directed primarily to dairy and beef cattle and bacon-type pig breeding. Together with Latvia, Estonia, Belorussia and Kaliningrad region of Russian Republic, Lithuania had to make North-West agricultural region specializing in livestock production. This region was entitled to deliver milk and milk products, beef and pork, breeding cattle and pigs to Soviet state procurement system. In 1986-1990 average annual deliveries made 174.3 thousand tons of meat and 1,158.8 thousand tons of milk (which made respectively 36% and 40% of total procurement). The 1986-1990 figures of annual deliveries are presented in Table 1.

Table 1. Deliveries of agricultural products to all-union fund in 1986-1990.

Agricultural products	Total all-union fund thsd tons	Deliveries from Lithuania, Latvia Estonia, Belorussia, thsd. tons	share %	Including deliveries from Lithuania thsd. tons	share %
Meat and meat products	2378	607	25.5	174	7.3
Milk and milk products	4191	4733	33.4	1559	8.2
Eggs, mln.units	6454	239	3.7	34	0.5
Potatoes	1775	576	32.4	23	1.3
Vegetables	3052	32	1.2	12	0.4

By no means these figures give a complete picture. Export of agricultural production to other countries was made from this fund and Lithuanian products reached foreign markets through it. Besides some production was exported directly to other republics. Since the share was very insignificant it didn't seem to have any influence on production growth and its lines. Such agrarian policy influenced greatly the Lithuanian agrarian structure and growth rates.

First of all, during the past fifty years the increase in livestock numbers made 2.2 times. The production line of this sector has changed from milk-meat to meat-milk.In 1941 cows accounted for 74% of cattle herd and in 1991 this share fell to 36%. In 1941 there was 0.4 fattening calve per one cow and in 1990 1.8 fattening calve per cow, i.e., the increase made 4.5 times. Milk yield increment per cow made 2.1 times and meat 7.1 times.

These changes were not backed by breeding stock renovations. The herds were hardly enlarged by special dairy and beef cattle breed, if at all. So far, from the point of view of meat quality, live weight increase, profitability of feed, beef breeds are superior than breed at our disposition. The same applies to dairy breeds, the dairy indices of which exceed those of our brown or black and white cows.

Alongside with the increase of cattle numbers the stocks of horses and sheeps, basic competitors of cattle from the consumption point of view, diminished. Two reasons accounted for this proces: mechanization and low prices for oil products, imports of higher quality wool, development of artificial fibre and synthetic fur production. Besides, sheep breeding was not easy to concentrate in large units.

Secondly, the pig numbers increased by 2.3 times. Pig breeding was concentrated in large complexes and based on high- concentrated rations. Pork production increased 2.8 times. Though from 1940 to 1990 its share in meat variety fell from 64.5% to 45.4%, the number of fattened pigs and meat pigs increased.

Thirdly, the crop area structure changed. The share of cereals, including leguminous plants, lowered; feed grain predominated in the crop area (excluding oats). Forage crops share, especially succulent, indlucding maize for silage, went up. To balance the feed basis imports of grain increased, the combined feed industries were developed.

Fourthly, the technologies have changed. They were based on production concentration and specialization, industrial methods. New basis for large-scale production was formed. These measures quaranteed production growth. Unfortunately, they had a devastating influence on environment, polluted ground water and deteriorated products quality. Production costs were going up under the influence of industrial commodities' price increases and infinite increase of management costs.

What will the future situation look like?

It goes without saying that in the nearest future we should maintain our presence in the Eastern European market. Our agricultural production is adapted to it best of all. If compared to the Western European market, it is large and less exacting from the point of view of quality and variety. No doubt, the demand for quality will arise in this market too, but changes do not seem to be abrupt.

Concurrently attempts should be made to enter both West European markets. But the situation here has quite changed since the inter-war period. Sooner or later Lithuanian agriculture will face the problem of saturation here, low prices and high quality demands.

East German agriculture has already encountered such a situation. When the two German states were united the agricultural costs in East Germany remained on the same level and prices for farm products fell by half. Moreover, administrative measures had to be implemented to retain domestic commodities on the market. There is one more problem

in Germany; there is almost the same number of workers employed in Eastern and Western agriculture, but the acreage of land in the West is twice as large. Thus, East Germany suffers a surplus of agricultural labourers and, so far, there are no jobs in cities since there was over-employment in the industrial sector either. It should be born in mind that when compared to East Germany, Lithuania used to be said to have better supply of labour resources.

Therefore at present we are not to sell what we produce but we are to produce what is in good demand. For this we should be expert in market situation, segment the market and choose most favorable segments for allocating our commodities. Besides, commodities should be attractive to consumers, bear high quality and low production costs.

Recently an inclination to cut pig breeding and promote cattle breeding has been felt. But a glimpse to the countries of European Economic Community shows that in 1986-1988 supplies of meat in these countries made 102%, including beef, which accounted for 103-107%, pork for 102-103%. In West Germany beef and veal made 30% of total meat production, pork 59%. Troughout 1972 to 1975 and 1982 to 1985 this percentage made 29% and 58% respectively. In 1962-65 consumption of beaf and veal made 30%, pork 54%; in 1982-85 this percentage made 23% and 60% and in 1988 22% and 60% respectively.

Pig breeding is currently being associated with grain production. It's true that during the last 50 years grain was the basic feed for pigs. By no means it should be forgotten that pigs can consume salvage feeds. In prewar Lithuania potatoes consituted the major part of pig feed ration (until recently when speaking of potato varieties we used to say food, pig and seed potatoes). After all, grain consumed by pigs provide for better weight surpluses than consumed by cattle. Besides, pork processing and storage have better traditions in this country.

Current agrarian reform aimed at private ownership and entrepreneurship will promote division of productive units into small but reasonable ones, form the basis for new agricultural sectors to emerge, make merging of agricultural production and industrial processing easier. This will form the basis for new competitive agricultural commodities. Production of new commodities will be developed.

Current agrarian reform aimed at private ownership and entrepreneurship will promote division of productive units into small but reasonable ones, form the basis for new agricultural sectors to emerge, make merging of agricultural production and industrial processing easier. This will form the basis for new competitive agricultural commodities. Production of new commodities will be developed.

Participation in all three markets will influence the growth rates and structure of production. Plans of economic developement at any cost which were characteristic of previous administrative-command system should be refused. The future agricultural development should be balanced against natural climatic conditions, the damaging impact of agriculture on environment should be reduced.

It should be mentioned that the prewar level of farm products in total exports will hardly be the same. Industrial commodities should prevail in foreign trade structure, these should be the result of high intellectual capacities. The volume of farm products export does not seem to lower quantitavely though its share is likely to fall. This direction should be taken in view of our economical and intellectual potentials and market demand.

The host country was represented by Dr. B. Kuzulis (on the left), Dr. A. Kuodys and Dr. R. Duzinskas, among others.

At the end of the seminar a memorandum was signed, in which, among other things, the participants expressed their high satisfaction with the results of the seminar and with the way the seminar was organized.

STATE REGULATION OF RURAL LABOUR MARKET

A. ALEKSIENE, R. DUZINSKAS AND V. NOVOGRECKAS

Lithuanian Research Institute of Agricultural Economics
Vilnius, Lithuania

Labour market is among the major constituents of market economies. It not only ensures efficient use of labour, but also stimulates economic growth and development of personality, makes the elimination of demographic and social disproportions possible. As yet, it's too early to speak about functioning developed labour market, i.e. free exchange of labour as commodity, in Lithuanian agriculture and in the countryside. Currently the analyses are focussed on the prerequisites and problems of labor market formation, tasks for immediate future, and the results of its functioning are left behind. A number of administrative and economic restrictions on labour force migration, impeding free favourable trade of labour force migration, impeding free favourable trade of labour are still valid. These are namely compulsary registration of a person at a particular location, and constraints of it, under development of the housing system, prevailing state ownership (privatization has just begun) and absence or inadequatness of state labour market regulators. Though a number of laws regulating employment have been adopted already, they can't be effective within the undeveloped infrastructure of labour market. Labour exchanges are, in the process of establishing, they have no clear cut concept and lack information. Besides, additional factors burdening the efficiency of rural labour market are a traditional need for proximity of areas in which people live and work, comparatively poor variety of jobs, more prominent conservatism and sluggishness of rural people, etc. For these reasons first and foremost attention should be drawn to rural labour market formation, and the previous approach to labour resources as agricultural ones should be refused. Unreasonable restrictiveness and administration of labour force migration on one hand and an immediate need for the modern state employment regulation system on the other necessitates discussion on prerequisites and priorities of labour market creation. It might enable us to determine the principles of state presence in this process.

No doubt, the administrative command system forced upon Lihuania impeded its development in many spheres. Nevertheless, some positive influence on regulation of labour force migration can be admitted. The uniform settling system, which had been attempted to introduce in Lithuania two decades ago has been buried in oblivion. In fact, it was due to this system, aimed at limiting large cities growth, evolvement of district centres and even rural settlements distribution, that rational distribution of labour force became possible, migration of rural dwellers slowed down. It is mainly for this reason that the starting position towards labour market establishment in Lithuania is much more advantageous than in other former Soviet republics.

From the point of view of balancing rural labour demand/supply situation the last 20 years were distinguished by shortages of labour force. In some districts these shortages were bad enough to hinder production growth. Like in neighbouring countries the process

of speedy urbanization concurrently with aging of rural inhabitants and drop of birth rate took place. Recently these processes slackened though the demographic situation remains unfavourable from the point of view of labour force reproduction. In the situation characterized by excess labour demand the government policy was directed mainly to stabilization of rural population decrease and training more specialists and rural labourers. In the absence of self-regulation the administrative economy was not flexible enough to adjust production structure, its extent and distribution and adapt itself to labour force supply.

The agrarian reform influences the employment situation radically and in future these changes are to be more prominent. At present it is not easy to make accurate forecast by labour market situation is to develop in the opposite direction, i.e., number of jobs will curtail. In the nearest future distinct demographic processes, including migration, are not likely to occur, and the labour resources will remain on the same level. The rural birth rate is likely to increase and migration from the countryside to towns and vice versum is expected to overlap.

The number of jobs and their structure are most difficult to forecast. These will depend on the process of reforms, changes in production structure, general economic situation, etc. There is one more factor to be mentioned, at the first stage of the reforms the enforced redundancies were limited seeking to avoid high unemployment, irrespective of enterprises' difficult economic situation. It mainly applies to urban enterprises but some rural industries are also concerned.The employers were forced to introduce other measures, such as parttime work, sending workers on unpaid holiday, etc. It has nothing to do with efficiency of labour. Besides, forced limitation of job numbers only increases the potential unemployment, which later might result in major upheavals. Moreover, international financial organizations, i.e. World Bank, Itnernational Monetary Fund, etc., which are potential financial supporters, don't favour such policies either. The current situation makes the government develop employment programmes. These must be oriented towards immediate and low-investment consuming new jobs creation, rational use of present employment opportunities.

The employment situation in the nearest 2-3 years period will be influenced both by the process of the agrarian reform and the production support measures introduced by the government. The abrogation of enforced redundancies limitations should not influence greatly the employment level in direct agricultural production. Abrupt reduction of job numbers is likely to begin after the first stage of reforms is completed, labour efficiency rises, competition starts, small producers go bankruptcy and small-scale farmers merge. These processes are not likely to deepen before 1995.

Some professional groups of rural population are beginning to face employment difficulties just now. Most often it concerns young people, who want jobs they were trained for, people working in infrastructure and retired pensioners. Small towns' inhabitants who were working in service sphere, small industrial enterprises and crafts make another group of risk.

The main principles to be observed in a new crash programme should be as follows:

1. The state must secure establishment of new jobs through stimulating and informative measures. It is the only way to guarantee economic and social efficiency of employment policy.

2. The incentives for jobs creation should not contradict the prospective economic model
and principles of market economy.

3. Abrogation of enforced redundancies limitations should be conducted stage by stage in view of the privatization process.

4. Strategic enterprices with a set number of jobs should be retained in any case.

5. First and foremost support should be given to enterprises using domestic resources and those, whose production is most likely to be in great demand.

6. Investment and support policy should be based on preferential agricultural taxation.

Prospective regualtion of labor market should be based on the Programme of Labor Market and Employment Strategies which is currently in the process of development by some scientific institutions (Labor and Social Studies Unit, Institute of Economics, Institute of Agrarian Economics, Vilnius University, etc). The package of balanced measures within this programme would help to improve rural employment situation. The programme is aimed at ensuring rational employment in Lithuania, based on efficient economy, flexible system of social institutions and legal framework for human rights. These objectives can be achieved through the following measures:

- Short-range and extended forecasts of structural changes in Lithuanian economy, including evaluation of last-period development, new structural policy which is being developed and implemented, market situation and world experience in this field.
- Population employment changes forecast in view of economic structural changes.
- Sociologic studies of employers, employees and the unemployed demands and proposals for their coordination and complying with them.
- Proposals for vocational training and re-training system development.
- Development of labor market regualtion and employment models on the basis of economic, sociologic and statistic information.
- Coding and analysing legal documents on Lithuanian labour market and forwarding proposals on adopting international practice in this field.

MEMORANDUM

The Third Finnish-Baltic Joint Seminar in the field of Agricultural Economy was held on May 26-29, 1992 in Lithuania. The institute of Vilnius hosted agricultural researchers from Finland, Baltic countries and U.S.A. The topic of the seminar was: State Regulation of Agricultural Production. Four researchers from Finland, two from U.S.A., five from Latvia, four from Estonia and eleven researchers from Lithuania took part in the seminar.

Lithuanian participants overviewed agrarian reform in the Republic from legal and organizational points of view. Presentations covered the following issues: procurement prices for agricultural production and the taxaton system, state procurement system as a regulator of production, influence of East and West European markets, regulation of labour market in the countryside.

Researchers from Finland characterized taxation systems in Finnish agriculture, grain production in Finnish Farm policy. Besides, they gave an account of the latest developments of the agricultural structure in Finland, and presented information on efficient farms.

The economists from U.S.A. covered the issues of privatization in agricultural policy, modelling state agricultural policy during the transition period.

Researchers from Estonia overviewed privatization of agricultural enterprises, presented information on taxation in agriculture and the role of local municipalities in the mechanism of privatization.

Latvian participants discussed the following issues: production relations in agriculture, problems of small business and privatization, taxes, pricing and crediting, state regulation of foreign economic activities.

The participants visited the Ministry of Agriculture, the Parliament of the Republic of Lithuania, had meetings with the deputies, members of the Agrarian committee. Other visits included individual farm and agrofirm.

The presentations on urgent problems of the agrarian reform aroused great interest and lively discussions. The participants of the seminar stressed the fact that all post-communist countries are facing similar problems and it is important to study objective regularities of the transition from a planned to market economy.

The delegates came to a conclusion that there is a great need for sharing the experience of different countries and international seminars are of great help.

The coordination of research in family farm problems, market economy-studies, farmers social problems, exchange of information and publications should be given priority.

It was stated unanimously that the traditional Finnish-Baltic seminar should be held further on. Next year 1993 Estonia will host the seminar. The Estonian Scientific Research Institute of Agriculture and Land-Reclamation will prepare the proposal for the program of next meeting in the end of 1992.

The participants expressed their high satisfaction with the way the seminar was organized.

Vilnius, May 28, 1992

Matias Torvela
Representative of the
Finnish delegation

Valdek Loko
Representative of the
Estonian delegation

Aleksandr Pugacevs
Representative of the
Latvian delegation

Stanley R. Johnson
Representative of the
U.S.A. delegation

Raimundas Duzinskas
Representative of the
Lithuanian delegation

STATE REGULATION OF AGRICULTURAL PRODUCTION

The Third-Finnish Baltic Joint Seminar

Time: May 26-29th, 1992
Place: Lithuanian Research Institute of Agricultural Economics, Kudirkos str. 18, Vilnius, Republic of Lithuania

Program

Tuesday May 26, 1992

08.00	Breakfast
10.00	Meeting at the Ministry of Agriculture of the Republic of Lithuania
13.00	Lunch
14.30	Meeting with the Deputies of the Supreme Council of the Republic of Lithuania
16.30	Sight-seeing tour round Vilnius
19.00	Dinner

Wednesday May 27, 1992

08.00	Breakfast
09.00	Opening Remarks
09.10-09.40	Lithuanian Agricultural Reform: Legal and Organizational Aspects Dr. B. KUZULIS Lithuanian Research Institute of Agricultural Economics
09.40-10.10	Privatization in Policies for Agriculture Prof. S.R. JOHNSON CARD, Iowa State University
10.10-10.30	Break
10.30-11.00	Problems of Privatization in Estonian Agriculture Dr. V.LOKO Estonian Scientific Research Institute of Agriculture and Land-Reclamation

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Time-limit: Each speaker is allotted 20 minutes for presentation and 10 minutes for discussion.

11.00-11.30	(Problems of Improving Production Relations in Agriculture of Latvian Republic Dr. D.ROMANOVS Latvian Scientific Research Institute of Agricultural Economics)
11.30-11.50	Break
11.50-12.20	Privatization and Problems of Small Business in Latvia Dr. A.PUGACEVS Latvian Scientific Research Institute of Agricultural Economics
12.20-12.50	Features of Efficient Farms in Finland Dr. M.PUURUNEN Finnish Agricultural Economics Research Institute
13.00-14.00	Lunch
14.00-14.30	Last Development of the Agricultural Structure in Finland Prof. M.TORVELA Finnish Agricultural Economics Research Institute
14.30-15.00	Modelling Government Policy for Agricultural markets in Transition Prof. W.H.MEYERS, CARD, Iowa State University Dr. N.KAZLAUSKIENE, Lithuanian Research Institute of Agricultural Ecnomics
15.00-15.20	Break
15.20-15.50	Grain Production in Finnish Farm Policy MSc O.ALA-MANTILA Finnish Agricultural Economics Research Institute
15.50-16.20	(The Role of Collective and Family Farms in Providing Population with Food-Stuffs Dr. T.AKKEL Estonian Scientific Research Institute of Agriculture and Land-Reclamation)
19.00	Dinner

Thursday May 28, 1992

08.00	Breakfast
09.00-09.30	Taxation and Credit System in Finnish Agriculture MSc J.IKONEN Finnish Agricultural Economics Research Institute
09.30-10.00	Latest Reforms in Procurement Prices and Taxes in Lithuanian Agriculture Dr. G.KULIESIS, MSc. I.KRISCIUKAITIENE, Dr. A.STADNIKOVA Lithuanian Research Institute of Agricultural Economics
10.00-10.20	Break
10.20-11.20	Taxation of Agriculture Enterprises in Estonia in 1991 Dr. E.KOIK Estonian Scientific Research Institute of Agriculture and Land-Reclamation

10.50-11.20	State Procurement as an Economics Reculator in Transition Period Dr. L.KALINAUSKIENE, MSc. O.ANAPOLSKIS Lithuanian Research Institute of Agricultural Economics
11.20-11.40	Break
11.40-12.10	Basic Issues of Privatization of Agricultural Enterprises: Different Approaches in the Republic of Latvia MSc. A.MIGLAVS and MSc. R.ZILE Latvian Scientific Research Institute of Agricultural Economics
12.10-12.40	(The Role of Local Municipalities in the Process of Privatization Dr. A.ALMAN Estonian Scientific Research Institute of Agriculture and Land-Reclamation)
13.00-14.00	Lunch
14.00-14.30	The Role of the Government in Pricing, Taxing and Crediting Individual Farms MSc. B.ARNTE Latvian Scientific Research Institute of Agricultural Economics
14.30-15.00	Lithuanian Agriculture Under the Influence of Eastern and Western European Markets Prof. A.POVILIUNAS Lithuanian Research Institute of Agricultural Economics
15.00-15.30	(State Regulation of Foreign Economic Activities in Latvia Dr. T.GIRGENSON Latvian Scientific Research Institute of Agricultural Economics)
15.30-16.00	State Regulation of Rural Labour Market A.ALEKSIENE, Dr. R.DUZINSKAS, V.NOVOGRECKAS Lithuanian Research Institute of Agricultural Economics
16.00-16.20	Break
16.20	Adoption of Memorandum
19.00	Dinner

Friday May 29, 1992

08.00	Breakfast
08.30	Departure for Kaunas Field trips to farms
13.30	Lunch
15.00-16.00	Sight-seeing tour round the city of Kaunas
16.30	Visit to the Ethnographic Museum in Rumsiskes
20.00	Dinner in Vilnius

Saturday May 30, 1992

08.00	Breakfast
09.00	Departure

Appendix 2

STATE REGULATION OF AGRICULTURAL PRODUCTION
The Third Finnish-Baltic Joint Seminar in Vilnius, May 26-29, 1992

List of Participants

FINLAND:
Finnish Agricultural Economics Research Institute
Prof. M. Torvela
MSc J. Ikonen
Dr. M. Puurunen
MSc O. Ala-Mantila

ESTONIA:
Estonian Scientific Research Institute of Agriculture and Land-Reclamation
Dr. V. Loko
Dr. E. Koik
Dr. J. Kaubi

LATVIA:
Latvian Scientific Research Institute of Agricultural Economics
Dr. A.Pugacevs
MSc. B. Arnte
MSc. A. Miglavs
MSc. R. Zile

USA:
CARD, Iowa State University
Prof. S.R. Johnson
Prof. W.H. Meyers

LITHUANIA:
Lithuanian Research Institute of Agricultural Economics
Prof. A. Poviliunas
Dr. R. Duzinskas
Dr. B. Kuzulis
Dr. G. Kuliesis
Dr. A. Stadnikova
Dr. L. Kalinauskiene
Dr. N. Kazlauskiene
MSc. I. Krisciukaitiene
MSc. O. Anapolskis
MSc. V. Novogreckas

Interpreters:
R. Sustaviciute
K. Sadauskas

Maatalouden taloudellisen tutkimuslaitoksen julkaisuja
Publications of the Agricultural Economics Research Institute

No 47. THE ECONOMY OF CROP PRODUCTION. The fifth Finnish-Hungarian-Polish seminar on agricultural economics Finland, June 13-16, 1983. 182 p. Helsinki 1983.
No 48. HEIKKILÄ, A-M. Perheviljelmän koko ja viljelijäperheen toimeentulon lähteet. Summary: The size of family holdings and the sources of farm family income. 95 s. Helsinki 1984.
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