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CASE STUDY ON THE ORGANIZATION AND MANAGEMENT OF AGRICULTURAL SERVICE FOR SMALL FARMERS WITHIN THE CONTEXT OF THE EVOLVING POLITICAL AND ECONOMIC STRUCTURE OF LATVIA

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INTRODUCTION

The present study has been carried out within the framework of FAO complex project "Case Study on the Organisation and Management of Agricultural Services to Small Farmers within the Context of Evolving Political and Economic structures of Selected Eastern European Countries".

In the post-socialist countries where political and economic restructuring is in progress in agriculture and in rural areas, the lifestyle in the countryside, the organisation of agricultural inputs and services, their institutional structure (directed towards decentralisation), supply and demand of services are undergoing radical changes.

The purpose of the study was to characterise the course of development of this process in case of Latvia; to analyse reforms in services to small farmers, to synthesise recommendations for simple measures to be taken to achieve prompt improvements, as well as to prognosticate strategic development of services for future. The traditions, economic and other peculiarities were also taken in consideration.

The case of Latvia, as to the subject of the study, has certain peculiar features (if compared with other Baltic countries and most of East European countries):

1. In Latvia agrarian reform is proceeding at a quicker pace than reforms in other branches of national economy and also quicker than in the neighbouring countries. The proportion of individual farmers has increased almost by 10 times during the last two years, but collective farms (with few exceptions) will cease to exist as agricultural producers in 1993. Formally, they have another legal status already now;

2. On December 10, 1991 the government adopted a decision on price liberation; it also gave up the system of socialist distribution of resources. During one year the existing input and service organisation for farmers was dismantled; however, also the horizontal and vertical integration and co-ordination between service structures was lost;

3. Psychologically, during 1992 the farmers' attitudes towards service offer have changed essentially. As the supply is sufficient, the only motivation for choice is the price of the input or service.

From the above said, the results of the study could serve as recommendations for the formulation and reorienting the government policies and programmes in agriculture. They could be also used by the new Latvian government which will be elected in June, this year.

The study is based on empirical evidence obtained from small farmers and their associations at different levels, as well as from state, co-operative and private structures providing services and supplying inputs to farmers. The conceptual projects worked out at the Latvian State Institute of Agrarian Economics were employed in the study.

I. GENERAL SURVEY OF GEOGRAPHICAL, SOCIO-ECONOMIC AND LEGAL ENVIRONMENT

1. Geographic Survey

Latvia is one of the three Baltic countries located on the eastern shores of the Baltic Sea. The country borders with Estonia, Russia, Belarus, Lithuania. The total area is 6459 thousand ha, 2567 thousand ha of which is agricultural land. 2803 thousand ha are covered with forests, and 1089 thousand ha are other lands and water. The acreage of agricultural lands has considerably decreased if compared with the pre-war period (See Figure 1). About 1 million ha have turned into swamps, forests or shrubbery, or have become urban territories. The surface of Latvia is slightly undulating. The soils are mainly sod podsolic, sod gleysolic and gley, their fertility is considerably inferior to that of the best soils of West Europe (the Netherlands, Belgium, West Germany).

Latvia's mineral resources are limited to peat, dolomite, limestone, gypsum, amber, gravel, sand and clay. There are no fuel sources other than peat. Approximately 50 percent of Latvia's electricity requirement is imported (mostly from Estonia). Latvia has to import all the oil, gas, steel, coal, non-ferrous metals, chemicals etc. it requires.

Latvia is geographically advantageously situated in the cross-roads of sea, railway, and air routes. It has three ice-free sea ports, a well-developed network of railway and roads. The territory is divided in 26 districts, the smallest territorial unit is pagasts, usually the territory of former collective farm coincides which its borders. Apart from Riga, the other major cities are Daugavpils, Liepāja, Jelgava, Valmiera, Jūrmala.

2. Demography, Labour Resources

The total number of population is 2.65 million (1992), 69,8 percent of which is urban, with approximately one third of the entire population concentrated in Riga, the capital of Latvia.

Only little more than a half (52 %) of population is Latvian. Another major ethnic group is Russians (34 %), the rest consisting of Byelorussians, Ukrainians, Poles, Lithuanians and others. In 1992 the ratio of females to the total urban population was 54%, to the total rural population it was 52%. 1,5 million of the population is at working age: males 16-59 (51,5%) females 19-54 (48,5%). The level of demographic load (population under and over working age per 1000 of working age) is 780 in average. The data about labour force in national economy indicate a tendency to a decrease of population employed in state sector with a simultaneous increase in private sector. According to different approaches, 16 to 18 percent of the entire population are agricultural producers.

Traditionally, there has been a shortage of labour in Latvia, but in the last two years employment and vacancies have declined significantly; this only resulted, however, in open unemployment in late 1991. By the end of 1992 unemployment rate was 2,3% with a tendency to increase. A law on employment, providing for retraining as well as unemployment benefits, went into force in early 1992. Unemployment will be endemic, possibly rising to some 10 percent of the work force.

The monthly minimum wage in December 1992 was 1500 LVR, the average wage in state sector about 8000 LVR.

The unemployment benefit is paid at a rate corresponding to 90 percent of the minimum wage for a period of six months. There are no provisions for payments of benefits beyond the six-month period.

The income of population in real terms has decreased by 36% in 1992 (compared with 1991) which has led to a low purchasing power. According to family budget survey, by the end of 1992 the income of 56-58% of population was below the crisis "consumer-basket"(approximately 5 thousand LVR). More than a half of a family budget is spent on food, thus in 1992 the ratio of foodstuffs in total retail sales constituted 55% (from 37,3% in 1991). Nevertheless the consumption of dairy products has declined by 18%, of meat products - by 13%, of eggs - by 6%, with a simultaneous increase of bread and cereal consumption by 10%.

Though current Baltic income levels are less than 10% of the in nearby Nordic countries, Latvia and the other Baltic countries still maintain higher living standards as if compared to other republics of the former Soviet Union. They also have the advantage of more skilled labour force.

3. An Economic Overview

Latvia has a mixed economic profile with a strong bias towards agriculture and heavy industry (see Table 1).

The Soviet system stifled the evolution of a service sector, in preference to a concentration on industrial production. Having successfully gained political independence, Latvia is now facing with the task of restructuring its economy and reducing its economic dependence on the former Soviet Union.

The energy shortage initially had a limited impact on industrial output, which was unchanged from 1990 to 1991, but real gross domestic product (GDP) fell significantly as activity in the construction and services sectors contracted sharply and agricultural output declined. Several price reform measures were introduced during 1991 and, as a result, annual inflation reached more than 300 percent by the end of the year. Price liberation, together with a very cautious expenditure policy, had a strong positive impact on budget.

Real GDP, which was 22,305 million LVR in 1991, is estimated to have declined by about 8%in comparison with 1990.The recent developments in 1992 indicate a deepening of economic recession. The inflation has been continuing to grow, (see Figure 2). GDP has decreased by 40%, the majority of decline is constituted by the industrial and services sectors. The worst situation is in industry, where the decline was 35% in average and as much as 50-70% in the enterprises closely linked with the military industrial complex of the former Soviet Union. The recession in industrial production became conspicuous after the introduction of Latvian interim currency in May, 1992. Initially the exchange rate to Russian rouble was 1:1, however, due to the sky-rocketing inflation rates in the former Soviet Union Republics the Bank of Latvia introduced differentiated exchange rates for the "soft" currencies. The result is poor marketing possibilities of Latvian products in the CIS countries; they are unattainable for the consumers as to their price, because their purchasing power is continuously decreasing. The situation in the Russian market will be still aggravated by the import and export customs duties introduced by Russia in early 1993.

The situation in agricultural production was slightly more promising. The average decrease during the year 1992 was 12%. It should be pointed out that there is a trend to production increase in private sector. It contributed 40% of aggregate agricultural product, which splits up in 25% produced by small part-time and subsidiary farms, and 15% produced by individual farmers. From the 50,000 entrepreneurs registered as individual farmers the actual number of producers is about 40,000 at best, because many of them were established only in the second half of 1992.

4. Agriculture

The current complicated situation in national economy is outspoken also in agriculture. During the period of planned economy the sectoral structure of national economy was distorted. This is very much true as to agricultural sector. It was being intentionally overdeveloped with a strong emphasis on dairy and meat production, the main target was to increase exports to the Soviet Union. At the same time farm inputs, especially feed grain, fertilisers, as well as agricultural machinery were supplied in abundance and at a very low price.

After proclaiming independence and making efforts to get it politically and economically, Latvia has to re-orient its agriculture on self-sufficient basis with a little surplus for export. This may involve also a liquidation of excess capacities and reduction in output, which is painful for national income.

The agricultural year of 1992 has been dramatic for agricultural producers. Agriculture started to experience difficulties already in 1990 when the prices of industrial products were partly liberated and increased considerably, whereas the prices for agricultural products were fixed. The agricultural producers were put in an extremely disadvantageous situation. An the end of 1991 and later in 1992 prices on agricultural products were also partly liberated. This means that producer prices on primary agricultural products were negotiated every 10 days between the representatives of producers, processors and government. The government also guaranteed a minimum producer price for the primary agricultural products. These prices could vary considerably from one district to another. For example, the producer prices for cattle were 20,000 LVR per ton in Liepāja and 42,000 LVR per ton in Saldus; for pigs - 95,000 LVR per ton in Ludza, Gulbene, Alūksne, Balvi and 135,000 LVR per ton in Saldus. The wholesale prices (set by the processing plants as there is no real agricultural commodity exchange in Latvia) may also differ from place to place. Thus, at the same time period the processing plant in Cēsis sells beef for 58 LVR per kg, while the plant in Riga sells at the highest price in the country (100 LVR per kg). However, the costs of farm inputs and labour have increased in average by 27 times if compared to 1990 (by 31 times for crops, by 26 times in livestock farming), whereas the producer prices for the same period have increased only by 14 times in average (by 77 times for crops, by 12 times for livestock (see Figure 3 as to increase in energy prices and Figure 4 as to increase of producer prices).

A further significant price increase on agricultural products is restricted by lack of demand both in domestic markets and in the markets of former Soviet Union republics, caused by the low purchasing power of population. Besides, in the Eastern markets our agricultural products cannot compete as to their price, because Latvian farmers purchase most of their inputs at market prices close to or equal to world prices, and without any subsidies, while agriculture in the former Soviet Union territories is strongly subsidised. The actual situation in 1992 is that crop production in Latvia has been operating with profit (the government of Latvia purchased grain at world prices) but livestock production has incurred losses of 14 billion LVR.

All farmers suffer from chronic shortages of finance. The farmers who have already started to produce need short-term credits which are available only at commercial banks at a very high interest rate (120%-180%). Long-term credits are not available at all. The situation is made even more complicated by the delayed payments to the farmers for the farm products they have delivered to the large processing plants. The delay often is as long as 2 to 5 months.

The lack of economic incentives, objective and subjective difficulties have led to a decrease in production of all primary agricultural products (production of meat has decreased by 15%, of milk - by 12%, of eggs - by 20%), especially this is true to livestock farming where herds are being reduced. The situation is not uniform with different types of agricultural producers. The private sector has been gaining momentum. Its contribution to total agricultural output is 40% in average (49% of milk, 40% of meat and 20% of eggs, see Figure 5). The decrease of production in 1992 was 12% for agriculture in general, 25% in joint-stock companies, while there was a 10% increase in the private sector.

If compared to other Baltic countries, the situation might not seem so threatening (see Table 2).

5. Short overview of Legislation on Agrarian Reform

In 1990, when the independence of the Republic of Latvia was partly restored, the Supreme Council passed a decision to carry out the Agrarian Reform. The issues to be solved by legal acts could be grouped as follows:

(1) Land reform:

- “On Land Reform in Rural Areas";
- "On Land Privatisation";
- "On State Land Survey";
- "On Land Title Register".

(2) Privatisation of agricultural production, service and processing enterprises:

- "On Privatisation of Agricultural Enterprises and Collective Fisheries";
- "On Privatisation of State Dairy Processing Enterprises";
- "On Privatisation of State Agroservice Enterprises";
- "On Privatisation of Meat Processing Enterprises".

(3) Change of management system and economic relations in agrarian sector.

5.2. Historical Background of Agrarian Reform and of the Traditional Understanding of the Concept Small Farmer

Collective farming has never been a tradition in Latvian history before 1940, and its adverse consequences must be comparable to those in other post-socialist countries. During the period of Latvian independence (1918-1940) a land reform was carried out, which made the landowner the main user of the land (see Figure 6). The experience of renting and tenancy was not widespread.

During the first agrarian reform there were two types of individual farms: old farms, usually larger in size and richer, for their history reaches as far back as the end of the 19th century; these nearly always employed farm labourers; and newly created farms, which came into being in the period of first agrarian reform of the Republic of Latvia. Their average size was 22 ha (see Figure 9), except for the Eastern parts of Latvia, where some of the population was of Slav origin and traditionally lived in villages. This was a problem for the agrarian reform, because the newly established farms there in most cases were less than 10 ha in size. There were also craftsmen's farms (4 to 5 ha), where the main income source was craftsmanship, and additional income was originated by farming: in most cases the income was in kind, i.e. agricultural products for family needs.

Usually, in the farms above 40 ha the owner of the farm worked himself together with his family members, as well as some hired labour was employed.

This was the traditional understanding of a "small farmer" from the times of the first agrarian reform in Latvia; and, to some extent, it has been carried over to nowadays.

After Soviet occupation in 1940 and mass collectivisation in 1949-1950 all the land became state property. Agricultural production was made more and more public, the major producers were collective and state farms. There was a policy to move the residents of the traditional farms, scattered throughout the country, to villages. However, individual producers still contributed to the agricultural product. The collective farmers typically had a small subsidiary or "part-time" farm: 1-2 milk cows, a couple of pigs, poultry and very limited land plot not exceeding 0,2 ha (occasionally it was allowed to use the land not farmed by the collective farm) . The contribution of this so-called "individual sector" was rather significant in some types of products:

potatoes	62 % of total production;
vegetables	45 %;
meat	27 %;
milk	29 %;
fleece	68 %;
honey	67 %.

5.3. Land reform.

Before the 1990 land reform (all the land was nationalised) the main land users were collective and state farms (see Figure 7) The peculiarity that before occupation the landowner in majority of cases coincided with the land user, which definitely bear also a political connotation, determined the procedure of land reform:

(1) A partial restitution, retaining some of the present land users (1990) as potential landowners.

(2) At the first stage of land reform, claims for land use are being accepted, including those from former landowners. The deadline for putting land into use is November 1, 1996. The total balance of land claims is as follows:

- collective farms and state farms have petitioned for 2,7 million hectares. This includes 74 percent of the acreage these farms are using at present or 43 percent of the land subject to reform;
- seventy-seven thousand individual farms have reserved land for 1996, with total acreage of 1,8 million hectares. Thirty-five thousand individual farms have requested land for 1992 in order to establish medium-sized (24-hectare) farms, with total acreage as high as 607,000 hectares;
- one hundred thousand subsidiary plots have been requested, with total acreage of 616,000 hectares. The average size of a subsidiary plot is 6 hectares.
- one hundred thousand plots for home workshop needs have requested, with total acreage of 240,000 hectares, the average size is 2,4 hectares;
- the former landowners, or their heirs, number 101,000 or 36 percent of all land petitioners. City dwellers number 29,000 or 29 percent, (mostly in the United States, Canada, Sweden, and Germany) with 1,400 or 2 percent living abroad.

(3) At the second stage, which starts from January 1, 1993, ownership to land is established, based on the land survey documents; and land market with selling and buying should begin.

The guideline for the land reform was to create a framework of land ownership where, in most cases, the land user is the same person as the landowner.

On July 9, 1992 the Law "On Land Privatisation in Rural Areas" was passed. It was a logical sequence of the Law "On Land Reform", adopted on November 21, 1990. The latter contained regulations for a gradual restructuring of legal, social and economic relations in the countryside as to land use and ownership. It established the procedure for carrying out the land reform, defining the provisions for submission of land claims and complying with them; as well as regulations for restitution of landowner's rights.

The Law "On Land Privatisation in Rural Areas" stated the former landowners' rights to their landed estate provided they had submitted their applications before June 20, 1991. However, there were some exceptions if the land had been allocated for a permanent use during the first stage of land reform.

The reason why privatisation in rural areas is being carried out in two parallel and closely linked ,yet independent directions, is rooted in establishment of collective farms back in the 1940-ies: all the land became state-owned, whereas all the other assets became collective-farm owned. Though collectivisation as such was recognised to be illegal, its fruits - collective and state farms - were not evaluated to be in the same status, even after independence was proclaimed, therefore they should comply with the Law "On Privatisation of Agricultural Enterprises and Collective Fisheries" (adopted on June 21, 1991). As in agriculture land is, in fact, the main asset, these laws came in confrontation and, in real life, actually in contradiction to each other. As the law regulating the first stage of land reform was adopted before the Law "On Privatisation of Agricultural Enterprises and Collective Fisheries" regulating privatisation of assets ,there were instances when Land Commissions had allocated land to the former owners or to new users (mainly for establishment of new individual farms), and the production units envisaged for privatisation (most often livestock-farms) were left with no land. Actually this means their operation in future is impossible.

The Supreme Council has adopted several amendments to the laws with the goal to rectify the errors. However, the courts are often incapable of adequate control as to fulfilment of their verdicts. There have been several occasions when the local government and authorities have disobeyed the court decision, thus violating the law, and there have been no consequences.

The Law "On Land Privatisation" stipulates that the joint-stock or limited liability companies (the former collective farms) have the right to use their land for 5 years. However, when a stockholder privatises e.g. a livestock-farm, there exists an immediate risk of losing the land attached to this farm, because in most cases former landowner's rights are restituted. Due to objective and subjective reasons there is not yet land and rent market in Latvia (symbolic land and property taxes etc.). So it may often happen that a farmer full of entrepreneurial spirit, who buys, for example, a dairy-farm with 100 cows, has no real possibilities for raising feed.

The structure of land users has changed:

- at the end of year 1992 there are about 49 000 farmers in Latvia, with average acreage of 16.5 ha, which constitutes 19 % of agricultural land;
- 20% of agricultural land is being used by companies;
- according to the data of the local land commission, there will be 103,5 thousand subsidiary plots.

There is also a technical problem that hampers the establishing of ownership rights in the proper sense of the word. Though formally the Law "On Land Privatisation" allows to fulfil the formalities connected with land ownership, only in December of 1992, a law on establishment of State Land Service was passed (it is under the command of Government and will have to deal with confirmation of ownership rights for people who already are given the land use rights according to the rule). At the same the Law about Land Title Register was revived - it is under the command of Supreme Court , and its task is to register changes in ownership. In fact the offices of Land Title Register were set up only after April 1, 1993, and the first land title was registered on May 31, 1993.It is envisaged that the process might take a lengthy time.**Privatisation of Agricultural Production, Service and Processing Enterprises**

The law on privatisation of non-land assets of agricultural enterprises (collective and state farms) came into effect on July 1, 1991. As this was the very first privatisation law not only in agriculture, but in national economy in general, we can already feel the results: in Latvian national economy the highest ratio of private sector is in agriculture

Taking into account this contradictory legal status of present day Latvia and the political, socio-economic, and demographic situation, the law "On Privatisation of the Agricultural Enterprises and Collective Fisheries" contains the mechanisms to regulate the privatisation process so that it can respond to various aspects of the problem. There are seven economic principles of this law:

1) While changing the character of entrepreneurship and ownership in agriculture, it is necessary to maintain existing production capacities;
2) The principle of publicity should be observed when the property of an enterprise is being privatised;
3) The transition from collective (with limited liability) business activities to private businesses (farms and service enterprises) must be gradual;

4) Because collectivisation is illegal, it is admissible, to buy out the property of agricultural enterprises on calculated parts of the capital, called shares, with the current currency and other means of payment;
5) Specific items of collective farm property (tractors, cattle, and buildings) can be obtained through private ownership if the holder of the shares 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;
6) A shares is a means to get, free of charge, property to start entrepreneurship, and not a way to make consumer payments. It is possible that, in the process of privatisation, the shares of those who do not want to start private business activities can lose their initial face value;
7) Guaranteed rights are given to all shareholders to obtain or to participate in a closed auction (if there are other applicants) when a technically or technologically integral item is being privatised.

After March of 1992 which was the deadline for all the collective and state farms for changing their legal form and being registered as a company of some type, these enterprises entered the second stage of privatisation.

During this stage a shareholder of a company could alienate, by paying with his shares, any single or combined item from the inventory list he wished to acquire. The shareholders could also freely trade their shares among themselves. Within a month's time after public notification other shareholders could also apply for the same objects, and often the new owner was determined in the auction. The company had no rights whatsoever to alienate the object for actual privatisation.

Thus by October 1992 about 15% of companies' assets were actually privatised. According to unofficial estimates by Statistics Committee, by January 1, 1993, 25-30% of companies' assets might already be privatised.

By October several companies had undergone liquidation, and the large enterprises had ceased to exist as legal entities. The agricultural producers in these pagasts are individual full-time farmers, part-time farmers, service enterprises on co-operative basis (mechanical stations, grain-dryers etc.) owned by farmers, as well as some limited liability companies owned by few members. In most cases the latter are the owners of middle-size livestock-farms.

The objects of the above study, i.e. the mechanic workshops, machinery and vehicle pool, storehouses, grain-dryers, woodworking shops and like, which formerly belonged to collective or state farms, are subject to some special provisions stipulated by the law on privatisation of enterprises. The main idea was that the above listed production units should become service partners for the farmers, located the closest possible to their farms.

The essence of these special provisions are:

- the production units that render services to agricultural production, may be alienated (privatised) only by co-operatives, which are founded by the shareholders of the company interested in the particular services.

The law of the Republic of Latvia on co-operatives slightly differs from similar laws or acts of Western countries. One of the contradictions within the law is that the members of co-operative are allowed (and they do so) to participate with capital investment of unequal value, i.e. they invest a varying number of shares in order to alienate the particular production unit for co-operative use. However, they have equal power in voting (as in a classic co-operative).

It should be noted that the appearance of new co-operatives, based on the production units of the former collective (state) farms, is very scarce in Latvia. Actually, this has happened only on separate occasions. Typically, the production units rendering services still remain a property of former collective farms (now companies). The reasons why those service units, located at a convenient distance from the farmer, have not become the property of a farmers' co-operative or a farmers' association, are of psychological nature, and are rooted in lack of information and knowledge:

1. The farmers in a pagasts who are pioneers in property alienating, e.g. of a grain-dryer or a of a service-station, for co-operative use , find it difficult to persuade sufficient number of individual full- or part-time farmers, i.e. shareholders, that they invest their shares in co-operative property;

2. The hobby - farmers , their full-time job being in the company, are interested in retaining the service production units in the legal possession of companies. They speculate on the possibility of receiving the necessary services unofficially, e.g. from a company tractor-driver. These farmers are reluctant to see any structural changes in the pagasts;

3. Psychologically the concept "co-operative" is closely associated with the concept "collective farm", and this is what the farmer would very much like to avoid;

4. Many farmers find it difficult to get accustomed to the fact that the major income source for his co-operative would be his own payments. He would like these to be next to nothing, which is impossible for co-operative, which must operate, in the worst case, without losses.

In case no co-operative is founded to privatise a production service unit, but a company is under liquidation, private businesses are being established. Often they are perceived by the farmers as local monopolists who dictate too high prices for the services they are rendering.

The rapid privatisation of collective (state) farm assets and production units causes considerable structural changes in the service sector in rural areas.

In *dairy processing* the small dairies, creameries and milk collection stations since July 1992 can be obtained free of charge by the local dairy producers' associations. However, this has not happened too rapidly. In December 1992 a law "On Privatisation of Dairy Processing Enterprises" was passed concerning the privatisation of 10 largest dairy plants by transforming them into joint-stock companies, with certain quotas set for the purchasers of stock: not less than 70% for the dairy producers' associations; not more than 10% for the employees; up to 20% - the state share , which will be subsequently sold to the investors and for vouchers. As the deadline for this process is after 7 months, the producers are compelled to establish local dairy producers' associations in 2 to 5 months.

The law "*On Privatisation of Agroservice enterprises*" has been passed. Its essence is to sell the state capital in proportion to business done with the enterprise; the law also provides for restructuring the enterprises. As to privatisation of the large meat-processing plants (14 in Latvia), the law "On Privatisation of Meat Processing Enterprises" has been adopted. It is envisaged that capital will be sold on business-plan competition basis or in auctions to those entrepreneurs who will be willing to buy.

From the above said, there is a disproportion in rates of privatisation between agricultural production and the other parts of food chain (processing, services, marketing). The task for the nearest future is to equalise these rates. According to experts, the future projections for agriculture might be as in depicted Figure 8.[1]

[1] The trend was evaluated by researchers from the Latvian State Institute of Agrarian Economics: A.Miglavs, R.ZÄle, A.Bondars and others, in the course of work on privatisation part of the strategic Plan for Development of Agriculture in Latvia. The experts proceeded from the following criteria:
1. The current situation - according to statistical data and by determining the weights of different resources (land, buildings, machinery);
2. Projects for future:
- developments in legislation regarding privatisation in different agribusiness branches;
- variance in the contents and essence of privatisation laws for different agribusiness branches;
- evolution of motivations for different privatisation subjects (survey data);
- the stability of parastate structures in some agribusiness branches.

II. OPERATIONAL DEFINITION OF SMALL FARMER IN CASE OF LATVIA.

A special explanation might be relevant. What is understood by the term "small farmer" in this study. Our interpretation of the term "small farmer", which is not officially used in Latvia, is a point of view expressed by a group of scientists and may be of subjective nature.

A historical background given in chapter 5.1. could be helpful in understanding the term "small farmer".

Definitely, what we understand by small farmer today, is not a group of land-owners or land users classified according to acreage of land. We consider that the approach from the point of view of hired labour would be more appropriate: that is, who uses family labour and hires some seasonal workers. The small farmer may be full-time or part-time. If we do not use the acreage criteria for defining "small farmer", it enables us to detect their specialisation in a particular crop or animal, though at present there are very few farmers in Latvia who have really specialised in one or another branch of agribusiness.

The agricultural producers in Latvia can be grouped as follows.

1) Companies established on the basis of former collective farms. They have changed their ownership status; private entrepreneurs, including farmers, have alienated their property; yet they have retained the management system of collective farms.
2) Private entrepreneurs (either individuals or small groups of 25-30 people forming companies), who have alienated the large production units from companies. Their business is clearly market-oriented, with the aim to make quick and large profits. The labour force there is either the co-owners, or hired labour.
3) Minor agricultural producers - the owners of small individual and subsidiary plots, who produce mainly for family needs (and small quantities for the market). Some of them can be regarded as hobby-farmers, i.e. farming is not their main income source. Technically, this group is part-time farmers. A part of them might develop in profitable farmers.
4) "Small farmers", that is individual farmers

- who have sufficient land or property to at their disposal develop agricultural business as the main income source for family;
- who may take some part-time jobs, mainly off the agricultural season;
- hired labour is not dominant in their farms;
- farming is also a lifestyle (or is becoming a lifestyle);
- they have not set feeding of their families with vegetables, fresh, milk and meat as the sole target for agricultural production.

It is true that many producers falling under group 3 have several features of "small farmer". Actually it may be considered there are no strict borders between the 3 rd and 4 the group of farm producers. However, there is no reason for regarding all the producers from group 3 as small farmers - majority of them do not produce for market; do not develop any specialisation (e.g. horticulture) that would be subsidiary plots and home workshop plots are part-time farmers, their full-time job being with the joint-stock companies. Their main interests lie in:

- preserving the joint-stock companies, because these provide them with means of subsistence, which occasionally are raised even by stealing company's property;

- subsistent and new-specialised farming, which, in the crisis period, means just feeding their families with primary foodstuffs produced at farm.

The further existence of this group is in jeopardy owing to privatisation of companies and differentiation of pagasts residents:

- some become "small farmers", in our understanding of the term;
- some start service business; a part of these individuals will temporarily continue farming in the subsidiary farms;
- some, mostly the village residents, will be in real trouble in case of unemployment, because the small land-plots they are using (mainly kitchen-gardens) are located within some distance from their apartment buildings, they farm them inefficiently, the issue of manure to be used as organic fertiliser cannot be solved in principle and the mineral fertilisers are too expensive. So their product will not be able to compete with that of small farmers and of other individual producers even at pagasts level.

Apart from that, at present there is no difference as to access facilities to inputs for any group of farm producers. As to output services, the processing enterprises settle the delayed payments with subsidiary farmers in the very last turn, after all the other agricultural producers have been paid.

Even, if in the future the government or farmers' associations work out a model for a world market-oriented, specialised production (e.g., organic products, mushrooms, berries etc.), then today's small farmers will have better chances, as they most often are country people full of initiative, profit-oriented and having know-how of efficient farming.

The understanding of this concept will be dynamic in Latvia.

With the development of payment and credit system, with continuing process of privatisation of companies, with establishment of real estate market and other factors the differentiation of farmers will take place, and a demand for another, perhaps, a very precise definition of "small farmer" may arise.

III. SUPPLY OF INPUT AND OUTPUT RESOURCES AND SERVICES, AND MARKETING POSSIBILITIES TO THE SMALL FARMER

1. General description

The situation in 1992 and at the beginning of 1993 varies considerably from supply of one resource or service to another. This is the reason why each particular service or resource will be analysed separately, the focus being on the following specifications:

- description of the supply structure from the institutional point of view (state, co-operative, private);
- state functions in the support to small farmer;
- description of the current market situation and the trends for future (prices, network of supply etc.);
- the current situation and projections as to privatisation of state structures, farmers' co-operatives;
- characterisation of horizontal and vertical co-ordination;
- typical systems in resource delivery.

After carrying out a dynamic analysis of service supply (from 1988 to the beginning of 1993), the following conclusions can be drawn:

(1) During the five years the situation in the field of services has changed in principle. From next to 100% services rendered by state institutions (a small part by collective or state farms) the evolution has led to actually a zero share of state institutions in some services;

(2) The supply of services has changed from "fund allocation"- a methodology of socialist planning and supply- to the demand-supply principle functioning in market economy; however, it should be admitted that this principle still works in a somewhat chaotic way;

(3) In choosing one or another resource or service, the main limiting factor for the farmer is its price. It is made still more significant, because of the regularly delayed payments to farmers; because of the output prices for several products, at the present level of labour productivity in agriculture, do not cover the production costs; because since 1992 credits are unavailable to the farmers owing to the high (120% and more) interest rates, which is unacceptable for agricultural producers;

(4) The majority of former state service enterprises have been converted into leasehold enterprises. Their founders are the present and former state officials engaged in the same field of service and have all possible kinds of private connections. These "semiprivate" enterprises typical for all post-communist countries, on the one hand, seemingly, increase the supply; on the other hand, they are trying to retain their monopolist position;

(5) Farmers' co-operation in service and processing is extremely weak. The reasons are mainly of psychological nature: the desire to operate on one's own after many years of collective farming, and the inadequate information about the essence of true co-operation;

(6) After having lost the "state prices" and "funded resources", the small farmers have no privileges as against other agricultural producers. The only exception is the priority in receiving the delayed payments from the state dairy, meat and grain processing plants.

The general tendency is that with the change of the structures on the demand side (from companies to farmers), the structures on the supply side are also changing. Irrespective of the drawbacks and problems after passing the stage of chaotic market, the situation is likely to stabilise and the result would resemble the structures typical for the Nordic countries, including the protectionism policy aimed at consolidation of small farmers.

2. Fuel and Lubricants

Before transition to market economy began in Latvia, procurement and trade with oil products were a state monopoly. Legislation with the regard to entrepreneurship opened opportunities to non-governmental structures to enter the fuel market. The only state enterprise is "Latvijas nafta" with branches in all districts of the republic. The largest oil bases in Liepāja, Tukums, Valka and Jēkabpils are also state-owned.

Peculiarities of Latvia as to supply with oil products result from the fact that there is neither oil-extracting industry nor any refineries, but we are a transit country for Russian oil. Latvian Government takes the advantage of this position and sets transit duties on oil products.

In 1990 and 1991 the situation in fuel market largely depended on policy pursued by Russia, the major supplier, towards the Baltic countries. Both economic and administrative barriers were put in the course of normal economic relations.

The year 1992 can be regarded as the year of formation of fuel market. "Latvijas nafta", like majority of state enterprises, proved to be inefficient in the competitive market environment. As a result of this, it was compelled to lease 34 gas stations to private businesses. Due to competition, during 1992 and at the beginning of 1993 they kept fuel prices below those of "Latvijas nafta", besides, in the last 6 months there is a descending trend in prices (see Figure 10). By the beginning of 1993 75% of aggregate tank volume in oil bases were filled by private businesses.

At the beginning of 1993 "Latvijas nafta", in fact, the sole proprietor of gas stations, reduced the number of stations they leased to private companies, because it had sufficient quantities of fuel at its own disposal. It was purchased with borrowed money at high interest rate, so another price increase can be expected.

The situation in oil market (price, supply etc.) largely depends on the relations between "Latvijas nafta" and private companies. In order to establish free market relations, state monopoly ought to be liquidated. Privatisation might be a possible solution. The first steps in this direction have already been made. A special commission of the Ministry of Industry and Energetic worked out a conception for privatisation of "Latvijas nafta". Irrespective of the competition that has appeared in the fuel market, the situation is rather complicated, and largely owing to the low purchasing power of the population, which leads to shortage of current assets.

In the countryside the situation is still worse. The network of gas stations is poorly developed. Thus, the farmer may often have to travel as far as 20 or 30 km to buy the necessary oil product. The purchasing power in the countryside is still lower than in the urban territories.

This is why the farmers are looking for alternative sources where to buy diesel fuel, for example, from the Russian army. Occasionally the fuel suppliers are unregistered private businesses, so there are no guarantees as to the quality. Shortage of finance does not allow to buy oil products in larger quantities directly from the oil bases. Besides, this also requires special vehicles, which correspond to the demands set by the safety regulations, and which the small farmers do not possess.

As to government support to agriculture, including small farmers, the government supplied diesel fuel for the planting season of 1992 as a credit - the first instalment had to be 20% of the price, and the total sum was to be repaid by the end of 1992 at 4% interest. In fact, the government has not claimed back this credit. For the planting season of 1993, the government again is planning to sell diesel fuel on instalment plan. This time the first instalment will be 33%, and the remaining sum will definitely have to be repaid.

In order to determine the demand for fuel, the network of district departments of agriculture is collecting information from the pagasts.

From the point of view of accessibility, fuel is the most easily available input for the small farmer. This is due to the high ratio of private businesses , which may vary as to their turnover - from private companies operating on the territory of the whole country to retailers in the privatised oil bases of the former collective farms. At present there is no sense from the economical point of view to establish farmers' co-operatives with the objective to purchase fuel in bulk in Russia or other countries. The investments for purchase of special vehicles and equipment, the payments of Russian customs duties and taxes will raise the price for fuel and lubricants to that offered by private companies. The Government does not plan any special privileges to small farmers in fuel supply, as it used to do in the years 1989 to 1991.

3. Seed

The supply of seed fully meets the demand both as to quantity and as to assortment. The price is what comprises the only problem.

The demand on seed depends on the acreage the farmers have planned to plant. Thus, the total acreage planted with summer wheat and rye is 448 thousand ha, approximately 200 thousand ha of which are in individual farms. The individual farmers' demand in order to plant the above said area is 40 thousand tons of seed, about 15 thousand of which are stored by the farmers themselves. The farmers have choice where to purchase the 25 thousand tons they are short of.

1. State reserve fund which stores 2,5 thousand tons located in 22 districts of the republic (in 33 companies). The farmers have the possibility to borrow seed from this fund on contract basis, and they have a choice of terms:

- to return the seed in kind after harvest in the ratio 1:2 (in bunker weight);
- after harvest, in kind at the ratio 1:1,7 (in granary weight);
- in cash after harvest, 25 LVR per kg.

The seed to state reserve fund is supplied by specialised state selection and experimental stations and seed producing farms, on contract basis.

The seed from this fund may be sold only at the permission of Ministry of Agriculture. The purchases to the fund are made on the basis of directives from the district department of agriculture or directly from the seed producer on mutual agreement.

2. About 4 thousand tons are stored in farmers' mutual support fund (founded by the Farmers' association of Sweden) kind after harvest at the ratio off 1:1,7, or 1:2.

3. The state company "Seed" has about 2 thousand tons of seeds which, in case of necessity, can be sold to farmers. In autumn the seed of winter wheat and rye was lent to the tune of 71 million LVR, which 4% interest. At present some more seed is being lent for 29 million LVR (the same 4% interest). It is envisaged to allocate about 50 million LVR from the state budget from these purposes. The loan is funded from the EEC credits to the government.

4. In the reserve fund of companies there are 17,1 thousand tons of seed, which are also available to the farmers.

The seed supply exceeds the demand in spite of the fact that in autumn the government paid the farm producers a very high price for grain (20 LVR per kg), which caused a very steep increase of acreage planted (winter wheat and rye) and expected to be planted (summer wheat and rye), see Table 6.

At institutional level, the seed supply is concentrated in governmental structures. If there is a situation when this vital input is too expensive for the farmers, the government can adopt a decision to sell seed at credit making use of international help and credits. This system is suitable at the present stage of reforms.

A negative aspect here is the clumsiness in organisation of information, typical for government structures: as well as the quality of service. The demand for seed is compiled in the district departments of agriculture, and they submit their balance to state company "Sēkla", which, in its turn, submits the total balance of demand to the Ministry of Agriculture. The district departments obtain the information from pagasts level, where most often it is collected by farmers' associations. If the order in the district is small, the transportation costs become quite a problem.

At the end of 1992 and beginning of 1993 the companies have turned into major seed suppliers, for they have excess seed as in 1993 the acreage of land they are using will considerably decrease in the result of land reform. Regularly, this seed is privatised for company shares, but at the next stage it is sold for LVR and increases supply, simultaneously reducing the price in the seed market.

It is quite typical for a Latvian farmer to store seed at his own farm or in company's dry-house (also in those owned by farmers' co-operatives).

The purchase of high quality local and foreign varieties of seed for other crops, like potatoes, flax, beet etc. does not comprise any problem either.

4. State Plant Protection Service

The task of State Plant Protection Service is to reduce the adverse impacts and losses caused by all types of pathogens to the limit where their use is still efficient from the economical point of view.

At present, together with the changes in the structures of agricultural producers, also changes in the structure and functions of agricultural producers agricultural services take place. Besides, the economic situation, when the economic ties with the former USSR, as a supplier of cheap inputs, have become very weak and the prices for chemicals have increased dramatically, has resulted in decrease in plant protection activities (see Table 4) and in reduction in the amounts of chemicals applied (see Table 5).

This fact has led to a decrease of yields. The expenditures at harvesting and at the initial process of treatment have increased; the farmers fields are rapidly taken over by weeds.

When the State Plant Protection Service was established, a special attention was paid to maximise all types of prognosis and signals about them, so that all kinds of chemicals be applied at the optimum dose, quality and right time. This enables to use the minimum quality of the expensive chemicals with maximum efficiency and to prevent environmental pollution. Figure 11. illustrates plant protection system in Latvia.

The tasks in plant protection are distributed between the following groups: operations, science and research, service, advisory service group.

1. State Plant Protection Station is the head organisation in the operations group. Its two main tasks are prompt planting protection and the quarantine issues in the entire territory of the republic. On district level the plant protection agronomist is responsible for the above questions; as a rule, he works in the premises of district Departments of Agriculture.

On the pagasts level plant protection activities are usually performed by farmers and other land users themselves: before that they are obliged to take a 25 - hour training programme, which provides with the minimum knowledge in plant protection, and they get special certificates. Plant protection operations on pagasts level are also carried out by a group which unites production co-operatives, farm producers' associations, joint-stock companies and other land users. All these entities are working within the framework of pagasts land users' service centre. This group has specialised equipment at its disposal, it is also in charge of the pagasts pesticide storehouse. The land users service centre is the repair station for plant protection machinery and equipment.

2. Research as to plant protection is done by Agricultural University, Research Institute "Agra", Research Institute "Agme", State Plant Protection centre and their substructures.

3. Practical operations in plant protection most often are carried out by the state enterprise "Latvijas agroķīmija" and Ltd company "Lauksaimniecības tehnika".

4. Advisory services as to plant protection are rendered by Latvian Advisory Centre for Agriculture, namely, by their district offices.

The Ministry of Agriculture receives the information about the demand in plant protection services from State Plant Protection Station, which collects it from district plant protection agronomists, who, in they turn, collaborate with company agronomy service, with advisory service and with small farmers. As to amounts of pesticides ordered, the Ministry gets information from "Latvijas agroķīmija". The government control on storage conditions, trade and application of pesticides is carried out through the district plant protection agronomists employed by State Plant Protection Station, as well as by sanitary inspectors in the districts.

The purchases of pesticides from foreign companies are done by the wholesalers of "Latvijas agroķīmija" located in Iecava. These wholesalers may sell pesticides directly to either land users, or through district offices of "Latvijas agroķīmija"

5. Agrochemical Services

Agrochemical services embrace the following kinds of services to the Latvian farmers:

- the sales of mineral fertilisers, plant protection chemicals and polyethylene film;
- the agrochemical analysis of soil and soil mapping, offering consultations concerning agrochemical problems;
- taking out manure to the fields and working it into the ground;
- plant protection.

Several organisations are engaged in providing services in this field. The bulk of the work is done by specialised agrochemical service system of independent enterprises such as:

(1) The state enterprise "Latvijas agroķīmija" with the Central republican storehouse of mineral fertilisers and plant protection chemicals. This enterprise is the main fertiliser supplier in bulk and practically the sole plant protection chemical wholesaler in the republic. The resources are mainly being sold to the regional agrochemical service enterprises, as well as directly to the agricultural producers. In the latter case, consumers can acquire them at 20 % cheaper.

(2) Regional agrochemical service enterprises.

They carry out the direct agrochemical services to the farmers. At present they are the main fertiliser suppliers directly to the farmers, it being the main direction of their activities during the reform. Besides, regional agrochemical service enterprises offer also the taking out of the manure to the fields and working it in to the ground, and mechanised plant protection jobs (sprinkling). The farmers can apply to the service centre for a consultation on fertilising and plant protection, as well as make agrochemical analysis of soil. The economic reform has essentially changed the demand structure for services. The demand for services with manure has significantly decreased. To compensate it these enterprises have started offering general mechanised services. There are zonal support facilities of these enterprises for offering mechanical services.

(3) Republican production research association "Ražība". Besides doing research, this enterprise is carrying out agrochemical analysis of soil, soil mapping, and giving recommendations for a proper fertilising of plants.

(4) Rural district agrochemical service enterprises.

They are not always separate specialised enterprises, but usually they have been formed as co-operative formations on the technical basis of the former collective farms in the course of privatisation, alienating specialised agricultural technology, agrochemical servicing mechanisms including. (If the process of privatisation of collective farms has not yet been completed, agrochemical servicing of this district is indirectly done by this collective farms). As to mechanised agrochemical services the share of these enterprises is proportionally the largest, and there is a marked tendency for these enterprises to form and develop.

Indirectly provision of agrochemical services to the farmers in also the concern of consumers' association by selling fertilisers through their network, yet the of sales does not exceed 10% of the amount consumed in agricultural production.

Thus farmers can have a certain possibility to choose agrochemical services in:

- for purchasing fertilisers - regional agrochemical enterprises, the state enterprise "Latvijas agroķīmija", the network of consumers' association;
- for obtaining mechanised agrochemical services - an enterprise of the local or another district (very often a co-operative), a state-owned regional agrochemical service centre or other farmers;
- for soil-sample analysis - a regional enterprise or production research association "Ražība";
- for obtaining agrochemical consultations - farmers' advisory service centre or a state-owned regional agrochemical service enterprise.

6. Machinery and Technical Services

The small farmers in Latvia consider the supply of machinery and available technical services as one the decisive factors (besides finances) for their support. Practically all of the first farmers, who established their business prior to the start-up of the Agrarian Reform, i.e. in 1988-1989, when the total number of farmers was small, the economy was more stable and political environment and public opinion was more encouraging, obtained rather cheap machinery of Soviet make, which, as to the technical specifications, but not to the quality, is close to Western standards. The existing supply level seems poor from the of farmers' point of view, in spite of rather wide range of offers due to high prices of new machinery. At the same time it should be noted that the farmers consider it absolutely necessary to have all farm machinery at their own possession irrespective of the efficiency and intensity of the use. It is psychologically unacceptable for farmers to use some of the expensive machinery jointly. It could be testified by fact that the total amount of almost all types of machinery has increased by 01.01.93., if compared to 01.01.91. But in the companies the total amount of tractors was down by 21%, grain harvesters by 21,5%, ploughs by 21%, cultivators by 26,5%, mowers by 20% etc., while the amount of machinery in farmers' possession has increased as follows:

- tractors	200%;
- ploughs	192%;
- cultivators	203%;
- sowing machines	166%;
- mowers	160%, etc.

Moreover, private persons (farmers and holders of subsidiary plots) have already more than a half of total amount of tractors, ploughs and cultivators in their possession. After the funding for small farmers ceased, the institutional structure of suppliers considerably changed. At present it consists of:

- former state monopoly "Lauktehnika";
- machinery of companies;
- farmers co-operative organisations;
- legal and illegal private enterprises.

In 1992 the state company "Lauktehnika" was formally partly transformed into a limited liability company (see Figure 12). So formally all the 26 regional associations are leaseholders of state association "Lauktehnika", i.e. private entrepreneurs who have developed from the range of employees. Yet, in fact regional associations through the state-owned capital share are represented in "Lauktehnika Ltd".

The association offers the following services according to placed orders: manufacturing of machinery and equipment, repair of machinery, delivery or materials and spare parts, freight transportation services. The association manages purchase and sale of machinery, commodities and production units in any country, carries out import and export operations and international freight transportation.

The association "Lauktehnika Ltd" offers: tractors, trucks, trailers, loading equipment, fertiliser spreaders, sowing and plant machines, furrowers, grain, potato and flax harvesters, grain cleaners and sorting machines, root choppers, forage distributing equipment, heating systems, electric roasters and dryers, electric fence, metal building sections, tractor trailers, bulldozer mould-boards, concrete mixers, vibration equipment for manufacturing of construction elements, oil and oil product containers, tanks for grain and forage, wheels, wedgebelts, steel products, household commodities, tools, electric appliances and materials, measuring equipment and instruments, technology and equipment for various foodstuffs, import of repaired second-hand agricultural machinery.

The structure of "Lauktehnika Ltd" consists of Foreign Relations Department, Juridical Department, Engineering Department, several units for supplies of: steel products; tractors, trucks and agricultural machinery;- technologies and equipment; spare parts for cars and lorries; spare parts for agricultural machinery, tractors and excavators; electric and plumbing appliances; rubber and chemical production; packaging materials; transportation services; tools and household commodities, as well as Brokers Department and Information Group.

Before the law "On Privatisation of Agroservice Enterprises" was passed, there was at least one limited liability company in almost every regional "Lauktehnika Ltd", operating on the basis of its production units and providing respective services. In Jēkabpils "Lauktehnika", for example, there were five such companies offering repair of diesel engines and tractors, transportation services, repair of livestock-farm equipment and wood processing. Taken together, these 5 companies employed approx. 300 employees (incl. co-owners), which constituted about 40% of total labour force in this enterprise two years ago. Situation is similar in all regional associations, because the number of employees has decreased from 30% to 5 times within 2 years.

The law "On Privatisation of Agroservice Enterprises" envisages to develop the structure and services of "Lauktehnika Ltd" as a network of specialised regional enterprises, where:

- this regional association is a dealer of new machinery (produced in CIS), offering machinery on consignment principles all over the country through the network of "Lauktehnika Ltd";
- regional association specialises in repair of more complicated units and aggregates and therefore can quickly fulfill client's order, if it is placed in this regional enterprise;
- the head management institution of "Lauktehnika Ltd" systematises general purpose orders and purchases large consignments at a lower price to meet the demands of regional enterprises.

The proposed structure of "Lauktehnika Ltd" and placement and fulfilment of orders can be displayed as depicted in Figure 13.

The real life shows that as a result of structural changes and due to financial situation such structure of orders' placement and fulfilment as well as intended territorial network of enterprises was not formed, as:

- the regional enterprises strive for maximal independence like a privatised, unrestricted company;
- the machinery centres of former collective farms are not transformed into farmers co-operative organisations of pagasts or established as an "Lauktehnika Ltd" enterprises, but remain as a separate part of weak companies without any perspective, or else turn into private company often with changed profile of rendered services;
- due to limited financial resources of farmers and other agricultural producers, the demand has considerably decreased.

Therefore practically all sales of new machinery are performed by regional enterprise from storage, without any care of advertising, but specialised repairs are badly co-ordinated (The fact that only during one day 5 separate clients from Liepāja district arrived to Jēkabpils (in 300 km distance) to obtain the same electric spare part - a starter, could serve as an example.).

Approximately 10% from total amount of specialised repairs in a specialised repair regional enterprise are carried out for clients from the same region. The clients from other regions do not believe in placing specialised repair orders through their regional "Lauktehnika Ltd" enterprises, but do it themselves, which, of course, is more expensive and less efficient.

The "Lauktehnika Ltd" enterprises operate similarly in purchasing new machinery (mostly in Russia), i.e. orders are taken in until a small consignment is consolidated and then the purchase is done using their own connections.

At the same the practice when representatives of state enterprise besides this small consignment of machinery purchase similar machinery for their own or partners' private enterprise has appeared to be very popular. In this private enterprise prices will be lower then in the state enterprise (which has to cover a lot of additional expenses). Such practice would be inconceivable and inadmissible in Western countries, but it is widely spread in Latvia and the CIS countries.

The most unpleasant fact is that the "businessmen" dealing with such transactions, would not be able to operate as legal, independent entrepreneurs, because then they lose long-term connections, credit guarantees, transport, etc., of state enterprise, but are compelled to pay the taxes levied on private entrepreneurs.

There are no guarantees for purchased new machinery in neither state or private enterprises, so the suppliers' responsibility ceases at the moment of transaction.

Recently the opportunity of obtaining machinery on leasing basis has reached the farmers in Latvia.

With the foreign trade company "Lata" of the Ministry of Agriculture as mediators, the association "Agrolīzings" has been established, in which three Finnish companies "Sampo", "Valmet" and "Regula Finland Oy" participate.

This association offers on lease grain harvesters, mobile grain dryers and tractors.

The lease terms for the grain harvester "Sampo" are as follows: the first instalment is 3900 US$, and then from 4 to 13,2 thousand US$ are paid annually until in the ninth year this harvester is redeemed by total payment of 82610 US$, though the initial price is 48200 US$.

An alternative offered to Latvian farmers could be the grain harvester "Yenisey" offered by Latvian-Russian joint venture "Kombain- serviss" (the partner from Latvian side is a subsidiary of "Lauktehnika Ltd").

In 1992 there were 2 options as to terms of payment:

- to purchase it by paying 4600 US$, or to sign a leasing agreement and pay in the first year instalment - 2500 US$ and additionally 4500 US$ next year, i.e. approx. 7000 US$ in total. If the leasing commences in 1993, the projections for the sum to be paid is 8000 US$. The joint venture also renders after-sales services after 200 hours of exploitation free of charge.

Simple calculations show that in nine years the price of one Finnish harvester is equal to 10 harvesters, produced in Russia. Of course, there are differences in technical parameters, but both are convenient in exploitation, though the main difference lies in quality.

Recently some private companies have started sales of new machinery, so they compete with state enterprises as to price and terms of lease. Regarding machinery repairs, machinery centres of companies have become serious competitors to state enterprises ("Lauktehnika Ltd"). Moreover, it is not the farmers' co-operative organisations, which are the most successful, but private businesses that have emerged from the companies.

The existing structure of offered machinery, repairs and services usually is as shown in Figure 14.

The existing co-ordination level of farmers' orders is undeveloped, therefore farmers can choose a possible partner (incl. supplier of technique or spare parts), but the main obstacle is the price.

With respect to offer of services that involve the use of agricultural machinery, they are mostly provided by machinery centres of companies, that have separated from share companies and started private or co-operative entrepreneurial activities, as well as by farmers co-operative organisations. Services rendered by state enterprises "Lauktehnika Ltd" and "Agroķīmija" are practically not required (except ploughing), as their services are more expensive and therefore can't compete with above listed offers.

Besides, farmers very often make use of services rendered by their neighbours having respective machinery in their possession. A more detailed description of the actual practice and the scope of this kind of services is available in Chapter V.

The wide-spread practice of Western countries (especially in the USA and Canada), when private companies provide farmers with necessary agricultural services, incl. ploughing, cultivation, harrowing, etc., is not developed in Latvia yet, as the demands at present are met by above described means and ways.

7. Construction Materials and Services

The socialist economic policy had set as one of its goals to destroy the traditional individual farmsteads in the Latvian countryside and to substitute them with densely populated villages. The consequences of this policy are very outspoken today. As farmstead is indispensable for individual farming, in order to start farm operation, a farmer needs large investments to build a residential house and farm - buildings, road etc.

The prices for construction materials and services are increasing steadily; the outputs are constantly decreasing - the situation is very much like the other branches of national economy. Till 1992 there was a funding system, and the distribution of construction materials was done in administrative way by government structures. After 1992 all these relationships are market regulated. The small farms which were established in 1991 purchased building materials (through state distribution channels) and erected the buildings at much cheaper cost than those who started their business later. The increase of construction material prices is one of the key factors for differentiation of small farmers as to income, because the ratio of construction costs is very high in the total capital investment.

From 1992 there were no more shortages of building materials, but, as demand exceeded supply, the prices increased. Owing to the low purchasing power of the customers, the production output reduced rapidly, e.g. by 51% for cement, by 44% for gas concrete, by 43% for slate, by 67% for linoleum, by 41% for prefabricated reinforced concrete constructions. The production of some of the construction materials (prefabricated cottages produced by a factory in Līvāni, drain pipes etc.) has stopped entirely.

The building - material industry in Latvia is fully capable of supplying the individual farmers with construction materials. Proceeding from the production capacities of 1991, in 1992 the demand of construction materials for individual farmers' needs constituted 62% of total possible cement output, 80% of brick, 95% of slate, 58% of glass, 8% of linoleum. There are some problems with construction materials which are not locally produced, like steel, pipes, bitumen, roofing felt.

The government carried out a decision to allot to each small farm 100 m^3 of lumber, which equals approximately 40 m^3 of timber. This was rather helpful to the farmers.

At present practically all construction work at the farms has stopped owing to lack of finance. Only very few farmers who have stored the materials are building on their own. There is no co-operation in construction, the prejudice against joint property and joint activities is still strong in the countryside.

Until recently, most of construction works was done by interdistrict construction companies. They were founded by collective farms, who were the investors. In the years 1987 to 1988 the legislation of the former USSR permitted to transform them into co-operatives, where the smallest part of capital (equal to founders' investments) remained the collective farms' property, but the rest of capital was regarded as employees'. According to today's legislation, enterprises like these are illegal, however, no juridical solution has been found. Anyway, in all these enterprises the management is typical to that of state enterprises, which means they are not viable. Their production capacities which were designed for large-scale production now are idle. The number of employees is being reduced. Restructuring of these enterprises at present stage is impossible, as the ownership relations have not been settled.

8. Land Improvement

After nationalisation all land became state property, thus also land improvement service was established by the state and became a state institution. At present the situation has remained unchanged - the mobile mechanised units (PMK) are responsible for land improvement. The joint - stock companies do not have the specialised machinery for land improvement at their disposal; the liming is usually done by the state company "agroķīmija".

At the initial stage of agrarian reform the state subsidised land improvement and road building for individual farmers. According to the law "On Land Reform in Rural Areas", after 1996, when land will have become private property, the land improvement system will also be the property of land users.

At present all the land improvement services for individual farms are rendered by state organisations. The reason for the low demand on these services are the high costs, which the state organisations do not tend to reduce, as there is no competition. As a result of this, they drain as little as 15-20% and lime 10-12% of the areas the individual farmers would require to be improved..

9. Advisory Services

The network of advisory services for farmers is at the stage of formation. The University of Agriculture and Extramural Agricultural College are rearranging their educational programmes and are organising extension service for farmers. This has and orientation to education and training, and not consulting.

In winter the above mentioned educational institutions organise fortnight classes for "small farmers". Partly also the farmers' wishes and requirements are taken in account when the programmes are drawn up.

The leading advisory service is Advisory Centre of Agriculture which has been established by the government and the financing is from state budget. It is planned that its structures will comprise all levels:

- *state* level, where the functions will be: co-ordination of consultants' network; providing information for consultants; relations with research institutions and extension centres in foreign countries, etc.;

- *district* level: the functions will be to set up and co-ordinate consultants' network in the pagasts; to organise the training of farmers at the district level and field consultations in the pagasts, consulting the farmers directly;

- on *pagasts* level: the functions are to consult the local farmers; to inform the customers where the information sources are available etc. At present the consultants are in about 20% of pagasts.

As a rule, the advisory centres in districts are housed under the same roof as district departments of agriculture; and they also employ the specialists from the departments, as well as the managing directors of farmers' associations. This is why the advisory centres closely collaborate with government structures.

The farmers still have the possibility to get consultations from qualified company specialists: agronomists, veterinary doctors, bookkeepers. Information is also available from 5 (weekly or monthly) newspapers or magazines, which offer practical advice to farmers, as well a survey of the latest publications in science, editions by private publishing houses and by editorial boards of magazines.

10. Research

Agricultural research activities, including research to serve the needs of private farmers are concentrated in State Scientific Research Institutes of the Ministry of Agriculture, Latvian University of Agriculture and Fundamental Research Institutes of Latvian Academy of Sciences, which have recently started dealing with production-related problems due to difficulties with funding. The main institutions carrying out the research to serve the needs of farmers are:

1) Latvian Land Reclamation Institute;

2) Institute of Cattle-Breeding and Veterinary;

3) Institute of Mechanisation and Electrification.

The above mentioned institutes have developed a network of experimental research-production units dealing with selection and design of new machinery samples and technologies.

4) Latvian State Institute of Agrarian Economics (research projects on economic, accountancy and legal topics);

5) "Agroprojekts" (rural construction projects);

6) Latvian University of Agriculture (research is being specified by its 10 faculties).

The named institutions in general are funded from the state budget, but some income could be earned from production-related agreements, most of them, of course, are made with companies, less - with private farmers.

The co-ordination of research with Agricultural Advisory Centre turned out to be somehow problematic, so the scientific agricultural research is mostly carried out according to the requirements and orders of the Ministry of Agriculture.

The mostly required research items for private farmers are: sorts of crop seeds; pedigree cattle; new machinery samples (new technologies are less required); analyses of soil samples; accountancy systems; marketing; choice of an optimal farm management model.

The situation with farm management model obviously reveals the problem with research offers, because, in spite of repeatedly announced competitions, nobody has yet received the grant to complete this very required research project, but the preliminary investigations have been carried out and experience acquired at the:

1) Latvian State Institute of Agrarian Economics;
2) Agricultural Advisory Centre (in co-operation with specialists from Denmark);
3) University of Agriculture;
4) a Software Company (private).

Though the approach to formulation of the problem and solution, i.e. complex estimation of agronomy, cattle-feeding, forestry, construction and marketing by using software to ensure the optimal farm management model and compilation of business plan almost similar. The proposals differ in convenience of usage from the farmers' point of view.

Projects are made by using a variety of input data given by the farmer, as total amount of resources necessary to reach the production target, or what results could be reached by the use of existing resources.

Due to uncoordinated research, farmers have to gather the necessary information from various scientific research institutions, instead of free access to operating information systems, preferably at the disposal of Agricultural Advisory Centre. The above described order in no way promotes the farmers' interest in scientific research (only 5-10% of all private farmers have made use of research achievements in 1992), nor it does encourage the development of research to serve the needs of private farmers (scattered funding, weak linkage between researchers and farmers).

The assessment of agricultural research for the needs of private farmers and estimation of farmers' demands has led us to the conclusion that the supply at present exceeds the demand, however, it can not meet the requirements as to quality. The situation is being aggravated by the fact that the newly-established farmers are not interested in achievements of research under the present chaotic economic environment, but the state cannot afford to fund for promising and perspective research projects, therefore a lot of potential researchers quit science.

The Law of the Republic of Latvia "On Scientific Research" was passed in October, 1992, allowing private persons and companies to undertake scientific research activities, including the right to obtain the allocated budgetary funding, if they have won it in competition with other researches.

11. Marketing

Since December 10, 1991, when the government took the decision about price liberation and their formation and level in wholesale and retail trade, the relations between all types of producers, processors, trades people and customers have changed essentially, though not without problems. In a comparatively short time period (1 year), apart from drastic economic changes, also a psychological revolution has taken place: the structure of the system has changed; the demand-supply interaction, close to that in market economies, with an adequate number of transactions and price setting has started to function; food market has become more international.

If at the end 1991, when the prices for foodstuffs were set by the government, the public opinion was very much concerned about the export of food and tried to protect the domestic food market for local consumers, then at the end of 1992 the farmers, processors and trades people were occupied with problems of completely different nature: difficulties with foodstuff export from Latvia caused by high prices; import of foodstuffs from the CIS and Lithuania, where the prices are lower (they are state - regulated); it is complicated to restrict this influx even with import customs tariffs.

If in 1991 the consumers bought food chiefly at state stores and not at the marketplace, then at present the customers are more likely to buy food at a private store or at the marketplace, where the prices are lower.

At the same time the marketing section of the food-chain is in evolution from planned distribution system to free market; several phenomena testify to this fact.

1. The number of livestock is being reduced: they are slaughtered for meat. As the incomes of population increase at a slower rate than the inflation, while the export possibilities are limited, supply exceeds demand, and, theoretically, prices should be reduced, however, this does not happen. The situation is full of paradox: the state meat processing plants do not accept livestock from farm producers, because after adding the high processing costs, the trades people find it difficult to sell meat; or else, the state trade organisations do not settle their payments with the meat processing plants, which, in their turn, are in debt to meat producers. The meat producers find it impossible to lower the producer price, because the input prices increase more rapidly. They would rather sell live cattle to buyers from Poland, who have the export possibilities.

In this chain several drawbacks, which have remained from the former economic system, can be pointed out:

- state processing enterprises are operating inefficiently and with large costs; however, at present they are monopolists;
- there is an insufficient proportion of private trades people, especially in wholesale (co-operation of retailers could be effective);
- a real competition among agricultural producers is insufficient, because the existing taxation system in particular and agrarian policy in general do not promote competition of producers.

2. As meat prices in the world are still considerably higher than in Latvia (even without the import tax of 0,3 US$ per kilo), the major "imports" are from the CIS (bread and flour also from Lithuania): usually this is done as small consignments sold directly at the marketplace even without any sanitary inspection.

3. Food expansion from the Western countries is indirect - as human aid help in kind. This saturates the market still more.

4. Sugar costs more if it is produced in Latvia, if compared, e.g. with that imported from Brazil, even the import tax of 0,2 US$ per kilo included. This means that Latvia should determine an appropriate level of agrarian protectionism; most probably it would not be useful to keep the prices of Latvian foodstuffs above the would price level.

5. The consumer is absolutely defenceless as to the quality of foodstuffs. The responsibility here largely lies on the customer himself, as he, owing to the low income level, often chooses the cheapest products, even at the so-called "black market" (i.e. illegally imported foodstuff market).

As there is a tremendous margin between the producer price and the price in the state or consumers' association retail shops, the farmers have an option to sell their product to private retailers. Quite a considerable part of farmers supply meat to small privately owned or co-operative stores, thus lowering the consumer price. Typically, this happens in fruit and vegetable marketing, lately, also in dairy marketing. Yet, most of the private traders buy meat from the processing plants and not directly from farm producers. Though the plants charge a higher price, the traders have lower transportation and processing costs.

One of the most serious shortcomings in food marketing is the monopoly in the wholesale trade. This belongs either to state owned wholesale bases, or to consumers' association, which formally is a co-operative, but in fact it is a structure preserved from the socialist times.**Farmers and Grain Market**

Till 1991 there was a centralised grain supply system in Latvia as well as in greater part of the USSR. It was based on a low grain selling price and a corresponding low grain purchasing price. As a result, all grain trade depended on obligatory state purchasing orders, which were fixed practically for every agricultural producer irrespective their possibilities to raise grain. The obligations had to be fulfilled already in autumn. The grain market in fact was a state monopoly.

The system of grain processing and storage was designed accordingly. All marketable grain resources were stored in centralised state storage facilities which simultaneously processed the grain into feed and into baking flour. There were 15 such enterprises in Latvia with the total capacity of about 750 thousand tons.

At the same time the situation in Latvia had its own peculiarities. Latvian agricultural enterprises had the all-union specialisation in cattle-breeding using also the grain purchased from the outside. Therefore, from all the grain grown in Latvia only 20% had to be marketed to the state. The remaining amount was used up by the respective grain processing enterprise to produce feed. So besides grain storage facilities , Latvia had an extensive network of grain processing and storage facilities in the agricultural enterprises - collective and state farms. They could carry out the first treatment, storage. and milling, but could not prepare qualitative mixed feed. Therefore it was a generally accepted practice to deliver grain to the state concentrated feed-producing enterprises for processing it into concentrated feed, paying for that as for a service.

In 1991 and especially in 1992 the situation changed drastically. The cheap, state subsidised grain resources from Russia and Kazakhstan granaries ceased to be available. On the other hand, the domestic grain prices increased, considerably, thus turning this kind of production into one of the most profitable agribusinesses. It created the necessary prerequisites for the establishment of the local grain market, and today the whole branch is undergoing essential changes. Since 1992, state grain processing enterprises have also begun to function as independent business enterprises. Besides, privatisation of production facilities in collective farms, concentrating 2/3 of the Latvian grain storage capacities, is continuing. These enterprises are becoming the basis for the establishment of rural district grain processing and storage facilities. As a rule, they are co-operative enterprises. Till the establishment of separate enterprises these functions are practically carried out by the companies formed instead of collective farms.

Now it is already possible to forecast the future of the system of the Latvian grain market and the role of farmer in it.

The Latvian grain market will be formed by independent grain producing, storing, processing and marketing enterprises. The State Control will fix only the general level of the grain prices in the country, its main lever being the state control of grain imports and the utilisation of the state grain reserve.

Grain producers will have their own choice of partners to sell the grain (see Figure 15). The grain produced will be purchased by bakery-flour mills, mixed feed mills, by the state to secure its grain reserves, as well as food producing enterprises (distilleries and breweries). Grain marketing will purely depend on the contract relations between the parties concerned. It will change the time when grain is typically sold, permitting this process to last throughout the whole year. Till the grain is marketed or utilised locally at the farm, the individual farmer can make use of the local district grain processing enterprises with their grain storage facilities.

It can be foreseen that the process of the formation of co-operative grain producing associations will go on, taking over from the companies the grain-drying facilities and storage.

Besides, in the nearest future the state-owned grain processing enterprises are expected to be privatised, too.

13. The System of Selling and Processing Milk

After World War II in Latvia, as well as in other ex-soviet republics, there has been a strictly centralised system of selling and processing milk produced by agricultural enterprises. The total area of the country from the organisation of dairy processing point of view could be divided into ten dairy processing regions with dairy processing enterprises at the centre (see Map 2). They are the main dairy product manufacturers, including condensed milk and cheese.

The second link of the system is dairies which also produce dairy products and supply milk to dairy enterprises for further processing. These are mainly engaged in supplying the local district with dairy products, besides, they make butter and certain sorts of cheese.

Both dairy enterprises and dairies mainly process the milk collected from the agricultural enterprises (especially from individual farmers and other small producers) by the milk collecting stations and dairies.

All the above mentioned enterprises, till recently, were exclusively state-owned, and their network embraced the whole territory of the republic. Thus, peasants and other small producers had only one particular milk collection and processing enterprise to take their milk to. The price for milk was fixed by the state and the same price was paid by all dairies: it was the state which purchased milk, processed it and sold it later on.

Beginning with 1991 the situation has been undergoing essential changes.

Milk is no longer purchased by the state, but by dairy processing enterprises as economically independent entrepreneurs, yet still being state-owned. Consequently, there appears a price difference for dairy products, and dairy processing enterprises are beginning to face a certain competition to find markets for their products, the dairy product export possibilities being substantially reduced.

1992 is noted for a sweeping privatisation of the dairy processing branch. In order to change the previously existing centralised system of dairy processing, the process of privatisation is effected in two stages.

1. Since 1992 the dairy collection and processing enterprises (up to the dairy-plant level) are transferred without reimbursement under the ownership of dairy-farmers' co-operative associations according to their claim. Thus, dairy producers are given an opportunity to choose the level of their co-operation system.

2. In 1993 dairy-processing enterprises are being privatised mainly through transferring them to dairy farmers' co-operative associations by forming joint-stock companies. Considering the fact that the main capital investments during the last years are made just in these enterprises and that these plants can process the largest part of the milk produced, it can be predicted

that in the future, too, the bulk of dairy products will be produced in these dairy enterprises or their subsidiaries.

The privatisation of dairy processing enterprises brought about changes in milk marketing and the system of settling payments . Milk producers, in fact, do not sell unprocessed milk, but the milk processed in their privately owned enterprises, thus, profits being directly dependent on the results of dairy processing and product marketing.

The existing stage of economic development offers the farmers the following choice opportunities to market and process the milk produced (see also Figure 16):

(1) Participation or non-participation in the rural district dairy farmers' co-operatives. Participation provides certain additional opportunities not only in milk marketing but also in improving milk-cow herd and in management of a dairy farm.

(2) Marketing of milk to the state and co-operatively owned dairy processing plants; or processing it locally and marketing the finished product independently. The situation with the settlement of payments for the last year proves to be in the in favour of the latter. The dairy processing enterprises in most cases settle their accounts with the farmers for the milk supplied with a two or three month's delay when money, due to inflation, has lost its value already by 15-30 %.

(3) Marketing of milk to the enterprise of their association or to other entrepreneurs (other associations or state enterprises), shopping around for a higher price. In the latter case the farmers must take into consideration the fact that they have to cover the transportation expenditures.

(4) Being members of the rural district dairy farmers' co-operative, they participate in decision-making whether to join a co-operative association at a higher level, or to consider the possibilities of expanding the system of dairy processing enterprises.

14. Meat Processing

Meat production, together with dairy production, has traditionally been one of the main branches of agriculture both in the pre-war Latvia and during the years of occupation. In independent Latvia (data of 1938) the structure of livestock herd established naturally, i.e. proceeding from the quantity of domestic feed: there were 1224,4 thousand of livestock, including 896,3 thousand dairy cows (there are no special varieties of beef cattle in Latvia, so beef production has always been a subsidiary branch in dairy farming), 813,5 thousand of pigs, 1360 thousand of sheep, 4391,2 thousand of poultry. During the Soviet centrally planned economy pork production was boosted on account of extensive increase of pig herd. It was estimated to be 1703 thousand in 1986 (as contrasted to about 700 thousand that would be practical for Latvia). The number of poultry was also increased and they were concentrated in the large poultry factories.

The number of sheep decreased to 160 thousand (1988). The import of concentrated feeds from the former USSR constituted about 50% of feed consumed in Latvia.

This policy created a corresponding meat production and processing structures: huge pig complexes were erected in Latvia, as large as for 30000 pigs. Meat processing was concentrated in 10 plants, 2 of which, Riga and Valmiera, processed more than a half of meat produced. Annually about 100 thousand tons of meat were exported to the large cities in the USSR. The "influence" territories for the plants were strictly determined and they existed as long as till 1992 (see Map 1). The equipment in meat processing plants is obsolete both from the technological and efficient service life point of view: more than 60% of plant and machinery have been depreciated for more than 50%. The packing lines for meat and sausage have been depreciated completely: seven of the plants do not have deep freezers.

At present all the meat processing plants but two (in Cēsis and Saldus, owned by the former collective farms, now- companies) are state enterprises.

In March 1993 the Supreme Council of the republic started the reading of the draft law on privatisation of meat processing enterprises. It is envisaged that the fixed capital should be privatised 100% - in a comparatively short time period. In contrary to dairy plants, the persons going to privatise companies will not be farmers' co-operatives, but joint stock companies as competitive businesses.

In the second half of 1992 a real basis was formed for competition: the zones as depicted in Map 1, actually disappeared, because, even as state enterprises, the meat processing plants had to face competition - the one who offered the highest price to the producer and was the quickest in settling payments, was the winner and got the largest deliveries (for a more detailed description see Chapter III. "Marketing" section). Besides, if the Riga plant, for example, purchased livestock even in the most remote parts of Latvia, the transportation costs constituted only a small fraction of the production costs.

In 1992 essential changes have taken place in the structure of meat producers: while the total number of livestock decreased, in the private sector (small farmers and subsidiary farms) the number increased. Thus, more than a half of dairy cows belong to private producers. During 1992, the number of cattle owned by farmers increased 2,3 times, including a 2 fold increase in the number of dairy cows; the number of pigs has increased 2; times of poultry 2,8 times, but as to sheep in Latvia they are kept only by the small farmers.

From the above structure of meat producers and the current problem with settlement of payments, the Ministry of Agriculture has determined priority for individual farmers in receiving the due payments from the processing plants: first of all they have to pay the individual farmers, the companies come next and the owners of subsidiary farms are the last, as meat production is not their main income source. So, at the beginning of 1993 the individual farmers usually receive payments in a months time.

In winter of 1992/1993 farmers in practically all parts of Latvia had the choice between selling their product either to the state meat processing plants, or to buyers from Poland who paid in cash and in hard currency.

Lately the first farmers' co-operatives and small private businesses have been established for meat processing operations. They have obtained anew or alienated the former collective farms' small capacity (0,5 - 2 tons per shift) meat processing equipment. As equipment like this is offered in large supply and if credits are available, the farmers co-operation in meat processing and marketing hopefully will develop rapidly and will change the market situation.

From the technical and technological aspect, the largest stumbling-block is meat packing, where no serious improvements in quality can be expected without foreign investments.

15. Sugar Production

In comparison to other crops, the production of sugar- beets fluctuated around a stable trend until 1991. The total area cultivated under sugar-beets in all types of farms ranged from 13,5 to 14,5 thousand ha in 1986-1991 with average yield between 26 to 36 tons per hectare and total product 360 to 430 thousand tons.

In 1992, due to expansion of beet production in private household plots, the area planted with sugar-beets has increased to 24,8 thousand ha. The bad weather conditions caused the decrease of the average yield to 18,7 tons per hectare, though aggregate yield of beets reached 463 thousand tons.

The areas planted with sugar beets in 1992 were shared between the following groups of farm producers:

- companies and state farms 8,2 thousand ha
- small farmers 6,9 thousand ha
- subsidiary plots 9,7 thousand ha

It could be simply calculated that the average 32 kg per capita sugar consumption level could be provided by 82 thousand tons of beets, produced on 22 thousand ha with average yield 31 ton per hectare.

The imported sugar already competes with local beet sugar, as the production costs have risen to 58-62 LVR.

The significant increase in the number of beet producers has led to the formation of state firm "Latvijas cukurs", which operates as a mediator between sugar production enterprises and beet producers. The three Latvian sugar production enterprises in Jelgava, Jēkabpils and Liepāja have already entered this firm by investing their shares (see in Map 3 geography of sugar production enterprises and zone of sugar beets production).

The terms for beet deliveries (time-schedule, quality, amount, etc.) are stipulated by agreements signed between the beet producers and processing enterprises annually, starting with March 15.

16. Flax Processing

Flax has been traditionally cultivated in Latvia. The area under flax amounted to 63,5 thousand tons in 1938.

Several factors, as underdeveloped flax processing capacities and drop in yields have significantly increased production costs due to extensively used manual labour. As a result of it, the area under flax has been decreasing and constituted 7,6 thousand ha in 1992, with average yield of 0,19 tons per hectare and total product of 1,4 thousand tons. These factors led to closing of all flax processing enterprises in Latvia, so for the time being the farmers have no market for the flax they have produced, therefore nearly all of them have ceased the flax operations.

To renew the flax production to the level and quality of 1938-40, the flax prices need state subsidies in order to raise them to the level of grain prices. Additionally, the customs duty of 8% is to be imposed on imports of ready-made clothes manufactured from cotton, wool and artificial fibres.

17. Credit and Finance

A part of the difficulties the national economy in general and agriculture in particular is encountering are related to banking. The Bank of Latvia only now is starting to separate the functions of the central bank from the commercial functions. Its branches will be privatised and will operate as commercial banks. As they are located in all districts of Latvia (at least one branch in each, with 2 in major cities), they are in an advantageous situation to have the farmers as their customers. Up to now the branches of Bank of Latvia have been in fact the only lenders to farmers. However, in absolute terms, the credits extended are insignificant. Thus, by January 1, 1993, the balance total of Bank of Latvia of loans to agriculture was 1.5 billion LVR (234 million or 1.5% to individual farmers) for short-term credits and 704 million LVR (266 million or 37.8% to individual farmers. Here it would be relevant to explain that practically no long-term credits were granted to agriculture in 1992, and the high ratio of credits is owing to debts carried over from the times off collective farms, or given to the first individual farmers who started their farm operations as early as in 1988 or 1989.

Short-term credits could be obtained also from commercial banks (their number by the end of 1992 was about 50-60), but they charge high interest rates (120-200% annual or 12-16% monthly) and are reluctant to lend money for time exceeding 3 months. This is unacceptable for the farmers, because agricultural year is at least twice as long and the revenue cannot be expected earlier. The demand for operational credits is expected to be much higher in 1993, because the input costs have increased. Thus, in order to plant 1 ha with potatoes, it cost 21819 LVR in 1992, but in 1993 it will cost already 102029 LVR, i.e. almost five times as much.

Long-term credits were not available at all. This does not allow for any capital investment.

The answers from the questionnaires concerning the credit item predominantly state that the farmers have not borrowed money from any lending institutions in 1992. However, they might have forgotten they have taken indirect credits. Thus, before the planting season the government purchased fuel and sold it to the farmers at a price below the current market price, and the farmers had to pay only 1/5 of it in spring; the remaining balance had to be repaid after harvest. As to seed, it was lent in kind before the planting season under the provisions that it will be returned after harvest. Still very few farmers are taking the advantage of possibility offered by the "Agrolīzings" company to take expensive agricultural machinery (e.g. combine harvesters, tractors) on lease. The tradition of dealer's or supplier's credit is not yet deeply rooted, but in future it will become a source of agricultural credit to be seriously reckoned with.

The government has attempted to improve the financial situation for small farmers by seeking for foreign credits. A special state institution "Agroinvestkredīts" has been founded who auctions human aid, in most cases grain. The money raised is loaned to farmers as short-term or long term credits at a much lower interest rate (10%-20% in 1992) than in commercial banks.

There are practically no other options for a farmer where to borrow money. One can often see advertisements in the newspapers where farmers are looking for businesses or private lenders who would be willing to support farm business by an investment of favourable terms.

The financial situation of the farmers is still aggravated by delay of payments from meat, dairy and grain processing enterprises. Thus, by February 1993, they owed to all farm producers 2,6 billion LVR, 335,7 million LVR to individual farmers inclusive. The delay of payments often is as long as 2 to 6 months. This actually means an interest-free loan from farmers to agricultural processing enterprises.

At the end of 1992 and beginning of 1993 there are signs indicating a possible improvement in agricultural credit. The strict monetary policy of Bank of Latvia has led to stabilisation of Latvian interim currency and the slowing down of inflation rate. At the beginning of March 1993 Latvian national currency, lats (Ls), was put in circulation (1Ls=200 LVR). This will attract deposits from businesses and individuals, which both circumvented banking system when the inflation rate was high. (At the end of 1992 only 9% payments between enterprises were settled through banks, the rest of them being settled directly between the parties in cash.) The banks, due to increasing competition, are offering competitive interest rates on short-term (up to 1 year) time and draft deposits. The Bank of Latvia (the Central bank) is lowering its discount rate: at the end of 1992 it was 120%, in February 1993 - 100%, in March 1993 - 80%).

The issue of long-term credits will be partly solved by loans from the IMF, World Bank, G-24 and other foreign sources.

New developments can be expected in collateral lending. Up to now banks took only livestock, machinery, timber and residential buildings as a collateral. As the law on land ownership is in effect from January 1, 1993, vast possibilities will open to mortgage lending. Yet, it needs improvements in banking system, for Mortgage and Land Bank has just been established and the technicalities have not been worked out. There are more opportunities for development of collateral lending, e.g. against next years' crops, against inventory etc. Rural finance institutions on co-operative principles are planned to be set up, which would service the local farmer community and specialise in agricultural lending. Latvian small farmers also need to be educated to think in terms of operating with borrowed money which is often psychologically unacceptable for them.

IV. INSTITUTIONAL SYSTEMS OF FARM INPUT SERVICES AND INPUT SUPPLIES

The centralised planned administration system, which supplied the first "small farmers" with "funded" resources and services from the Ministry of Agriculture level to each farmer, has disintegrated. It has not been replaced by any other functioning decentralised and co-ordinated system which might consist of a network of state, state association, farmers' co-operative and private business structures. As the analysis of supply of primary resources and services indicates (see Chapter III), at present the supply is rather spontaneous; for some inputs (fuel) and for some services (processing) there is still state monopoly. However, psychologically the "small farmers" are inclined towards separatism in farming as a counter-reaction to the long years of forced collective farming. This is why farmers' decentralised administration system is emerging so slowly and with effort.

Taking in account the above described reasons, it is complicated to carry out an overall analysis of interactions between all kinds of institutional structures; this is why the analysis will be done in the following aspects:

1) state institutional system (ministry, state associations and concerns);
2) self-administration system:

- Farmers' Federation;
- farm producers' association;
- farmers' co-operation (by branch and by the geographical principle).

There is no definite system for private businesses. While rendering services to the farmers, they are not fulfilling any state orders which would need at least temporary co-ordination. However, the private businesses operate in competitive environment and are the most serious blow to the former administrative structures. The "small farmers'" answers to the questionnaire items indicate that in future they are more likely to choose private businesses as their partners to do business with (see more in Chapter V).

1. State Structures Supplying Inputs and Services to Small Farmers

In late 80-ies the first individual farms emerged; also the functions of the state in the management of agriculture underwent changes. The structures that were the major suppliers of inputs and services like new machinery, repairs, agrochemistry, construction and construction materials segregated from the Ministry of Agriculture. Beginning with December of 1991, when the prices for agricultural products were liberated, (the free prices on resources actually were introduced a little earlier), a dismantling of centralisation of state service system began, and, together with it, any co-ordination also disappeared.

In the years 1989-1991 in the planned socialist system there was a clearly outspoken centralised structure: republic - district -collective farm, where the first small farmers joined as a "new" structure which was favoured by the public opinion and, consequently, by the state. The collective and state farms were commanded to allot certain amount of agricultural machinery and comparatively cheap services to the farmers who started farming their former lands. District service enterprises were allocated funds for new machinery which was to be distributed only to individual farmers. At this time we can hardly use the word "to sell", because the market price for this machinery was much higher.

At the very same time Farmers' Federation was founded, with an inclination to a centralised rather than decentralised structure. State management institutions entrusted the Federation with the task of "fund" distribution at district level. The farmers could obtain access to the funds if they applied at the district farmers' association, but when extra funds were allocated, drawing of lots was organised.

It is important to point out that till the year 1991 farmers had certain privileges as to access to credits at advantageous interest rates. Dairy and meat processing plants had to pay the individual farmers up to 15% more for milk and livestock than they did to the collective and subsidiary farms.

After December 1991 there is no actual support to farmers. The typically socialist support in 1989-1991 is the reason for differentiation of farmers. Those who managed to receive state support before it ceased are much more secured than the ones who started business in 1992, however, the latter group constitutes about 80% of all farmers. During 1992 the state input supply and service structure and its management was in evolution, and the result was:

At the state level:

Ministry of Agriculture. The management functions at district and pagasts level become fewer and fewer. The main functions as to the object of study are:

1) *to carry out:* - the tasks determined by the strategic policy of the branch and the government-funded target programmes (including those in relation to improvement of infrastructure for farmers, see Chapter V, 1);

2) *to administer:* state land survey; state veterinary service; crop selection and seed-farming; the management of state service and processing enterprises;

3) *to establish:* information and consultancy system; foreign economic relations;

4) *to control:* the setting up of state reserves of grain and meat; veterinary service and pedigree work; exploitation of drainage systems and constructions; the technical condition of state-owned machinery and equipment.

The Ministry fulfils the above function, through its administration institutions - District Departments of Agriculture. The Ministry also collaborates, within the field of its competence, with local governments and other state institutions (including state organisations supplying inputs and rendering services: "Lauktehnika Ltd", "Latvijas agroķīmija" and state-owned processing plants); with public organisations related to agriculture: Farmers' Federation, Union of Agricultural Producers (its membership consists mainly of the chairmen of the former collective farms) and the farmers' self-administration organisations that are expected to be founded in the very near future (see Chapter IV 3).

At the district level:

Departments of Agriculture , which are under direct subordination and control of Ministry of Agriculture and are administering its functions at the district level.

In relation to the object of study, there are the below listed structures in the Departments: economic and bookkeeping service; legal advice; veterinary service; land survey service; head forestry service; agronomy service; labour and social service; commissions, like for management of state property; for budget and market issues.

Each of these services carries out, administers, controls and establishes the same functions which the Ministry of Agriculture is responsible for at the state level. As the Advisory Centre formally is an independent structure, but in real life it is in the same building as the department of agriculture, the co-operation between the staff of the Advisory Centre and the specialists of the department is very close and direct.

At the pagasts level:

This level is limited to the pagasts local government and partly to the joint-stock company or farmers' association. At the times of "fund allocation" the local government's (or company's) main functions were to submit the applications stating the needs and distribution of allocated resources to concrete farmers. At present the local government usually is the initiator for establishing farmers' self-administration (farmers' associations, agricultural producers' associations, local co-operatives, e.g. dairy farmers' association).

In the locations where these structures have not been founded, the local government acts as a substitute.

The structural reform which is in progress in the state system comprises the greatest problem as to input supplies and services to farmers.

The District Department of Agriculture is the institution which actually maintains the linkage between the farmer residing in the district (or the farmers' associations if they have been founded) and the outside suppliers of inputs and services:

- collect market information and offer it to the farmers (price and location of inputs, the projected state-guaranteed price for grain, milk, meat and other products;
- collect information from the district farmers as to their input needs (if the Ministry offers credit e.g. for seed, for fuel), as well as distributes these inputs after receiving;
- try to accelerate the settlement of payments between the processing enterprises and the farmers;
- consolidate the consignments of timber when individual farmers sell it for export;
- participate in determining the target programmes for the district to be funded from the state budget, e.g. the particular ways and subjects to be given the priority status when the target is to improve farmers' infrastructure.

While the bottom of the pyramid, i.e., the local structures, change from joint-stock companies to individual farmers and owners of subsidiary farms, the other levels of the pyramid - district and state - are incapable of forming administrative structures and of fulfilling constant functions. This unstable situation is made even more complicated by structural changes in all national economy, and together with it, the qualitative changes in satisfaction of farmers' needs. The main task in the nearest future in support to farmers would be a state protectionism in agriculture to the very grassroots level: guarantees for timely payments, distribution of credit resources, market information both about foreign and domestic markets; export quotas and quotas for supplies to state procurement. In order to fulfill this task successfully, the formation of self-administration structures in agriculture on the grassroots level plays the decisive role. Then sweeping changes can take place in the state administration structures and functions towards decentralisation.

2. Farmers' Federation of Latvia

Farmers' Federation of Latvia was founded in 1989 with the aim to consolidate private agricultural producers and to promote development of agriculture.

Farmers' Federation of Latvia is a public organisation that has been established from below by farmers, who united according to territorial principle. Farmers' Federation chief operational units are pagasts and district farmers' associations, which are represented in the Board of Farmers' Federation of Latvia. The task of the Board is co-ordination of district association activities.

Farmer's associations have been founded in all 26 districts of Latvia, but not in all pagasts. The farmers of these pagasts join directly the district associations. The total membership is estimated to be 40% of individual farmers who have been allocated land for use; the number of members has a declining trend.

Farmers' Federation of Latvia is funded from membership fees which are allocated between pagasts, districts and state level organisations in proportion 40:30:30, as well as from donations.

The question of supporting Farmers' Federation from state budget is being considered. The Federation practically has no property of its own.

The main functions of Farmers' Federation of Latvia are:

- to represent farmer's interests in state administration institutions;
- to establish and develop relations with international organisations and assistance foundations;
- to develop the system of co-operation of agricultural producers;
- to solve the issues of farmers' education, training and consultations,
- to organise input and service supplies for farmers.

At the initial stage of activities, when there still existed the fund allocation system, the main focus of this organisation was to distribute the allocated resources among individual farms. When this system disintegrated, only credits in kind (fuel and seed) are being distributed through farmers' associations. Currently one of the decisive field of activities is co-operation in input purchases (in large quantities directly from the production enterprises etc.) and in search for agricultural product markets. However, the intensity of these activities largely depend on initiative of the management of each particular association.

After the prices were liberated and state order system abolished, the defence of farm producers' price interests in relations with state enterprises in production and trade has become exceedingly topical. Farmers' Federation acts on behalf of agricultural producers both at pagasts level where the associations negotiate directly with processing enterprises, and at state level, in negotiations with the Parliament and Government.

If initially it was envisaged that Farmers' Federation of Latvia would represent farmers' public production interests, as well as co-ordinate the business activities of co-operatives, then at present it fulfils only the former function. The co-operatives are at the initial stage of formation, and it is difficult to prognosticate the direction for their associating.

Further activities of Farmers' Federation of Latvia are in close connection with the Government policy in agriculture and its influence on agricultural product market.

3. Agricultural Producers' Co-operation and Self-Administration, Development Prospects

3.1. Background

Till the beginning of the agrarian reform and partly also today self-administration of agricultural producers was effected by the state through state management institutions, collective and state farms being actively involved in the process. The system included also individual agricultural producers. The bottom-level self-administration unit at that time used to be the collective or state farmers' general meeting.

The agrarian reform having changed the structure of the agriculture producers towards the establishment of individual farmers, presupposes the formation a principally different self-administration system of producers. It embraces different formations of agricultural producers - both public organisations, co-operatives and other enterprises. This system is only undergoing formation, yet today we can already speak about its possible structure and constituent elements.

Figure 17 presents general possible structures and formation principles of the agricultural producers' self-administration. This General System could include two main branches:

1) The system of agricultural association and branch co-operation, which is aimed at pooling the producers' interests, activities and capital to attain economic goals;
2) The system of public organisations which enables the representation of interests of an individual agricultural producer in the relations with the state without any capital investments on his part.

This system may include the following formations:

3.1.1. **rural district agricultural association** which should represent the basic element of agricultural producers' self-administration system uniting on voluntary basis a wide range of entrepreneurs. In order to observe the principle of voluntary participation, rural district agricultural association should essentially be formed as public organisations without involving any capital investments. At present these associations can be formed both as public and co-operative organisations. In many rural districts these are farmers' unions instead of agricultural associations, however, they will have to change their legal status according to the legislation of the Republic of Latvia.

The tasks of the agricultural associations are:

- *to be a catalyst* for the formation of the local co-operation system, if necessary, establishing agricultural service or other formations (co-operative associations etc.);
- *to organise* the representation of the interests of rural districts in the privatisation process of agricultural processing, marketing and service enterprises;
- *to represent* the interests of the rural district agricultural producers in self-administration and raise questions to be discussed at the local government institutions.

The principal scheme of the formation of self-administration of agricultural producer's at pagasts level is reflected in Figure 18.

(1) Branch co-operative associations which can be formed by the producers concerned with the development of one or the other agricultural branch. At present in most Latvian rural districts there are district dairy co-operative associations, co-operative associations for joint use of machinery, as well as for other means of production and services are being established.

3.1.2. **District and regional co-operative associations.**

The formation of the branch co-operative associations can be usually limited only by the district or even lower level units, but these associations can also form regional associations (see Figure 17).It is most widespread in the case of dairy farms when, as a result of privatisation of dairies, district associations are forming regional associations to service the branch. So far this phenomenon has been typical only for this particular branch and not yet been observed in other branches.

Republican branch association could be formed to unite branch associations in order to co-ordinate the branch co-operation on the republican level, it being the top level of self-administration institution (hereinafter branch associations). At present there are already three such associations: the Republican Sugar Producers' Association, the Grain Producers', and the Dairy Farmers' Association. However, the former two will have to change the social basis of their activity significantly, as they both were formed in the times of collective farms and now the greater part of the founders have ceased to be existent.

Regional Agricultural Associations could unite legal persons - the district agricultural associations, regional branch associations, regional agricultural public organisations, including trade unions which have chosen to participate in the regional associations. So far there are no such all-embracing regional agricultural associations in Latvia. In rural regions there are regional farmers' unions functioning as agricultural co-ordinating structures.

3.1.3. **Latvian Agricultural Central Union** could be formed or the representatives from:

- regional agricultural unions,
- branch associations,
- republican agricultural public organisations,
- scientific and education establishments,
- state government institutions.

The main task of the Latvian Agricultural Central Union could be the representation of Latvian agriculture on the international scale, as well as the representation of agricultural issues of public concern in relations with the Government, the Parliament, the State Government institutions of other branches of the national economy and the rest of the association.

3.2. Gradualness of the Formation of the Agricultural Producers' Co-operation and Self-Administration System.

This process, of course, is continuous and gradual, it being closely connected with the general processes of the economic and agrarian reform, and the privatisation of state enterprises and land. The formation of General Self-administration system distinguishes the following stages (see Figure 19).

1. The formation of agricultural structures uniting separate agricultural producers within the rural district. Basically this stage could be finished by the end of 1993.

2. The formation of higher level organisational unions (regional and republican) on the basis of primary formations. Dairy farmers' structures could be established by the end of 1993, in the other branches - by the late 1994.

3. On condition that the first two stages have been completed, the formation of the all-embracing agrarian branch producers' self-administration organisation which represents the majority interests of these agricultural producers. The implementation of the tasks of this stage is a question of distant future, and it depends both on the socio-political situation in the country and need for agricultural organisation and abilities to implement it, as well as on the state activities to effect the agrarian policy.

The legal basis for the creation of agricultural self-administration system and its functioning at present is constituted by:

- the law "On co-operatives";
- the exemplary by-laws of particular co-operative elaborated on the basis of this law;
- the law "On public organisations and their associations".

4. Decentralisation and Co-ordination in Services to Small Farmers

After evaluating the institutional structure in service system to farmers, as well as taking in account state, district, pagasts officials' and small farmers' point of view, we can draw certain conclusions. Currently several macro and micro reforms are in progress simultaneously (agrarian reform, state administration reform, privatisation of service objects at all levels, principal changes in distribution system, crisis with settlement of payments etc.), and in fact there does not exist any co-ordination whatsoever between the service structures. In order to have a co-ordination of some kind, and co-operation between service structures both horizontally and vertically, it is essential that the new self-administration structures establish and consolidate first (see Chapter IV, 3).

An exceedingly important provision for the formation of self-administration structures is a motivation for agricultural producers to undertake activity like this. At present, when the producers' structures are at the stage of reform, there is neither economic nor social motivation, and, psychologically, small farmers tend towards separatism (see Chapter I, 5.2. and IV, 2 and 3).Decentralisation both in supply system and in decision-making at state and farmers' association level has been spreading widely during 1992, when the distribution system of "funded" services collapsed. Another problem is that decentralisation has, in a rather chaotic manner, replaced the central management system, and in absence of co-ordination of any kind, creates a saturated supply of inputs, like in unrestricted market economy (see Chapter II). It is a matter still to be discussed in Latvia whether this tendency is revolutionary or it is regressive. According to the answers to the questionnaire, more than a half of the farmers express opinion that the institutional status of their service supplier does not matter; it is the possibility of choice what matters. Moreover, most of the respondents express a wish to have private businesses as their partners, only 10% think of farmers' associations or local self-administration structures as possible service suppliers, and only 1% would like to see state structures in service business. This is why we would like to estimate the above described process as progressive.

V. LIVING CONDITIONS OF FARMERS - THEIR NEEDS, INTERESTS AND PROPOSALS FOR SERVICE ARRANGEMENT, INPUT AND OUTPUT

This chapter contains information, obtained in private interviews with farmers, and Farmer's Association leaders at district and grass-roots level (see Annex 1.2) and results of an anonymous questionnaire (see Annex 1.3), as well as yet unpublished data about needs of Latvian farmers, that would be incorporated into the Agrarian Policy Project (by granting investment priorities to develop infrastructure of small farms).

1. Infrastructure of Small Farms and Investment Requirements

1.1. Infrastructure of Small Farms

The majority of new farms have been developed at some distance from the centres of former collective farms. These areas have little percentage of drained lands, therefore annual renovation of subsurface drainage is required in area of 10 thousand hectares, reconstruction and repair of drainage system in area of 22 thousand ha and new subsurface drainage is required in cultivated land area of 5 thousand ha.

According to soil studies, normal crop cultivation could not be performed without capital soil reclamation, measures in the following areas of cultivated land:

- 550 thousand ha - due to soil acidification under pH 5,5
- 1400 thousand ha - due to deficiency of phosphorus (less than 70 mg);
- 840 thousand ha - due to low potassium level (less than 80 mg).

Additionally in some 30 percent of soils the humus content is very low (less than 2 percent).

About half of existing private farms suffer from poor condition of local roads, while approximately ten % of operating farms and half of areas to be acquired by claimants in 1993-1996, lack the drive-up roads at all.

The situation in providing farmers with electrical power turned out to be more complicated. At present nearly 4 thousand private farmers are compelled to manage without electric power, but 85% of them - without three phase (380 v) electric power. It makes negative impact on farmers' living conditions and mechanisation of cattle-breeding, as well as processing of agricultural products. Only some 20% of private farms are provided with telecommunications.

Approximately 60% of small farmers are operating on their allocated plots without dwellings and supplementary buildings. Full construction costs for one small farm has already risen in average from 2,5 to 4,0 million LVR.

As much as 60 % of small farmers lack the necessary machinery and livestock, if they decide to start intensive agricultural production.

In a situation like this, large investments are required in basic infrastructure to support private farms (see Table 7).

Besides long-term investment requirement, the small farmers need short-term loans for current assets for the following expenditures (see Table 3) - purchase of seeds. The total seed requirement for spring planting season is 40 thousand tons. Certain amount of seed is produced by farmers themselves, therefore 25 thousand tons are to be purchased from Latvian Selection and seed-growing research centres to the tune of 4,1 million US$ or 750 million LVR.

The total costs of fertilisers will amount to 72 US$ per hectare, if we base our calculations on 180 kg active ingredients per hectare.

The small farmers have already 560 thousand ha of cultivated area at their disposal. According to assumption, about 50% of fertilisers are to be purchased using credit resources, therefore 20 million US$ or 3500 million LVR are required:

- the required amount of credit resources for fuel purchase is estimated to be 19 million US$ or 3385 million LVR;
- purchase of agrochemicals. If we assume that 60% of area under cereals is treated with herbicides, 5% - with insecticides and 10% - with fungicides, the total requirement of current assets will be 1.25 million US$ or 225 million LVR.

1.2. The Latvian Agrarian Policy regarding investment priorities

The Latvian Agrarian Policy envisages the following investment priorities and sources of funding:

1) Development of infrastructure of small farmers: erection of drainage systems; electrification; road construction; improvement of telecommunications; land reclamation; purchase of machinery; construction of dwelling-houses and farm buildings.
2) Development of farmers' education and training centres, advisory and marketing systems.
3) Up-dating, technological rearrangement and privatisation of agricultural production processing enterprises.
4) Grain production.
5) Sugar production.
6) Development of regional agricultural machine-building.
7) Production of construction materials for farmers' dwelling-houses and farm buildings (roof materials, wood constructions and articles).

1.2.1. The sources of investment are envisaged to be as follows:

a) **Latvian State Budget**

The majority of budget contributions are targeted to develop the infrastructure of small farms, drainage systems, electrification, construction of roads, erection of telecommunications and land reclamation.

The remaining sum will be used:

- to strengthen agricultural science and agriculture schools,
- to reconstruct and convert the production units of regional agricultural machine-building enterprises, to cover equipment and machinery testing expenses;
- to reconstruct and finish the construction of ecological equipment in food processing enterprises.

b) **Foreign long-terms loans and technical** assistance (World Bank, G-24). The envisaged usage for these loans is the following:

- to purchase necessary machinery and livestock in small farms;
- to construct dwelling-houses and farm buildings,
- to update and re-equip agricultural processing enterprises;
- to establish small and medium capacity food processing enterprises;
- to update and reconstruct enterprises in food processing industry;
- to continue the regional agricultural machinery manufacturing programme;
- to encourage agricultural foodstuff export;
- to establish production units for manufacturing of wood constructions, articles and roof materials.

c) **Short-term loans granted by foreign and Latvian banks.** These loans are envisaged as current assets for small farms to purchase fuel, fertilisers and seeds, as well as current assets for food processing enterprises.

2. Attitude and Proposals for Input and Service Arrangements

2.1. Selection of Suppliers

In 1992, the small farmers have fundamentally changed their attitude towards the input supply channels. Rapidly rising input and service prices, difficulties in settlement of payments, problems in receiving credits and diminishing role of farmers' associations in providing input supplies, have psychologically adjusted farmers to this new situation: *to accumulate necessary input resources considering only one criterion - price; and to order services only in case of a real urgency.*

The results of questionnaire can testify to this outlook. 55% of respondents "do it different ways": see Item #6; Answer #7 in the Questionnaire (further: 5.,7.), moreover, this answer has not been impacted by distance up to the largest service centres, nor by being a member of any company. As for further opportunities, approximately half of farmers (49%) consider choice to be the most decisive prerequisite, regardless of supplier's legal status as a state, a co-operative or a private company.

The majority of respondents consider that their further suppliers will be private companies. In early 1992, these suppliers of input resources and services were regarded as shady transactors. The majority of farmers, of course, changed their opinion, after they had done some business with private structures. Furthermore, at present some farmers are involved in private entrepreneurship - they sell machinery and farm products, render transportation and machinery services (e.g. the range of services offered by individual farm "Robežnieki" is greater than in state enterprise "Lauktehnika").

The questionnaire data on input and service channels testify to the above mentioned action model of Latvian farmers (Question #9):

1) 48 % of fuel has been purchased in state structures (mainly because of state-granted credit in spring, 1992; see Chapter 3.1.);
2) 27 % of fuel has been obtained from private structures, including unofficial. The situation differs in districts of Latvia. In Eastern districts (Alūksne, Balvi, Rēzekne) and

regions adjacent to Estonia and Lithuania (Valka and Jēkabpils), state fuel has been purchased in small amounts, because of the large offer of comparatively cheap fuel (from Russian Army, official and unofficial fuel importers, as well as special "fuel trips" of farmers to Russia and Lithuania);

3) The fertiliser supply is organised through state monopoly structures (78 % of farmers) obtain fertilisers in state structures, though the purchased amounts are little, because of high prices and ecological considerations, prevailingly organic fertilisers are used). In districts adjacent to Russia, farmers try to import fertilisers from Russia (officially or unofficially) because fertilisers in Russia are 10 times cheaper than offered by state enterprise "Agroķīmija";
4) Veterinary services are carried out by veterinarians of companies, or licensed private practitioners. These private practitioners will practically render all veterinary services, if the companies are fully privatised and the tendency of 1992 remains. A certain competition has already appeared among veterinarians, restricted a little by the vast territory and the high transport costs;
5) The farmers' co-operation in providing technological (machinery) services is very low, therefore 53 % of farmers use services of neighbouring companies. These services were relatively cheap, moreover, in the cases if the farmers were the shareholders in these companies. The amount of services, rendered by private farmers and informal co-operation (using of neighbour's machinery) will increase in near future. This will be promoted by privatisation of companies. As for example, after having privatised a second-hand tractor for his shares, the farmer can render cheaper services, because practically no depreciation deductions are being calculated. These deductions can be 10 times higher for new machinery (this situation turns to be difficult to understand in Western Countries, because European bookkeeping system is being implemented in Latvia only with this year).

The technical services in crop cultivation are with a vast perspective - some 75% of respondents would like to order these services to qualitative entrepreneurs (the general demand could be for land cultivation, ploughing, fertiliser spreading, etc.):

(1) 62 % of respondents would like to sign appropriate agreements;

(2) 45 % would prefer complex crop cultivation services. As it turned out in interviews, the proposed partner is private businessman. The proposed service arrangement for such private company would include full crop cultivation complex:

- soil sample analysis;
- crop rotation;
- cultivation of and planted areas;
- harvesting.

2.2. Monopolies in services

The farmers consider their choice to be sufficient, as regards suppliers of necessary inputs and services, except for:

- fertiliser supplies (no alternative to 38% of respondents);
- suppliers of agrochemicals and agrochemical services (51%);

- technology services (42%).

Yet the situation in credit availability is too bad (as only 7% of small farmers consider the credits to be available).

2.3. Availability to receive input resources and services as to timing and convenient location. Prices and settlement of payments.

Veterinary and advisory services are the best organised as for timing and location (the responses of 74 and 80% of farmers, respectively). The most difficult is to receive agrochemical services in exact time and location (in practice these services are provided by state monopolies), as well as to purchase of construction materials and machinery. Only 15% of respondents consider it possible to receive these services exactly in time and at a convenient location.

The farmers have adjusted to purchasing machinery and construction materials themselves at sales place, after careful quality examination. This kind of activities proved to be correct, considering the high delivery costs and non-existence of after-sales service. Of course, some private companies have been formed in several regions (Valmiera, Jēkabpils), to undertake such operations, as described in Chapter III 3. These companies deliver of spare parts directly to private farms, though a half of small farmers consider these services to be expensive.

Close correlation has proved to exist between the distance to machinery service centre and satisfaction with service quality. As, for example, the smaller the distance to regional centre is, the more satisfied are farmers with availability of veterinary services, or fuel supplies. And vice versa, the distance to district centre ("agroķīmija" enterprise) being larger, the number of unsatisfied farmers increases (for great extent it is due to price increase).

Farmers turned out to be satisfied with existing order in settlement of payments for inputs and services in the form of

- payment in advance;
- state loans (for seed, fuel purchase).

At the same time input prices are considered to be unsatisfactory by 48 to 67% of respondents (depending on type of input).

The common psychological situation, when farmers consider all inputs to be too expensive, but output prices - too low, can be explained with the strained situation in settlement of payments: farmers have already reconciled themselves to the fact of unavailability of short-term credits at the moment when input suppliers require full payment in advance. Yet it cannot be understood by the farmers how repayments could be delayed for several months by state as processing monopoly (to some extent, also a monopoly in marketing), moreover, under the existing high inflation rate. In case the balance of input-output payments is reached, the input needs of small farmers could be met by 50%. The results of questionnaire (Question 8) testify to it - in case credit resources appear to be available and payments for delivered products are settled timely, only 1/3 of farmers would be dissatisfied with the current input and service supplies.

3. Farmer's Attitude and Wishes Regarding Storage, Processing and Marketing of Outputs.

Farmers' attitude towards possibilities of choice for marketing and processing is definitely negative; there are more branches of agribusiness where the farmers do not see any perspectives for future (or recently have dropped altogether) than the ones which farmers consider to be perspective (see Table 10). Under the conditions of economic crisis and the lack of protectionism on government's part, the farmers more and more are heading towards subsistence economy (see Table 9). Only in meat production they see some marketing options. The developing small and medium-size slaughterhouses and meat-packing shops (pigs are most often slaughtered at farms already now) can become one of the most perspective branches of agribusiness. Dairy farming, on the contrary, owing to its technological peculiarities and lack of branch producers' co-operation, not only does not bring in any revenue, but, actually, each day brings losses to the farmer.

The fact that in agricultural production privatisation is proceeding at a much quicker pace than in processing and trade, makes the economic relations between the private producer and state monopoly very complicated. This situation is likely to alter and improve with the ownership change in processing and trade enterprises; as well as with structural changes directed towards decentralisation and market-responsiveness; and with export protectionism on state level.

Most of the farmers who participated in the interviews expressed an opinion that the only opportunity to raise the producer price, and, consequently, farmers' income, is to treat and process most of farm products to wholesale or even to retail stage locally, i.e. in the pagasts or a little larger area. This trend would mean:

- farmers' local co-operation by branch;
- formation of private businesses' network in competitive environment.

First of all, this refers to creameries; skimmed milk should not be transported out of the pagasts, but milk with standard fat contents should be sold for further treatment at a higher price. The same is true also as to slaughterhouses, freezers and even smoke-houses and sausage-producing shops, grain dryers and local concentrated feed mills.

It should be noted that already now farmers transport the product to storage, or to the customer, with their own vehicles. 60% of farmers do so with grain, 72% with potatoes, 44% with livestock and meat. Only in dairy farming, considering the peculiarities of the branch, 63% of respondents make use of the customers, i.e. dairy processing plant's, transportation. It is more profitable for a farmer to buy his own vehicle than to pay the expensive transportation costs, because the customer deducts these charges from the price he pays to the farmer.

The situation is similar with storage of crop-production outputs. The farmers store themselves most of the grain (62%) they utilise at farm as feed; they have erected their own small grain-dryers using firewood as energy source. Only 3% of farmers make use of the former collective farms' grain-dryers, including those now owned by farmers' co-operatives. 67% of farmers store potatoes; the rest sell them right after harvest. Only 1% of farmers store potatoes on co-operative basis. The farmers pursue the following tactics: to store potatoes for feed themselves; to preserve them till spring when the price is higher. It is fully possible that already in the spring of 1993 farmers will have to change their tactics, as the potato supply does not diminish, whereas the demand decreases a little.

Forest has traditionally been one of the main income sources for Latvian farmer. This has been helpful also nowadays as a partial remedy for the financial difficulties caused by the chronically delayed payments. In 1992 the government allotted each farmer 100 m^3 of lumber as a credit not to be reimbursed. The approx. 40 m^3 of timber obtained was either for construction, or sold for export, mainly to Sweden and Finland. The revenue was invested in purchase of farm inputs. Even in this transaction part of the farmers could not make the expected profits: Figure 20 shows how many tons of diesel fuel farmers could buy during 1992 for the money raised from selling 40 m^3 of timber for paper and pulp industry.[2]

[2] In the diagram the costs of $1m^3$ of timber are assumed to be 10 US$, transportation to the port of Riga included; price of diesel fuel and paper-timber, as well as the exchange rate between US$ and LVR are taken in account.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1. Conclusions and Prognosis of Evolution

4.1.1. On June 5 and 6, 1993 the first democratic elections after the 1940 occupation took place. They were organised in compliance with the legislation from the times of independence. The majority of seats in Saeima (Parliament) will go to the right-centric forces, and there are no indications that any major changes might take place in the agricultural policies, for many of the new Saeima deputies have participated in working out the legislation for the agrarian reform.

The introduction of Latvian permanent currency lats (Ls) together with the strict monetary policy pursued by the Bank of Latvia, a quick privatisation of branches related to agriculture, guarantees for foreign investments and other economic measures should lead to the conclusion that the structural changes in agricultural production, input services, processing, trade and management will be completed till about the end of 1996.

4.1.2. The responsibilities of government structures with the regard to services for small farmers should be limited to very few functions:

- distribution of credit in kind in crucial situations;
- determining of supply quotas for the procurement of state reserves;
- support of perspective export products which could enter world markets;
- improvement of infrastructure for small farmers and implementation of target programs.

Structurally the fulfilment of state functions by institutions should terminate at district level; further on they should be carried on by pagasts self-administration structures.

4.1.3. Currently the small farmers' co-operation and formation of self-administration and farmers' federation are weak structures. The main reasons for this are:

- lack of economic incentives to from farmers' self-administration;
- psychological "separatism" that has appeared after the long years of collective farming;
- lack of information and knowledge about principles and goals of classical co-operation in service ;
- dynamic structural changes are still in progress among the agricultural producers.

4.1.4. The share of private business in farm services has considerably increased during 1992, thus eliminating the state monopoly in several resources and services (fuel, veterinary service, partly machinery and technological services). Private businesses are the entrepreneurs that most of small farmers are willing to have as partners.

4.1.5. In 1992, when a sharp turn from socialist "funding" to free market relations in input and partly also output the services took place, any co-ordination between the service suppliers disappeared. The only principle the small farmer adheres to when fulfilling his service needs is: a lower price for inputs - higher price for outputs. In order to achieve this, also "semilegal" input services are used. The scope of decentralisation in services is really large, if by this concept we describe the replacement of strictly centralised system with structures competing with each other.

4.1.6. The main problem for farmers today is comprised by the chronically delayed payments from the processing enterprises (2-3 months). In connection with the order that in most cases farmers have to pay for inputs in cash, and that interest rate on short-term credits is, in the best case, 15% per month, the small farmers become financially invalid and incapable of operation.

4.1.7. The system and level of supply for small farmers varies greatly from one input or output to another. To farmers' mind, the best situation is where there are options to choose from (fuel, seed), or where the supply structure is stable (veterinary service).

4.1.8. The price of services are the largest stumbling block for farmers. A farmer can receive practically any service at a convenient place and time, if he is ready to pay the high price.

4.2. Simple Measures for Improvement of Situation

4.2.1. In the districts which border with Russia, farmers' co-operatives should be founded the soonest possible, which could take the advantage of, for the time being, cheap resources (fertiliser, fuel, machinery etc.) and purchase them in large quantities. They could even be granted a financial support from the government. This issue is not yet solved at governments' level because of political motivations.

4.2.2. In accordance with the recently passed legislation, to privatise the large dairy and meat processing enterprises. These will either be under the control of farmers and operate on co-operation principles (dairy), or will be sold. The system of constant delay of payments would be thus done away with. About half of the farmers would be able to continue normal farm operation and money circulation.

4.2.3. Within the framework of foreign aid, to organise education and training programmes for small farmers on the topics of co-operative and self-administration organisations, their structure, operation etc. Even some financial help could be raised from the above said source for establishment of small farmers' co-operatives (keeping to the step-by-step principle: branch co-operative in the pagasts - branch co-operative in the district (or zone) - multi-branch co-operative in the pagasts and so on). This would be a rather quick way to set up the structures of local self-administration.

4.2.4. State support is necessary to promote the production of certain agricultural products typical only for small farmers - like organic products, honey, berries etc., which could find a gap in the world market. This could initiate specialisation in farming and would gradually replace the prevailing subsistence economy now favoured especially by small farmers.

4.2.5. A three-party co-operation: foreign experts - Latvian scientists - Advisory Centre for Agriculture, could lead to working out and implementation of service system for small farmers in Latvia, which would be capable of evolution together with the structural changes of agricultural producers.

4.3. Strategic goals of small farmer service and management.

4.3.1. When the self-administration structures will be established, it will be possible to ensure to process the farm products locally, and thus saturate the food market in small towns and in the countryside.

4.3.2. With the change of taxation, especially as to property tax and deductions from the taxable income (profit), as well as with the help of other economic tools, to achieve an efficient utilisation of resources and a qualitative change.

4.3.3. To expand the opportunities for a farmer in the aspect of choosing his service supplier, the government has to impose control on monopolist structures, has to stimulate privatisation of services and promote the establishment of new private businesses, especially if they are capable of rendering mutually co-ordinated complex services (e.g., in crop production - from analysis of soil samples to harvesting).

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