Policies for agriculture in Poland and the Netherlands
Contributions to a policy dialogue

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This volume contains background papers that contributed to discussions between Polish and Dutch agricultural policy makers, held in Warsaw (16-17 July, 2002) and in The Hague (26-27 September, 2002). These meetings took place in the context of the Utrecht Conference in which bilateral meetings on various policy issues are organised. The papers give insights in the agricultural and rural development in both countries and point at the main problems at stake. Further, the contributions discuss the past and present agricultural and rural policies and show to what extent these policies help(ed) to tackle the major problems of the agricultural sector and rural areas. Discussions took place on various issues such as farm retirement and direct payment schemes, competitiveness of the sector and the future developments of the Common Agricultural Policy in an enlarged European Union.

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Preface

This volume contains background papers that contributed to discussions between Dutch and Polish policy makers in the field of agricultural and rural development. The background papers are prepared by research staff of the Polish Agricultural Policy Analysis Unit (SAEPR), the Dutch Ministry of Agriculture, Nature Management and Fisheries and the Dutch Agricultural Economics Research Institute (LEI). LEI considers it an honour to have been asked to bring in its expertise and to be involved in the bilateral policy meetings, held in July 2002 in Warsaw and in September 2002 in The Hague. It is with pleasure that the Institute presents the background papers in this volume for a wide distribution.

Prof. Dr. L.C. Zachariasse
Director General LEI B.V.

Introduction

In the context of the Utrecht Conference Poland and the Netherlands have close bilateral contacts. They regularly discuss policy issues and have set up bilateral working groups.

In April 2002 a Polish-Dutch Agricultural Working Group was set up.Poland and the Netherlands are after all, both agricultural countries. Poland has an extensive farming area, and a large part of the population works in agriculture. Structural adaptations in the sector will be necessary in the coming years. Farmland in the Netherlands is scarce which required Dutch farmers to produce intensively. Environmental restrictions will force the Netherlands to make the necessary changes to production methods.

With the accession of Poland the Netherlands and Poland will soon become partners in the European Union. They will both have to deal with CAP requirements and take part in discussions on amongst others the future of dairy policy, rural development and food safety.

This prospect has created a wonderful climate for cooperation between the two countries. Major issues have been discussed in various sessions of the Agricultural Working Group and always in an open, friendly atmosphere.

The Polish Agricultural Policy Analysis Unit (FAPA) and the Dutch Agricultural Economics Research Institute (LEI) have contributed to the discussions. They have written papers on such topics as direct payments and competitiveness of the agricultural sector. As these contributions have been extremely helpful we have decided to make them available to a wider public.

This publication reflects the cooperation between our two countries. We hope that the cooperation between Poland and the Netherlands will continue to be as open and friendly as we have seen it here.

Jerzy Plewa
Undersecretary of State
Ministry of Agriculture and
Rural Development
Poland

Ate Oostra
Director General
Ministry of Agriculture, Nature
Management and Fisheries
The Netherlands

Conclusions

The Polish - Dutch working party on agriculture met on 16 and 17 July 2002 in Warsaw and on 26 and 27 September in The Hague. The Polish delegation was led by Mr. Plewa, vice Minister of the Polish Ministry of Agricultural and Rural Development and by Mr. Piskorz, head of the Polish delegation in Brussels. Mr. Ate Oostra, Director General of the Ministry of Agricultural Nature Management en Fisheries in the Netherlands, was head of the Dutch delegation.

Summary of the first meeting in Warsaw

- Mr Ate Oostra first presented the proposal of the European Commission on the Mid Term Review and the first discussions in the Agricultural Council. There was a useful discussion on the different elements of the proposal, amongst others the proposed modulation scheme and the farm audit system.
- Different departments of the Polish Ministry of Agriculture and Rural Development and the Foundation of Assistance Programmes for Agriculture (FAPA) gave presentations on Poland's current agricultural and rural development policy instruments.
- The Netherlands presented papers on the Dutch agricultural and rural development policies of the last 40 years and the importance of the CAP to the Dutch agricultural sector. The papers were extensively discussed.
- After an analysis of the Polish comments by the Dutch Agricultural Economics Research Institute (LEI) the comments of Poland on the Issues Paper of the European Commission were discussed. A research paper of the analyses is available.

Summary of the second meeting in The Hague

Discussions took place on a number of subjects, including:

- farm retirement;
- competitiveness of farming;
- simplified versus standard scheme for direct payments;
- future developments of the Common Agricultural Policy;

The following conclusions have been reached:

- The Common Agricultural Policy contains some instruments that have a social rather than an economic objective;
- With the ongoing liberalisation process, there should be a clear focus on the competitiveness of the sector in the CAP;
- A clear legal and institutional framework is of the utmost importance for investments in the sector. Investments (in physical and human capital) do play an important role in the competitiveness of the sector
- Although many factors determine the competitiveness of a sector, the Common Agricultural Policy has certainly an important stake in this

- It should be avoided that the CAP leads to distorting of production and trade within the -European Union. Therefore transitional periods should be as short as possible
- The social dimension of people leaving the agricultural sector should be recognised. Policy instruments -mostly outside Agricultural Policy- should be developed to take account of these.

1. Agricultural and rural development and policies in the Netherlands[1]

Kees de Bont, Siemen van Berkum and Jaap Post, LEI

1.1 Introduction

This paper presents in brief the major problems in agricultural and rural development in the Netherlands over the period 1960-2002. It further shows what policies were applied to tackle the issues identified. The aim of this paper is to present key issues relevant to the development of the Dutch agricultural sector and the role of policies in that development process for discussion with representatives of Poland. The difficulties that the Dutch agricultural sector had to face may show resemblance to problems the Polish agricultural sector face today. Setting out the Dutch development issues and policies to tackle them may provide ideas to Polish policy makers in their effort to find solutions for obstacles hindering further development of their own agricultural sector.

A number of problems identified in the farm sector and related to rural development, which are listed in this paper, already existed in the 1960s at the eve of the introduction of the Common Agricultural Policy (CAP) of the European Union (EU). Most of these issues are still questions today and thus have a long history (2.1). Other problems, however, came up more recently (2.2), as a consequence of the developments in the sector and in the general economy and society as well. Policies to tackle the major problems are national (agricultural) policy measures (section 3), but also the CAP played a role (section 4). Lessons from the interaction of policies and agricultural development are drawn in the concluding section 5.

1.2 Main problems in agricultural and rural development in the Netherlands

1.2.1 Problems existing in the 1960s

In the first two decades of the post World War II period a major problem for the Dutch farm sector was that many farms were too small to earn a reasonable income. In general, prices of farm products were the result of the market situation on which only the most efficient suppliers could realise an income comparable to other sectors. The Dutch government gave high priority to access to export markets and was very reluctant to provide price support or subsidies to the sector. In the early 1950s policies to improve the structure of the sector were emphasised, aimed at increasing productivity in the sector. Soon, productivity and production increased significantly. Investments in improvements of the structure of farms and the sector as a whole were crucial for further development. However, not all farmers could join that process.

[1] This paper has been discussed at the expert meeting in Warsaw, 16-17 July 2002.

Income disparity
With the exception of the first years after World War II when market conditions were favourable, most Dutch farmers had high production costs compared to their returns for their products. Total family income of the farmer could only be reasonable if remuneration for labour (of farmers and their family members) and for own land and capital was considered part of that income. Of course, incomes could differ strongly within the sector depending on many factors such as the size of the farm, productivity levels and prices for products marketed. Especially farmers who had to rent land and borrow money for making investments (the majority of farmers at that time) earned low incomes compared to average incomes in the rest of the economy and overall income disparity between the agricultural and non-agricultural sector increased.

Farm structure
The farm structure in the Netherlands could be characterised as small: in 1960 the average acreage of a farm was 7 hectares, with farms much smaller in some regions in the South and East of the country. Farms were often mixed family farms and productivity levels were low. In part this situation was the result of the economic crisis before World War II. Around 1960 there were still many young farmer sons interested to take over the family farm. Major reasons for this were the (physical) distance to the cities with employment opportunities, lack of schooling for non-farm jobs and the wish to stay in the farm sector and be an independent entrepreneur. These reasons hindered the discharge of labour and became an obstacle for agricultural productivity growth in the sector.

Finance/ investments
In general, farmers were reluctant to finance investments in modernisation and expansion from external loans and tried to use mainly own or family capital. Farmers also had problems to get loans with a reasonable interest rate from banks. Many farmers, who rented a farm (rented area in 1960 was about 50% of all agricultural land), were not able to provide sufficient securities for bank loans.

Infrastructure (production conditions)
Efficient production in many regions was handicapped by the fact that agriculture parcels were small, scattered at different locations, and sometimes far from the farm building. Besides that, water control (an eminent factor in Dutch agriculture with more than 60% under sea level) was insufficient for an optimal production and land roads often were not adequate for modern transport.

Infrastructure (processing, marketing)
For a large part processing and marketing around 1960 was based on local co-operatives and small-scale private enterprises (milk processing, slaughterhouses, auctions for fruits and vegetables, deliveries of animal feed, fertiliser, machinery etc.). Agribusiness was largely oriented towards the regional market for selling its products. Export activities were organised separately by specialised enterprises, for instance for dairy products.

1.2.2 More recent problems

In the 1960s and 1970s, the agricultural sector in the Netherlands (and also in other EU countries) was in a phase of growth, scaling-up, mechanisation and modernisation. Soon, problems linked to the rapid growth of production came up.

Environment
Intensive production on farms on the base of high levels of inputs such as fertilisers and pesticides as well as an increase of the number of animals (cattle, pigs, poultry) per hectare has lead to several environmental problems. In fact a surplus of minerals (nitrates, phosphates and ammonia) as well as chemical products used to protect crops polluted soil, water and air. In the 1970s, Dutch society became more aware of this and increasingly refused to accept the negative effects of agricultural practices on nature, the landscape and biodiversity. Following the public concerns governmental measurements were announced to restrict the emissions of the sector of harmful components to the environment.

Land use, landscape and nature
Given the high population density in the Netherlands and the growing prosperity, claims on land for other purposes than agricultural production (such as housing, infrastructure, industries, recreation) increased. These claims are not only formulated in quantitative terms (number of hectares) but also qualitatively which means that the society demands increasingly a landscape that looks attractive enough to spend leisure and holidays.

Animal welfare and health
Since a number of years, the general public shows interest in the conditions of animals, especially of those in the intensive, relatively large-scale pig, poultry and calve sectors. Apart from that, it is important to prevent the sector from infectious diseases like swine fever or foot and mouth disease, which can lead to enormous financial losses.

Quality of products
In order to remain competitive the quality of products (taste, fresh, healthy etc.) is of growing importance in a more open international market. In this respect Dutch products are not always at the forefront. Consequently, this has a negative impact on prices and incomes of farmers.

Energy (prices and environmental issues)
Dutch horticultural sector is an important, yet energy-intensive activity. High energy (oil, natural gas) prices have, at least for the glasshouse sector (vegetables, ornamental plants, pot plants) an enormous impact on production costs (energy costs are around 15% of total production costs) and income. Further, the huge volume of energy used mainly in the glasshouse sector and its CO2- emissions cause environmental concerns.

Labour (supply)
Some horticulture sectors (glasshouse, bulbs, fruits) are short of labour during harvest periods. The image of the sector, labour conditions as well as the short time work is available

(no contracts for a long period) prevent (Dutch) workers to respond to this demand, especially in periods of a favourable labour market (nearly no unemployment) which was the case in recent years.

Price reductions in the framework of the EU CAP
Starting in the sixties, some years later the EU was faced with its first market problems (surpluses, stocks, increasing budgetary claims), first on the dairy market and later on the cereals and beef markets. In those circumstances CAP's price policy had to adjust and could no longer guarantee prices at a level corresponding with growing costs of production (the aim was more or less to have parity prices, based on an objective method to follow the development of production costs). First, prices were frozen, farmers had to pay 'co- responsibility levies' and at a later stage it was decided to decrease prices (cereals, beef) or to maximize the volume of production (on milk). Consequently, farmers' incomes were under pressure.

Monetary imbalances and exchange rate volatility
In 1968 monetary stability in the European Union as well as exchange rate stability between European currencies and the US dollar disappeared. At least in the EU market both interrelated phenomena threatened the unity of the market and the farm price policy. For the farm sector an imbalance between the rate of inflation and the development of prices can have far-reaching consequences on incomes. For Dutch farmers a relative strong Dutch guilder resulted in lower guaranteed prices in the European currency (ECU) in a period that inflation and costs of production increased rapidly, as they did in the 1970s.

1.3 Interaction of the development of the agricultural sector in the Netherlands and national policies applied

1.3.1 Introduction

This section deals with policy instruments introduced in the Netherlands to tackle the problems mentioned in section 2. The aim is to present the Dutch approach towards agricultural problems that occurred over the period 1960-2002. The Dutch approach towards the problems of agricultural development may give Polish policy makers ideas on how solve problems the Polish agricultural sector faces presently.

It should be emphasised that agricultural sector policy is not separated from other elements of governmental policy. As an important point in the evaluation of policy instruments used to solve agricultural problems, it should be underlined that the farm sector in the Netherlands is always considered being part of the (whole) economy. On the one hand the sector contributes to general social economic goals, on the other hand the general economic development creates, at least in part, solutions for problems in the farm sector. The Dutch government formulated several economic goals in the 1950s: economic growth, full employment, productivity improvement and balance of payments equilibrium. It was stated that the agriculture sector should contribute to reach these goals. The creation of employment outside the farm sector, as it was supported by the socio-economic policy, was very

important to relieve structural problems in agriculture. In this framework, the Netherlands has an important practice of consideration between government (public authorities) and private organisations (corporative economy).

1.3.2 Policy instruments on problems with a longer history

1.3.2.1 Socio-economic policy

For a sustainable economic development of the agriculture sector, policies of other ministries than the Ministry of Agriculture are also important. Among the policy fields that affect agriculture are monetary and fiscal policy, the economic structural policy, social policy, town and country planning and environmental policy.

Macro economic policy
For an export-oriented agricultural sector, it is important that the currency rate, inflation rate and interest rate develop favourable vis-à-vis other countries. When around 1970 the fixed rates of exchanges of the European currencies and the US dollar (Bretton Woods agreement) were abandoned the Netherlands successfully aimed for a stable guilder against the German Mark and low inflation. An important objective in this respect was to follow the economic development of Germany, the main market for Dutch agricultural and other products. Inflation rates depend amongst others (fiscal and monetary policy) on the development of labour wages. The Netherlands has a long history of fixing wages by (collective) agreements between representative organizations of employers and employees (trade unions).

Fiscal policy
For almost a century Dutch farmers pay taxes in a normal manner, based on their income account. In this system depreciation on investments and paid interest stimulate investments. In addition, like other branches of industry, agriculture could make use of a system with premiums on investments (Industrial Investment Act WIR) in the 1970s and 1980s. This stimulated investments in new stalls as well as greenhouses. Bonuses linked to policy objectives, as small-scale activities, energy saving and environmental requirements, were important as incentives for specific investments. Some specific fiscal facilities for independent entrepreneurs (not only farmers), as well some specific regulations (fiscal facilities) for the farm sector on the value of land and production rights (quota) support the continuity of the farm (succession by son or daughter).

Industrialisation
In the first decades after World War II, the Minister of Economic Affairs stimulated the development of (non-agricultural) industry as well as the agricultural processing industry. This was important to create employment outside agriculture as an alternative for farm workers (employees) and farmers' family members and farmers themselves.

Social security
The system of social security in the Netherlands took shape above all in the 1950s. Schemes on pension and disability made it easier for (older) farmers to stop working and to make way for younger ones.

1.3.2.2 Consultation

Co-operation between public and private parties is a special characteristic of the Dutch economy. Since 1945 the Netherlands has a system of intensive consultation between the government and representative organizations of employers and employees. These organizations (social partners) are member of the Socio-Economic Council (SER) as well as of the Labour Foundation. Recommendations of the SER were in order to achieve the four central goals: economic growth, full employment, and productivity increase and balance of payments equilibrium. In this context, the Labour Foundation sometimes advised to limit (general) wage increase.

In agriculture, consultations between the government (the Minister of Agriculture) and the sector already started in the 1930s. At that time, a deep economic crisis depressed incomes. Immediately after World War II, the Statutory Industrial Organisations (PBO) were founded: horizontal sector boards as Landbouwschap for the farming sector (until late 1990s) and vertical Commodity Boards (Productschappen on, for instance, Arable Products, Dairy Products etc.). These PBOs have a task in regulating and stimulating activities in the sector (for example, improvement of quality of production, animal health), advising the government and representing and promoting interests of the sector. In fact, for a long time a large part of policy for the farm sector in the Netherlands was the result of direct consultation between the Minister and the representative organizations (so called Green Front including representatives of farmers' unions in political parties and the Parliament).

1.3.2.3 Research, Extension (advisory), Education

Economic development of agriculture is supported by a well-functioning knowledge and innovation system. Transfer of knowledge increases the skills of the farming population, improves productivity and eases structural adjustments. The roots of this system lie in the agricultural crisis of the 1880s, when the Dutch government saw it as its task for the future to promote technical and economic development of agriculture in an open market. The knowledge system is a product of close collaboration between the private sector and the government. In the Netherlands the three elements research, extension and education (REE/ in Dutch the OVO triangle) are developed in a close relation and with much coherence. The Ministry of Agriculture paid most of the budget for this knowledge system.

Fundamental **research** on institutes and on Wageningen University is financed (mainly) by the government. The private sector (by levies of the Productschappen and, earlier, by contributions of Landbouwschap) and the government both fund practical research, executed on regional centres and practical experimental farms. Applied and strategic research, as for instance on LEI, is financed primarily by public funds (around 70%). Recently applied research institutes got a private character (foundations).

Currently, agricultural **extension** is mainly provided by private organisations (DLV, LTO, etc.). Technical extension, however, was for a long period organised and financed by the Ministry of Agriculture. The farmers' unions organised socio- economic extension on economic, social, and legal questions on, for instance, succession of the farm, investments and retirement, but it was (and still is) co-funded by the state.

Agricultural **education** is providing schooling and courses on all levels, from lower professional education in the region to university level. Secondary and lower professional education is combined with part-time training courses in Agricultural Training Centres. Such courses are very important to keep the farming population in touch with new technical and management developments (for instance, on ICT, mineral management, use of pesticides).

1.3.2.4 Structural policy

Since its establishment in 1963, the agricultural Development and Reorganisation Fund (O&S- fonds) has played a key role in the improvement of farm structure. On the one hand, the Fund provided schemes for those who left the farm sector (farmers and workers). On the other hand, it provided grants for improvements (investments) of farms. In the period 1963-1973, spending on company reorganisation (retirement of farmers and farm workers) was higher than on company development. A specific regulation was to stimulate the breakdown of old greenhouses. Many schemes were incorporated later, from 1972 onwards, in the EU structural policy, for instance in measures on interest subsidies. In those years, the Board of the Fund (representatives of Farmers' unions and civil servants) advised the Minister of Agriculture on the implementation of the EU guidelines.

1.3.2.5 Capital and investments

An important funding instrument to promote the development of the sector is the Agricultural Loan Guarantee Fund (set up in 1951 within the framework of the Marshall Plan). The fund targeted investments with inadequate securities for skilled farmers with little capital at their disposal. The fund guarantees the payment of interest and the repayment of the loan. The Fund is still in operation. In recent years, many guarantees are issued for investments in improved working conditions, the environment and animal welfare.

1.3.2.6 Planning

Town and country planning policy enabled the agriculture sector to develop without restrictions in the countryside. Provincial, district and local authority zoning plans are based on national memoranda protecting the agricultural character of many areas. It means in fact that in agricultural zones, it is not allowed to build houses, factories, or other non-agricultural buildings. Planning is needed as there is much demand for alternative uses of agricultural land. At the moment, land is being dedicated for the development of nature reserves (in the framework of the Ecological Main Structure, EMS), separated from or in connection with agricultural use of the land (see landscape and nature section).

The creation of 'new land' (165 000 hectares) in the former Southern Sea (IJsselmeer- or Flevo-polders) in the period 1935-1975 gave new opportunities for structure improvement; the departure of farmers to this new land provided for others more room for expansion of their farm.

1.3.2.7 Land reclamation

Reclamation of land (on average around 40 000 hectares of land per year during a long period since 1924), based on the Land Consolidation Act and its successors, made it possible to improve conditions of agricultural production. During the process of re-allotment in a region, many boundaries between small irregular plots of land (as ditches, hedges) were removed and water control as well as the infrastructure (roads, supply of electricity and so on) was improved. The act enabled large-scale projects in the field of (re)development, accessibility and water management of agricultural land. By now, the whole Dutch countryside has been modified at least once; in total more than 1 000 large and small areas were reorganized. The projects were joint public- private financed. Farmers and landowners can obtain necessary funds for their investments on favourable terms (long term finance, attractive interest level); in fact the government pays approximately 60% of costs.

Currently, land reclamation projects not only aim to improve production conditions for farms, but also to allocate land for nature and recreation.

1.3.3 One more recent problems

1.3.3.1 Environmental policy

Starting in the 1970s society has become aware of the negative impact of (intensive) agricultural production on the environment. In the 1980s and 1990s many legal regulations were introduced to offset the negative environmental effects.

Minerals
To tackle the mineral problem (manure surplus), a regulation was enacted in the early 1980s to prevent the expansion of the capacity of stalls for pigs and poultry on farms with insufficient land for the manure. In fact production rights were introduced. Besides that, at the end of the 1980s a system of mineral accounts was introduced: farmers have to pay levies for the manure in surplus (based on nitrate and phosphate criteria per hectare). In this context livestock farmers will try to minimise the volume of minerals and transport their manure to arable farmers (inside the Netherlands as well as exports). Some initiatives are on processing the manure to make it more suitable for exports (lower transport costs) and to use it to produce energy (as an alternative for oil, gas etc.). In recent years, the government financed the reduction of pig production (with approx. 10%) by allowances for demolition of stalls in some regions.

Pesticides
In order to restrict the use of pesticides, an agreement reached in the early 1990s between the government and the sector (organisations) aimed to reduce the volume with 50% over

the period 1985–2000. This objective has largely been achieved with several measures. First, courses and extension made farmers more aware of the benefits to produce efficiently with lower use of chemical inputs (it appeared that in many cases risks of depressed yields and quality were negligible). Second, a regulation was announced to prevent planting potatoes too frequently on the same parcel (to diminish the use of disinfections materials). The present policy aims at certifying farms (90% in 2005) for a low use of pesticide. So, individual farms are now directly responsible. If the use of pesticides maintains at a too high level, the government will introduce levies (as is the case in Denmark).

1.3.3.2 Land prices and tenure

Due to the 'Town and Country planning' (see section 3.2.6) prices of farmland are much lower than prices of land for urban purposes (housing). But at the same time as a result of the intensive character of Dutch farming, farmland prices are high compared to farmland prices in other EU countries. High prices of land may allow farmers to opt for higher loans as high land values mean security for banks. Yet, high land prices also imply high costs of production if the purchase of land has to be financed. Nowadays, no instruments are used to control land prices while there was such policy in the 1950s and early 1960s.

For tenants rental prices (per ha per year as well as on buildings) are normally fixed for a period of three years, with a maximum price level depending on the quality of the land. In the amended Agricultural Lease Act of 1995, it is set that the maximum rent for land is derived from market prices (2%). Tenancy contracts for a farm have a length of at least 12 years and six years for single plots. Tenants and their successors (heirs) have the right to continue after these initial periods. If the landowner does not want to continue the contract, the tenant can claim compensation. Besides that, the tenant has the first right to buy the farm and land at a price level lower than the market price. Currently, around 30% of the agricultural land is rented.

1.3.3.3 Landscape and nature

Nature and landscape management on agricultural land is stimulated by contracts with the government (Ministry of Agriculture). In 2001 the area increased with 8 000 hectares to 91 000 ha (some 5% of farmland) on more than 10 000 farms (>10%). Budget costs are about 40 million Euro. In some regions farmers as well as citizens are member of nature/environment associations. Some of them have collective contracts with the Ministry or local authorities.

1.3.3.4 Product quality

Minimum standards on product quality are formulated by the government (Minister of Agriculture in collaboration with the Minister of Health). Regulations specified per product are settled by Commodity Boards (Productschappen); these regulations have to be approved by the Minister of Agriculture. Control on quality standards is organised in private (on most products) and public institutes (on cattle and meat). The costs of control by these institutes are for a large part paid by the farmers. Since the early 1990s many initiatives

have been taken by the sector (Productschappen as well as private and co-operative enterprises processing products, retail-organisations) to improve product quality in relation to what consumers want. This is increasingly related to the quality of the production process (reduction of use of pesticides, antibiotics, minerals, and energy to minimum levels; improvement of animal welfare etc.). In the context of this process labelling and certification of enterprises continues (approach per product chain).

1.3.3.5 Energy

In the early 1990s the government and the sector (organisations) agreed to improve efficiency of the use of (mainly) natural gas in horticulture with 50% in the period 1980-2000. If growers invest in saving energy by modernising their greenhouses and by using computerised systems to save energy, they are assisted by research (on experimental stations, co-financed by the sector) and extension services to adjust their production systems. Since the early 1970s (years when high energy prices were high) the sector and the supplier of natural gas (GASUNIE) have made annual contacts on the conditions of delivery.

1.3.3.6 Animal health and welfare

Policies to ensure animal health are largely based on EU regulations and directives, as for instance is the case with infectious/contagious diseases like swine fever and foot and mouth disease. Since the early 1990s non-vaccination has been the general rule in order to maintain exports. This rule is subject to debate because of serious breakouts of these diseases in several EU countries. In practice the costs of these breakouts are partly financed by the EU (about 50%), while in the Netherlands a large part of the rest of the costs are paid by the sector (levies of Productschappen on milk and animals for slaughtering).

In the Netherlands, national implementation of some EU directives on animal welfare will be effective on a earlier date than is required by the EU. For instance, in the Netherlands battery cages on laying hens will be forbidden in 2007 while the EU has set 2013 as deadline. Also the ban on individual housing of calves for veal production will be implemented sooner than in other EU countries. Consequently, production costs will increase, but hopefully consumers will prefer the products and will be ready to pay higher prices. Labelling of products to indicate the special way of production can support this.

1.3.3.7 Market structure

Increasing specialization and collaboration in the agrifood chain (including upstream and downstream industries) has been very important for the further development of the farm sector in a more open international market. The agrifood chain largely depends on domestic agricultural production. The government supported this process only modestly: some investments in agro-processing were co-financed by the EU from Structural Funds, mainly in regions with specific socio-economic problems such as high unemployment rates. Besides that, research on improvements of processing and product innovation occasionally is co-financed by the government (research on DLO-institutes as ATO - Agro Technological Research - is however increasingly financed by the private sector).

1.3.3.8 Conclusion

Many problems of agricultural development in the Netherlands have been listed in section 2. In this section 3 the major policies that have been applied to tackle these problems were explained. This section concludes with table 1 in which a summary of the problems and policies is presented, together with an indication of the impact of the policy measures.

1.4 CAP and relieving agriculture problems in the Netherlands

1.4.1 Introduction

In the previous two sections the main problems in the agricultural sector in the Netherlands and national policy to address these problems in the period 1960-2002 are identified. However, in this period the process of integration of independent countries in the EU, the Common or Single market commenced and evolved. Therefore, it is of interest to see to which extent EU policies have relieved agricultural and rural problems in the Netherlands.

This section first presents a short description of the main elements and the development of the CAP. This is followed by an analysis of the impact of CAP on the farm sector and rural development in the Netherlands

1.4.2 Development of CAP

The integration process started with six Member States in the late 1950s (Treaty of Rome). A major element, often indicated as an essential political condition, of the integration process was the establishment of a Common Agricultural Policy (CAP) to replace most of the national policy instruments of the Member Countries. Important objectives of the CAP are:

- to increase productivity in agriculture;
- to ensure farmers a reasonable standard of living;
- to stabilise agricultural markets;
- to ensure food supply at reasonable prices for the consumers.

Market and price policy

The CAP has been shaped largely in the period 1960-1964 with the introduction of a common market and price policy. Common market regulations came into force for (amongst others) cereals, milk, sugar, beef, pig meat, poultry and eggs, vegetables and fruits. These market regimes are based on three principles:

- unity of the market: abolishing trade restrictions between member countries;
- community preference: protection of the market at the borders of the Community, for instance with levies/ tariffs on imports to respect minimum border prices and intervention schemes based on minimum internal prices; and
- financial solidarity: costs of the CAP are paid by the Member Countries regardless in which country costs have been made.

Table 1: Overview of main problems, instruments and results

Problem(s)	**Instrument (s)**	**Result**
Farm structure, Low productivity, Income disparity	Socio-economic policy (non-agricultural industries), agricultural development and reorganisation fund	More opportunities outside farm sector; Reduction of number of farms with 3%/year; Enlargement and modernisation of farms.
Capacity of farmers, Low productivity	Extension (advice), education, research	Higher yields and improved technical results; Improvement of management
Finance/ Investments	Agricultural Loan Guarantee fund; EU directive; Fiscal facilities	Investments in modernisation of farms
Infrastructure/ production	Land reclamation, planning, Protection of tenants	Improved parcelling around farm buildings, water management
Infrastructure/ market; international competition	EU directive; fiscal facilities	Modernised agri- business
Environment	Agreements with farmers unions; regulations on pesticides; and on minerals	Reduction of volume of pesticides; Reduction of losses of minerals (N, P)
Land use	Land management contracts	5% of land under a scheme for landscape and nature
Animal welfare	Standards, legislation	Progress in farms, improvement of understanding with organisations
Animal Health/ diseases	Regulations; co- finance of sector	Still risks (swine fever, FMD)
Quality of products	Minimum standards, control, initiatives of partners in the chain	Improvement in exports, less complaints of consumers and retailers
Energy costs	Research, innovation, agreement on gas prices	Improvement of competitiveness of glasshouse sector

In practice, market organisations differ between 'basic or core products' (for example for milk, beef, cereals and sugar) with intervention schemes to guarantee minimum prices and market organisations for products (vegetables, fruits, eggs and poultry, pig meat etc.) without such schemes or at least with much less guarantees on prices. Furthermore, there are no market organisations for ware and seed potatoes, ornamental and pot plants. Besides that, the CAP does not cover all products, because in GATT negotiations it was agreed some products (such as substitutes for cereals as manioc, citrus pulp) could be imported freely.

Farm structure policy

Farm structure policy as part of the CAP came in force in 1972, when directives in the framework of the 'Mansholt plan' (Mansholt was the first EU Commissioner on Agriculture and Minister of Agriculture in the Netherlands in 1945-1958) were accepted. The main di-

rective was on investments (159/72) providing farmers with an approved development plan with interest subsidies for investments in, among others, stalls, barns, greenhouses, and store capacity for arable products. Farm structure policy also supported investments in re-allotment projects. After 1985 the interest subsidy scheme was replaced by a new scheme to increase quality of production and to stimulate environmental friendly production.

Other directives of the farm structure policy were on early retirement, extension services as well improvement of processing and marketing structures and on support to agriculture in Less Favoured Areas. The latter was the first kind of regional policy, introduced after accession of UK, Denmark and Ireland in 1973.

Reform of the CAP

After some years of experience with the CAP, market surpluses and stocks appeared and it became clear that price levels could not be guaranteed at levels as foreseen to follow the development of costs of production on farms. Some adjustments were made to tackle arising problems on the markets and increasing budgetary claims. Prices were frozen for some products in first instance during some years, despite the high level of inflation in the 1970s (energy crisis and monetary imbalances). At a later stage co-responsibility levies were introduced on milk and cereals. On milk, in 1984, a system of production rights (quota) was decided; the volume of (guaranteed) production was based on a reference period 1981-1983 with some cuts in the first years of quota application. To reduce cereal surpluses, set aside of land was introduced.

These decisions in the 1980s were not sufficient. Additional adjustments of the CAP were argued partly also because of the negotiations in GATT (Uruguay Round, 1985-1994) as well as the changed role of agriculture in the society (multi-functionality, the sector is not only producing food, but also important for landscape, nature, environment, rural economy). In 1992 the EU decided on a set of 'Reform-proposals' of Commissioner McSharry, including a strong decrease of prices for cereals and beef combined with the introduction of direct (compensatory) payments. The Agenda 2000 decisions (Berlin, 1999) again lowered cereals and beef prices (combined with adjustments of direct payments) and, starting in 2005, will lower prices for dairy products with the introduction of direct payments for dairy farmers.

Mid Term Review

The Mid Term Review on CAP in 2002 includes proposals to decouple direct payments from the production of specific arable crops and animals on the farm, as well as a reduction of these payments above a level of 5 000 Euro per farm. Compared to the system with coupled direct payments the new system is expected to save money, which then will be used for rural development (second pillar). Direct payments above 5 000 Euro will be conditional (cross-compliance). Besides that it is in discussion whether the quota systems in the dairy and sugar regime will be continued or not.

Second pillar

The reform decisions in 1992 and 1999 were accompanied by new regulations on agro-environmental issues, for instance to promote organic farming, (re-)forestation, nature and landscape management and rural development. These measures together are indicated as

the second pillar of CAP. National and regional authorities have to develop Rural Development Plans (RDPs) to get financial support of the EU; for the period 2000-2006 10% of the budget of CAP is reserved for this. Modulation (reserving some money from direct payments for RDPs) can be used to finance RDPs. Cross-compliance (conditions on direct payments), already mentioned in 1992 and underlined in 1999, can promote a more sustainable way of agricultural production.

Consumers concerns, environmental policy
In the 1990s the EU decided on several directives, which are not part of the CAP but (will) have an impact on the farm sector. In this respect the following directives should be mentioned: nitrate in ground water (1991/676), pesticides (1991/414), the water framework guideline (1999), Integrated Pollution Prevention and Control (IPPC, 1996/61) as well as animal welfare regulations (living conditions for animals in stalls and transport conditions).

1.4.3 Impact of CAP on the farm sector and rural development in the Netherlands

The CAP and its development in the last 40 years have a number of consequences for the Netherlands, which are presented below.

a. Market
The development of the Common (later the Single) market has stimulated Dutch economic growth in general and the production and exports of agricultural products in particular. The abolishment of trade restrictions (levies, tariffs, import quota) among the Member States in the 1960s gave the opportunity to expand exports, mainly to Germany (the main customer for Dutch exports) but also to other partners in EU-6. The expansion of the EU in 1973 with UK, Denmark and Ireland as well as in later stages with Greece (1981), Portugal and Spain (1986) and Austria, Finland and Sweden (1995) had a similar impact: Dutch exports increased to each of these countries. Currently (2001) Dutch agro-exports to Germany is around 12 billion Euro, followed by some 5 billion Euro to France, to UK and to Belgium/ Luxembourg and 3 billion Euro to Italy. The balance of agro-exports minus imports is positive (19 billion Euro), largely because of exports to EU markets. Exports to non-EU countries have been stimulated to some extent by EU export subsidies (for instance on dairy products).

b. Specialisation
In an expanded EU (and in some respect the world) market the Dutch farm sector had the opportunity to specialise in types of production for which natural, geographic and economic conditions were favourable. The Dutch farm sector specialised mainly in:

- *Dairy farming*:
  In western and northern provinces many farmers were already specialised on dairy production; the peat soil in these regions is not suitable for arable crops. In other provinces, at least in areas with sandy soils, many mixed farms (arable, cattle, pigs) during the last decades made a choice towards (mainly) dairy farming. Favourable market opportunities, solid profitability figures in the dairy sector and possibilities for mechanisation and investments on the farm were some of the factors in this proc-

ess. However, the quota system restricted the development of the sector from 1984 onwards. High prices on the Dutch quota market make clear that many farmers wish to increase their milk production.

- *Intensive livestock farming*
  The pigs and poultry sectors have benefited from cheap feed (cheap imports of substitutes of cereals) and a well-developed infrastructure (nearby ports, compound feed industries and slaughterhouses). For the development of veal production it was important that the EU dairy policy provided milk powder at reasonable prices. Veal production is mainly based on contracts with feed suppliers and slaughterhouses. Veal is mainly exported to France, Germany and Italy. Consumption in the Netherlands is negligible.
- *Horticulture in greenhouses*: flowers, pot plants and vegetables.
  The Netherlands has horticultural clusters (centres as 'Westland, Aalsmeer') around big cities (original markets) in regions with favourable conditions (climate near the sea, light). In these centres the supply of practical experience, research, extension, training and materials as well as the infrastructure (auctions) to market products stimulates production.
- *Horticulture in the open air*
  The world production of flower bulbs is concentrated in the Netherlands. It is an expanding branch of production. The production of nursery trees shows a similar positive development. The production of fruits (apples, pears) is, however, decreasing; the sector's profitability is low due to strong market competition. Production of vegetables in the open air is also under pressure of competition and is mainly for the Dutch market.
- *Arable crops*
  Ware potatoes for direct consumption and processing and seed potatoes are the main arable products in terms of production value in the Netherlands. During the last decades processing of potatoes (chips and potato crisps) created new opportunities to expand. Specialised arable farmers use a rotation plan with mainly potatoes, sugar beet and cereals.

c. Modernisation

Linked to the developments and opportunities on the markets and the increasing degree of specialisation, many farms were modernised, mainly in the 1970s and 1980s. The modernisation process was stimulated by interest subsidies. In this framework EU Regulation 72/159 has been particularly important, especially for the dairy and greenhouse sector as conditions on the availability of land to produce feed for the intensive livestock sector restricted the application in the Netherlands. In the years 1973-1985 more than 20 000 Dutch farmers used this EU facility; many of them in combination with re-allotment projects and at a later stage combined with (national) WIR investments premiums. At a later stage EU-incentives on investments increasingly aimed at improving the quality of the production process (environment, labour conditions, quality of products).

d. Sustainability

Sustainability of agricultural production in the Netherlands is, apart from the instruments under the Farm Structure Policy, stimulated by other EU decisions.

A direct consequence of the introduction of the milk quota regime (1984) has been the reduction of the dairy herd with some 40% (1984-2002) and a 25-30% decline of total manure disposal (the dairy sector had some 75%, at the moment about 50% of manure production).

The 'nitrate directive' has so far stimulated and at least underlined the necessity of the introduction of national instruments to achieve a more balanced situation for minerals (manure). Due to restrictions set in the Dutch manure policy pig and poultry stocks have been reduced with some 10% in recent years. This process has been accompanied by national programme to financially compensate farmers who finish their production.

So far, the 'pesticides directive' did not restrict the permission of some specific crop protection materials. In fact, harmonisation on EU level of this policy is far from complete. Environmental, health, labour and economic considerations are included in national decisions made in this field. Some national decisions may hinder the production of specific crops when alternative plant protection materials are not available.

The 'animal welfare decisions' so far stimulated corresponding national decisions. Organic farming in the Netherlands, actually some 1.5% of total agricultural production value, is stimulated by a corresponding EU instrument.

e. Rural society

Rural society in the Netherlands has changed a lot over the last decades. Many farms disappeared while others expanded and modernised. With an annual decrease of 3% of the number of farms, the agrarian population has become a minority, counting only less than 4 % of the total population now. Recently more attention has been given to the multifunctional role of agriculture and the rural area. This is also stimulated by (financial) instruments of the EU (second pillar, RDPs). The interest of the Dutch population is focused on health and safety of food, an attractive landscape, recreation outside the cities etc. Farmers respond to this by initiatives to invest in agro-tourism and take up the management of landscape and nature in compliance with EU and national regulations on this field.

1.4.4 Impact of Mid Term Review

The Commission document on the Mid Term Review and its proposals to reform the CAP has been released on July 10th. Some first remarks can be made about the possible impact for Dutch agriculture:

- decoupling will give some more flexibility to farmers to decide on how to use their land (for which crops) and on the numbers of animals per holding;
- the acreage of cereals, starch potatoes and silage maize may reduce to some extent;
- the acreage of ware and seed potatoes and some horticulture crops may increase, yet, room for extra sales at markets seems limited;
- direct payment-entitlements (per farmer, farm and consequently per hectare) may have an impact on land prices and succession of farms. Whether land prices go up, will -depend on the performance of the sector;

- the administrative burden may decrease (linked to decoupling), but new administrative activities related with transactions of land and cross-compliance control may come up;
- a part of arable and dairy farmers will have lower incomes when direct payments are reduced subject to the proposal to reduce levels above 5 000 Euro per farm with 20%.

1.5 Lessons from the interaction of the development of agriculture and rural policy

1. The creation of the Single European market offered many opportunities to the economy as a whole and related to that to the farm sector. The expansion of the market triggered the modernisation of the farming sector and the further specialisation on products for export.
2. Relearned the Tinbergen-rule that you need for each policy objective a policy instrument and that you cannot use one policy instrument to realise more than one policy objective. The original CAP, however, tried to realise with mainly price support a number of objectives (agricultural income, agricultural productivity, market equilibrium etc.) Market and price policy aimed at income support frustrated the realisation of market equilibrium by stimulating production and creating surpluses.
3. A market and price policy has to take into account all related agricultural products to prevent imbalances in the development of the agricultural sector. The absence of import restrictions on cereal substitutes stimulated the import of these products and frustrated the grain policies of the EU.
4. The market and price policy of the CAP stimulated the growth of agricultural production and neglected the negative effects on the environment.
5. The structural policy of the CAP, in particular the interest subsidies, stimulated productivity growth in the agricultural sector but stimulated at the same time the growth in agricultural production.
6. EU countries with well-developed administrative systems made an extensive use of subsidy instruments to modernise their agricultural sector.
7. A continuous increase in productivity, in particular of labour productivity, and a limited growth of demand for agricultural products, needs a continuous decrease in the input of labour in agriculture. The CAP, market and price policies and structural policies, cannot solve agricultural problems without the help of non-agricultural policies, in particular policies aiming at increasing non-agricultural employment.
8. In addition a regional policy is needed to maintain the economic viability of the rural area. A decrease in agricultural population in rural areas will have negative effects on the availability of facilities and deteriorate the viability of villages and the rural area.
9. The policies for the rural areas have also to take into account the changing priorities in land use as indicated by the society. The striving for productivity growth can have negative effects on the value of landscapes etc. while the interest of society in nature and landscape values is growing, among others for recreation purposes.

10. CAP (market and price policy, structural policy) cannot solve the imbalance between farm and non-agricultural incomes. Experience in the Netherlands learnt that training (schooling), extension and research have at least an equal importance to assist farmers to develop their farm adequately. Next, it is important that the farming population strengthens its capacity and capability to work in other sectors in the economy.
11. Re-allotment plans can increase efficiency of agricultural production importantly (parcelling, water control, roads). For this, plans have to be developed and decisions have to be made before authorities and farmers can implement investments. These plans often take a long time, sometimes several decades.
12. Legislation and adequate institutes to improve and control the quality of agricultural products are very important to increase the market opportunities of the sector. In recent years safety and health aspects of products receive much attention.
13. An instrument like the Dutch Agricultural Loan Guarantee Fund has assisted (young) farmers with capacity to produce efficiently but who have a lack of financial resources and securities. This selective instrument can stimulate innovation in new products and production processes.
14. The restoration of the negative environmental consequences of a fast, uncontrolled growth of production and the use of inputs is time and money consuming. Many negotiations with farmers and farmers unions about regulations and control mechanisms are necessary to arrive at a new balanced situation.

2. The EU Common Agricultural Policy and its importance to the Dutch agricultural sector - a note[1]

Siemen van Berkum, LEI

2.1 The CAP's main features and impact

With the Common Agricultural Policy (CAP), the European Union (EU) aims at 1) increasing agricultural productivity; 2) ensuring farmers a fair standard of living; 3) stabilising markets; 4) ensuring stability of supplies; and 5) ensuring reasonable consumer prices (Treaty of Rome). To reach these policy objectives, the EU applies in principle two types of policy instruments. These are, firstly, measures directed to the organisation of the market and, secondly, structural measures. Until the 1980s the CAP was dominated by price support in the form of guaranteed prices, intervention buying, border protection and export subsidies. Due to increasing market surpluses a milk quota system was introduced in 1984, next to the sugar quota regime the only production control measure at that moment. This changed in the 1990s when as part of the MacSharry reform the cereals and oilseeds production became subject of set-aside programmes. Direct payments, coupled to area and headages, were introduced to offset at least partially the decline in prices under the MacSharry reform. In Agenda 2000 the Commission enforced its policy to reduce price support of products and increase compensatory direct payments.

The EU structural policy focuses on the improvement of infrastructure, farm structure (modernisation) and farming intensity, and is therefore more directed towards production factors than towards agricultural products. In general, the impact of structural measures is due only at longer term. Over time, structural measures have been adjusted in order to improve their efficiency. At the moment, the agricultural structure policies are integrated with rural development policies, including measures like early retirement scheme, afforestation and environmental-friendly methods of production. Since 1999 the Commission has made rural development a second pillar of the CAP, expanding programmes aimed at stimulating modernisation of agricultural sector and (to a limited extent) at increasing non-agricultural employment in the rural areas of the Union.

In table 1 relevant policy measures in CAP are presented, together with the major advantages and disadvantages.

[1] This note has been presented and discussed at the expert meeting in Warsaw, 16-17 July 2002.

Table 1 Economic impacts of CAP on sector and markets

Instrument	Advantages	Disadvantages
Price policy	Stable prices Stimulates production and increases income	Domestic prices higher than world market prices (reduces demand); Market surpluses; High budget costs; Third countries complaints (as it distorts trade)
Production quota and set-aside	Control on production levels; high prices remain for produce under quota regime	Fixes agricultural structure; Limits regional specialisation; Creates quota rents; High administrative costs
Direct payments	Income support, which distorts trade much less than price support; if payments are linked to environmental conditions (cross compliance), this policy may reduce environmental damages related to agricultural practices	Restricts restructuring of agricultural sector and limits regional specialisation; Increases land prices; Budget outlays (tax payer pays instead of consumer pays); High administrative costs
Structural and rural development policy	Encourages modernisation (interest subsidies, extension, etc.) Enhances labour outflow from sector (early retirement scheme); Encourages afforestation of agricultural land (afforestation measures); Reduces environmental damages related to agricultural practices	

2.2 Importance of the CAP for Dutch agriculture

The CAP market and price support measures including direct payments are the major instruments for supporting agriculture in the EU. Generally speaking, the CAP market organisations can be divided in two main categories. The core or basic products (cereals, sugar beet, milk, beef, wine, olive oil, oilseeds) for which protection is offered at the border and internal market support measures exist (intervention buying, guaranteed prices, etc.) is one category. Products that are subject to so-called 'light' market organisations (fruits and vegetables, pig and poultry meat, eggs) for which protection exist at the border but not on the internal market, is a second category. Next to these two groups, one can identify products that are not subject to EU market organisations (potatoes, ornamental plants, forage). In table 2, the share of production value in the EU-15 and the Netherlands subject to each of these three categories is shown.

Table 2 Share of products in the agricultural production value in the three product categories identified (%)

Product category	EU-15	The Netherlands
Core products of CAP	59.2	27.4
Products subject to light market organisation	20.6	30.1
Products not subject to EU market organisations	20.2	42.5

Source: own calculations based on European Commission, Eurostat, and Situation in Agriculture, Brussels 2001

Only 27% (of which 17%-points milk) of the Dutch agricultural produce is subject to a core CAP market organisation. This is much less than the EU-average of almost 60%. More than 70% of the Dutch agricultural production receives no market support at all or is subject to market organisations that include less protection than the core products of the CAP. The conclusion is that the importance of CAP market organisations to the Netherlands is rather limited compared to the picture for the whole EU-15.

3. Farm retirement in the Netherlands, 1950-2002[1]

Gijs van Leeuwen, Ministry of Agriculture, Nature Management and Fisheries, The Netherlands, July 2002.

3.1 Introduction

This report aims at throwing light on the process of farm-retirement in the Netherlands during the period 1950-2002. It presents the number of holdings during this period and discusses the reasons for the decline of the number of farms. Next, the role that was played by the government in this process is discussed: the policy instruments the Dutch government used in this field are listed and the impact of the measures on the process is indicated.

3.2 Number of farms

In the 1950s the number of farms decreased considerably (see also Appendix 1). The Netherlands had been left impoverished by the Second World War. For years the Netherlands had practised a fairly liberal agricultural policy and the agricultural sector was oriented towards the world market. Other European countries protected their agriculture and applied import restrictions. There were few opportunities for Dutch farmers to export their products within Europe. During those years, many farmers emigrated overseas to Canada, Australia and New Zealand.

At the end of the 1950s the Netherlands joined the European Community (Treaty of Rome in 1957). This laid the basis for increased export to other European countries during the 1960s, as agricultural policy was gradually harmonised within the EEC. At this time industrialisation increased at a rapid pace, resulting in a labour shortage. This provided employment opportunities for farmers who wanted to finish their businesses.

During the 1960s, 1970s and 1980s agricultural production in the Netherlands increased very quickly and the process of business termination slowed down. Policy reforms took place in a number of agriculture sectors during the 1980s, which put an end to unrestrained production growth; in the dairy sector by the introduction of milk quotas (1984) and in the pig and poultry sector due to the introduction of restrictions on manure production (in 1987). In the 1990s production in these sectors declined and the need to cut back the number of holdings increased. Because of large manure surpluses government policy in more recent years has been aimed at reducing intensive livestock production. On average 3-5% of the agricultural holdings close each year since the mid-nineties (see Appendix 1).

In the coming years the number of farms will decline further. The manure surplus will force the pig and poultry sector to further reduce production and subsequently the number of holdings will fall. EU protection (market protection and income support) will decline in the arable and dairy sectors and will lead to loss of livelihood in these sectors.

[1] This contribution has been discussed at the meeting in The Hague, 26-27 September 2002.

Open field vegetable sectors are facing strong international competition because of the relatively high prices of land and labour in the Netherlands.

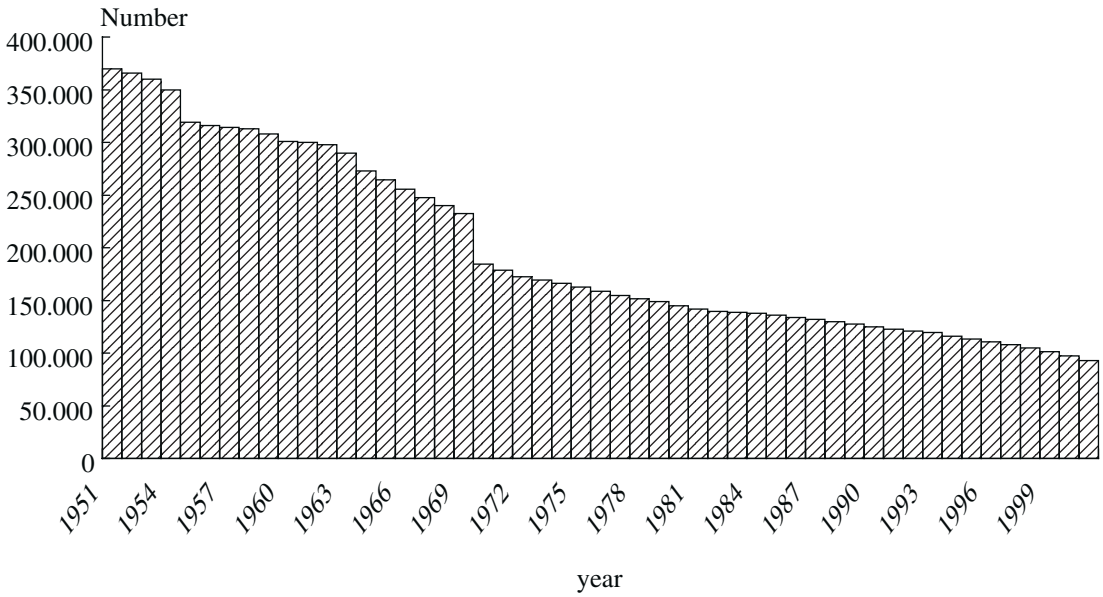

Figure 1 Number of agricultural holdings in the Netherlands, 1950-2002

It is also important to note that until recently the Dutch economy was functioning well, with labour shortages in several sectors. Technical progress offers further opportunities for growth of efficiency in agricultural production. Studies show that in case of complete liberalisation in 10 to 20 years 75% of production will be carried out on larger farms. In the dairy sector this will mean farms of 200 to 1000 cows, with remaining production taking place on smaller farms of 50 to 200 cows. Farms with less than 50 cows will then be seen as "hobby farms"!

We cannot predict how, or at what speed, EU policy will be reformed and agricultural sector protection will reduce. It is, however, certain that this policy will continue to influence the ability of farms to carry on.

3.3 Background of farm retirement

The decision to stop is one that is taken at micro level, by the individual farmer. The farmers are influenced by push factors and pull factors. An important push factor is that the business is generating too little income. Poor health of the farmer or the need to use the land for other purposes can also be push factors. An important pull factor is whether there is an attractive alternative, such as employment outside agriculture or other means of securing a livelihood.

There are many considerations that farmers take into account when making decisions to stop or continue. Some of these are cultural considerations: farmers often have strong ties to their farm, land or cattle. They enjoy working as farmers and like their way of liv-

ing. They live in communities (village, sector organisation, church) where farmers are treated with respect and where much value is placed on living in the country. Another consideration is that the holding (the land, building and cattle) is usually worth a substantial amount of money. Even if the income is low, this is no reason to cease immediately: part of the holding could be sold to generate funds. One reason for farmers not to stop is that their land and buildings retain their value as investments. Also, their farming expertise and knowledge would be undervalued elsewhere. All in all there are plenty of reasons not to stop. The decision to cease farming is hard to make.

The most common situation is that the farmer reaches retiring age and has no successor to take over the business. In the past decade more than 50 % of older farmers had no successor, at the moment this is 70%. Farmers usually stop working between the ages of 60 and 70.

Other farmers stop their farm at an earlier age for the following reasons:

- bankruptcy. This is a small number, about 100 each year;
- emigration. Immediately after the war each year about 500 to 600 farmers emigrated. In recent years this number is between 250 and 350. But there is a difference: in the fifties mostly poor farmers emigrated, nowadays it are the rich ones that see more future for farming in other countries than in the Netherlands;
- alternative employment outside farming. This can be a full-time or part-time job. Some farmers also introduce activities on the farm that are not directly related to farming, such as camping sites and farm shops;
- illness or death;
- non-agricultural land use. The land is sold for housing or nature purposes: 5000 – 10.000 ha a year. Some of these farmers buy another farm;
- early retirement between 55 and 65: about 100 farmers take part to the early retirement scheme every year.

Retirement from farming is to a large extent an autonomous process with its roots in economic developments. The need to stop is often the result of the low income generated by farming. This is because the application of labour-saving techniques, which are relatively cheap, has substantially increased productivity per farmer. For instance, in the Dutch dairy industry of the 1950s one person could milk approximately 5 cows in one hour. At the moment, depending on the system used, 50 to 100 cows can be milked by one person in an hour and each cow gives twice the amount of milk. The application of these labour-saving techniques led to an increase in supply and consequent fall in prices. In this competitive process some of the businesses are left with low incomes. This applies especially to smaller farms that are less able to introduce labour-saving techniques. Table 1 shows that the income from farming on small farms is one quarter of that on large-scale farms.

Table 1	Farm results and incomes (x 1,000 euros per farm)			
	According to type of farm (three tear average, 1997-1999)			
	Large-scale	Medium-sized	Other	Total
	farms	farms	Farms	
Size (SFU	263	76	50	97
Families per farm	1.7	1.1	1.06	1.13
Output per farm	595	165.5	99.6	213.4
Farm-income per family per farm	61.8	24.4	18.1	29.7

Note: SFU stands for Standard Farming Unit, a guideline to express size of business: 1 SFU is equivalent to 1 ha cereals, 0.75 dairy cow, 3.5 breeding sows or 350 laying hens.

3.4 Measures taken by the Dutch government to facilitate cessation of farms

The government plays a facilitating role in the process of farm retirement. By farm-retirement and subsequently selling the farm, production factors (labour and capital) may be used in a more profitable sector and this process then gives a contribution to economic growth and welfare. The instruments the government has been implementing have changed over the years. These are, on the one hand, measures specifically aimed at agriculture (under the responsibility of the Ministry of Agriculture), and, on the other hand, general measures (under the responsibility of the Ministry of Social Affairs). EU measures can also be important.

3.4.1 National measures, specially directed to help farmers cease farming

3.4.1.1 Support for emigration

Immediately after the Second World War the Dutch government facilitated farmer's emigration by giving support to organisations that guided and advised farmers who wanted to go abroad. The government also concluded agreements with countries willing to accept incoming farmers. This support was stopped in the beginning of the 1990s.

3.4.1.2 Financial aid for retirement and selling the farm

For decades the Dutch government pursued a policy aimed at restructuring the agricultural sector. One of the instruments with which this was to be achieved was an outgoing farmer's scheme, which encouraged farmers to sell their business and lands to make room for those who stayed in the business. To this end the Development and Reconstruction Fund for Agriculture was set up in 1963 with representatives of government and farmers' organisations in the Board. The Fund played a major role in agricultural restructuring policy. So-called 'Decisions of the Board' introduced measures to make cessation a financially attractive option. In the sixties and seventies, thousands of farmers benefited from these measures (See Appendix 2). But over time the effect of the measures dwindled and by the end of the eighties financial aid to outgoing farmers was stopped. From 1963 to 1990 the government

spent 0.5 billion Euro on these measures (see Appendix 3). In the end 83,000 ha of land had become available for farmers who wished to expand.

3.4.1.3 Buying up scheme for allocation rights in land consolidation projects.

In the fifties the government in the Netherlands introduced land consolidation schemes. Since the sixties outgoing farmers were given financial aid under these schemes when they sold their businesses and lands to government agencies to further the land consolidation process. Land consolidation projects were introduced to eliminate land fragmentation and improve the prevailing defective land tenure structure as a result of the distribution of lands among a farmer's children after his death. The schemes aimed to increase average size of ownership and average size of plots. The measures also included the construction of a proper farm road network and the improvement of water control. In the 1970s there was added emphasis on nature management, landscape and outdoor recreation.

3.4.1.4 Retraining schemes for outgoing farmers.

Outgoing farmers who want new qualifications to improve their chances on the job market may qualify for a retraining scheme. This option was quite popular in the 1960s and 70s but the measure still applies.

3.4.1.5 Buying-up scheme for manure production rights.

Since the mid-eighties the government has introduced many measures to prevent further expansion of manure production. In 1987 manure production rights were introduced. Livestock farmers were no longer allowed to produce above a given individual quota. This resulted in trade of manure quotas. In 2001 and 2002 farmers were given the option to sell their manure production rights to the government and cease pig and poultry farming. 5000 Livestock producers sold their manure quotas and half of them ceased business. The buying-up scheme has cost the government € 300 million.

3.4.1.6 Support to advisory services of farmers

The government has given financial support to the advisory services of farmers' organisations to help outgoing farmers deal with the dramatic consequences the decision of ceasing business may have. Now the support is no longer available but farmers can still get their businesses screened with government support to help them make the right decision.

3.4.2 General national measures that facilitate cessation of farming

3.4.2.1 Pension scheme

The Dutch government introduced in the fifties a general pension scheme, paid by taxpayers. Under the General Pensions Act all people of 65 and older are entitled to retirement payment which now stands at € 1163 for a couple. This is equal to 70% of the minimum

wage and is hardly adequate for a decent living. Employees are obliged to buy their additional pensions from occupational pension schemes but farmers and the self-employed need to buy during their working years their own pension at a private pension-insurance company or save money to provide for their old age.

3.4.2.2 Early retirement scheme

In the framework of its social policy the government has taken many measures since the fifties to help those who on account of age, unemployment or disability are without sufficient financial means. In 1987 these measures were complemented with a special scheme for the self-employed on low incomes, who want to retire early. Farmers also qualify for this scheme. Under this scheme those between 55 and 65 who are below the minimum income (about € 21.000 a year) and are unlikely to earn more, qualify for an allowance that brings their income up to the minimum wage level until they are 65. In the early days, around 1987, some 300 to 400 farmers a year applied for the scheme, around 2001 this number had dropped to 100.

3.4.2.3 Tax relief

There are also tax relief measures for those who want to cease business operations. On cessation of business there is tax exemption on a small part of the liquidation proceedings, the profit that is made by selling the agricultural land is completely exempted from tax. In addition self-employed persons (so, also farmers) can during their working years put part of their income aside without paying tax. This amount has to be saved for buying pension at the moment one stops working.

3.4.3 EU measures that facilitate cessation of farming

In 1972 the EU adopted a Council Directive in (72/160/EEC) concerning measures to encourage the cessation of farming (comparable with the measures the Dutch government took in the mid-sixties). Under this Directive Member States had to introduce measures that would be co-funded by the EU. The Netherlands implemented this Directive by amending a Decision of the Board (103). EU co-funding stopped in October 1985.

In 1992 the EU adopted a measures to encourage older farmers to take early retirement and reallocate their land. Only farmers between 55 and 65 could qualify for a annuity of 4,000 ECU to 10,000 ECU a year, half of which would be paid by the EU. This measure was never implemented in the Netherlands as the national early retirement scheme proved to be a better deal for farmers.

In the rural development regulation 1257/1999 the EU adopted measure to encourage early retirement and take land out of production or transfer it to the more profitable businesses. Again, only farmers between 55 and 65 could qualify. Again, the EU would contribute to the measure. This measure was not implemented in the Netherlands either.

In addition to measures directly aimed at cessation of business the EU also adopted measures that facilitated the process of terminating a business indirectly. These include the dairy quota arrangement, the set-aside arrangement and the acreage payments.

Dairy quota arrangement
In 1984 the EU introduced dairy quotas as a temporary solution to the overproduction in the dairy sector. But as the EU began to cut quotas dairy farmers found it increasingly difficult to go on and the Dutch government set up a scheme to allow farmers to sell their quotas. Over the 1984-1989 period the Dutch government bought milk quotas for a total of € 140 million. There were also farmers that sold their quota to other farmers. Farmers who try to expand milk production are willing to pay a price for the quota (milk quota are more or less on the free market in the Netherlands!). In this way many farmers stopped in a very easy way. The number of quota holders dropped from 54,000 in 1984 to 32,000 in 2002 and the sum that these sellers get is in the Netherlands about € 700 million each year. Above this about 9,000 owners of quota let milk quota, 5,000 of them stopped completely with milking (so called "sofa" farmers). The sum that these "sofa-farmers" yearly get by letting quota in the Netherlands is € 125 million. The imposition of milk quotas, introduced to limit government expenditures, proved to be a lucrative arrangement for stopping dairy farmers in the end and helped to cease business.

Set-aside arrangement
In 1988 an EC-wide move to curb cereal production was introduced. It offered compensation to farmers willing to take their land out of production. Set-aside land could either be left fallow or planted with trees. Some 100 farmers in the Netherlands made use of this scheme. In fact it helped them to cease farming.

Acreage payments
The EU regulations give income support for some products (e.g. cereals and beef). This support partly brings higher incomes and leads to higher prices for land because of the higher profitability for the buyers. The high prices for land facilitate those farmers that want to stop.

3.5 Concluding remarks/points of discussion

For the purposes of structural improvement in primary agriculture it is necessary that farmers cease business. This gives possibilities for other farmers to expand and practice economies of scale by a more efficient use of assets such as labour, land, machinery and buildings. The task of the Government is to create the right conditions to allow this to happen.

Encouraging business cessation is, however, an emotive issue as it may lead to the loss of jobs. It is important that there is alternative employment or income opportunity.

The Dutch approach of combining the encouragement of business cessation with the development of farms under the guidance of the Development and Reconstruction Fund for Agriculture has been a successful one. It has provided farmers with a reasonable income and it has released land for structural improvement. The co-responsibility of the representatives of the farmers' organisations in the Board of the Fund helped to give trust to farmers in the difficult process of making up ones mind.

A question is whether the measures to encourage farmers to cease business have been effective. It may be argued that many would have stopped farming anyway, measures or no measures. The measures, therefore, must be focussed strictly at farmers who really need it. An allowance for those who cannot earn their keep is generally accepted.

An argument against encouraging business cessation is that people fear that in many areas people will move elsewhere and local (social and economic) facilities will disappear. But this is an argument that does not apply to the Netherlands because it is a densely populated country and the population is distributed evenly across it. Moreover, economic forces move toward expansion of scale and the preservation of small-holdings is not a viable proposition.

Older farmers ceasing business in the Netherlands increasingly have sufficient means of their own and do not require government aid. On account of high land and quota prices business cessation is financially attractive for many farmers.

A large part of the cessation process happens quietly, particularly where farmers have no successor. It is important that young farmers take over only viable farms.

Appendix 1 Number of farms (1950-2001) in the Netherlands and farms ceasing business (absolute number and percentage of total number of farms)

Year	Number of farms	Farms ceasing business	
1951	370000	4000	1.1%
1952	366000	6129	1.7%
1953	359871	10060	2.8%
1954	349811	1)	1)
1955	319037	2839	0.9%
1956	316198	2187	0.7%
1957	314011	1083	0.3%
1958	312928	4874	1.6%
1959	308054	7054	2.3%
1960	301000	1000	0.3%
1961	300000	2000	0.7%
1962	298000	8000	2.7%
1963	290000	17000	5.9%
1964	273000	8661	3.2%
1965	264339	8844	3.3%
1966	255495	8060	3.2%
1967	247435	7478	3.0%
1968	239957	7536	3.1%
1969	232421	1)	1)
1970	184613	5992	3.2%
1971	178621	6105	3.4%
1972	172516	3384	2.0%
1973	169132	2935	1.7%
1974	166197	3603	2.2%
1975	162594	3979	2.4%
1976	158615	4011	2.5%
1977	154604	2897	1.9%

1978	151707	3033	2.0%
1979	148674	3680	2.5%
1980	144994	3344	2.3%
1981	141650	1996	1.4%
1982	139654	1115	0.8%
1983	138539	796	0.6%
1984	137743	1844	1.3%
1985	135899	2055	1.5%
1986	133844	1831	1.4%
1987	132013	2260	1.7%
1988	129753	2386	1.8%
1989	127367	2464	1.9%
1990	124903	2297	1.8%
1991	122606	1670	1.4%
1992	120936	1212	1.0%
1993	119724	3540	3.0%
1994	116184	2982	2.6%
1995	113202	2535	2.2%
1996	110667	2748	2.5%
1997	107919	3041	2.8%
1998	104878	3333	3.2%
1999	101545	4062	4.0%
2000	97483	4700	4.8%
2001	92783	92783	

in 1953 and 1969/1979 different threshold for registration

Appendix 2 Measures for cessation of farms under the Development and Reconstruction Fund for Agriculture

1. Decision of the Board no 2

Period covered: 1 May 1964 - 1 October 1967.
Target group: natural persons of 50 years of age or over whose main source of income is agriculture and whose net income is less than 8,000 guilders a year.
Condition: person must cease business.
Monthly allowance based on age
Payment made in monthly instalments up to applicant's death: Amount increases with age at cessation (a farmer ceasing business at 50 for instance gets 196 guilders a month, a farmer ceasing business at 64 gets 451 guilders a month. Those over 65 get 96 guilders a month (on top of OAP). On applicant's death the allowance is paid to his widow.
Number of applications: 11,130 of which 6,314 were approved.

2. Decision of the Board no 12

Period covered: 1 January 1966 - 1 February 1967.
Objective: releasing land for structural improvement.
Target group: natural persons in agriculture of any age and any income

Allowance: 10 times the annual rental value of the land per ha in five one-year terms
Allowance based on number of ha.
Number of applications: 735, of which 258 were approved.

3. Decision of the Board no 25

Period covered: 1 January 1968 - 15 November 1972.
Target group: natural persons of 50 to 65 whose main source of income is in agriculture (size of holding must be at least 2000 points).
Monthly allowance based on the rental value of the land released and the size of the business.
Number of applications: 9,214 of which 4,890 were approved.

4. Decision of the Board no 103

Period covered: 15 November 1972 - June 1991.
Target group: natural or legal persons in agriculture under 65 , whose annual income before tax is less than 26,000 guilders a year.
Allowance:
a. allowance per ha (arable land and grass 1000 guilders per ha, (more for horticultural land) plus when agriculture is main source of income:
- for those under 50, a lump sum payment based on size of business
- for those over 50: a monthly allowance up to age 65.

Number of applications: 3,994 of which some 2,100 were approved.

Appendix 3 Participants in the measures for cessation of farms under the Development and Reconstruction Fund for Agriculture and government expenditure

Year	Farms ceasing business	Expenditure in million Euro
1965	2037	2.31
1966	2183	7.76
1967	1389	11.16
1968	906	13.70
1969	422	14.07
1970	467	14.38
1971	922	18.92
1972	1871	28.68
1973	1008	21.46
1974	401	18.60
1975	274	18.51
1976	345	20.74
1977	231	19.78
1978	138	19.56
1979	98	18.97

1980	107	18.42
1981	223	18.65
1982	170	18.79
1983	166	17.74
1984	85	16.11
1985	43	14.16
1986	22	13.25
1987	23	12.07
1988	24	11.21
1989	24	10.57
1990	15	9.71
1991	42	9.67
1992		8.89
1993		8.80
1994		8.08
1995		7.26
1996		6.44
1997		6.04
1998		4.90
1999		4.99
2000		4.31
2001		3.95
Total	13636	482.64

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4. The concept of competitiveness and the role of the government in improving it[1]

Siemen van Berkum, LEI

4.1 Introduction

In this contribution the concept of competitiveness will be clarified and the role of government in strengthening the competitiveness of the agricultural sector will be discussed. This chapter starts with briefly indicating the main factors determining competitiveness according to mainstream economic literature. Next, the role of government in improving the competitiveness of the sector is identified and elaborated. The guiding principle for government intervention is whether the market functions properly or not. The final section considers potential problems affecting competitiveness that may affect commodity sectors and reflect on whether and what type of government action may be most appropriate to overcome them. Please note that although the situation in Poland is sometimes referred to as an example, the issues discussed are not specific to the Polish case but may hold for every country.

4.2 Factors determining competitiveness

The issue of competitiveness is highly complex and elusive. Competitiveness embraces issues of resource endowment and the quality of these resources (labour, capital land, human resources), but also the organisation and use of resources. Managerial capabilities and performances are important too, like international demand and supply conditions, and unpredictable physical conditions like climate. Also, the consequence of policy interventions affects competitiveness. Further, competitiveness can be assessed at the levels of a country, sector or firm. It can be also assessed at different market levels.

A very brief reference to the economic literature on this subject may act to illustrate the various approaches that can be followed to indicate competitiveness. Trade theories are so-called macro-economic theories focusing on reasons of international trade between countries. All trade theories emphasise costs and efficiency of resources, yet modern trade theories also indicate that economies of scale, product differentiation and innovation are important drivers of international trade and therefore important factors determining competitiveness. Theories from the industrial economics approach refer mainly to sector level. Well-known industrial economists like Porter and Grant distinguish six factors determining competitiveness: 1) production factor conditions; 2) demand conditions; 3) related and supporting industries; 4) firm strategy, structure and rivalry; 5) chance; and 6) government. Strategic management theories emphasise the importance of competitive advantages linked to available resources on firm level. According to these theories firms should improve their level of knowledge and skills to face competition in future. Marketing, then, assumes a market-oriented approach in obtaining competitive advantage and stress aspects like prod-

[1] This paper has been presented and discussed at the meeting in The Hague, 26-27 September 2002.

uct innovation, service and quality. Institutional economics highlight the impact of institutional structures (like markets, firms and governments) on economic performance. Institutions (defined as a set of formal and informal rules including their enforcement arrangements) affect incentives and the specific economic choices people make. Clearly the economic literature offers no general theory about competition; many factors may influence the competitiveness of a country, a sector or firm. Consequently, there is no single indicator of competitiveness.

Furthermore, competitiveness is a dynamic concept, meaning that changing market conditions change competitive positions. Market conditions change with changes in demand (due to higher incomes or changing preferences) but also with changes in government policies. For instance, when the EU market opens up and import tariffs and duties are abolished, the Polish exporter may be able to sell at lower prices and will be more competitive vis-à-vis the EU producer. In the *static* sense, therefore, a freer trading environment results in more opportunities for the exporting sectors which are likely to expand, and increased competition for the import-competing sectors which are likely to contract. This conclusion, however, is over-simple (although it may be true in the short term) because it neglects the dynamics of freer trade. Since, freer trade increases the flow of ideas and capital between countries. Cost structures of the industry respond to new techniques, new management methods, new sources of raw material supply and possible substitutes. In addition, the exposure to new products and marketing methods can lead to new cost-reducing approaches to the market and more innovative products being developed. It is, therefore, usually impossible to predict which sectors in the long term will be the winners and which will be the losers in a more liberal trade environment.

Further, it should be acknowledged that competitiveness has different implications for an individual farm than for a sector or industry as a whole. An industry can be competitive (in the sense that under changing market conditions, it can maintain or increase its sales) while individual businesses within the sector may be highly uncompetitive. Similarly, an uncompetitive industry may have highly competitive firms within it. Therefore, it is not possible to assert the sector's competitiveness from average numbers (like productivity, cost of production, farm price levels, and measures of protection), although this is mostly what is done in studies on this subject.

4.3 Competitiveness and the role of government

More important than the exact measure of competitiveness is to determine the reasons for a potential lack of competitiveness. In other words, it is not necessary to measure the competitiveness of an industry precisely in order to identify problems that reduce its current and future competitiveness.

Why might a particular sector NOT be competitive? There are several possibilities:

1. on-farm technical efficiency might be low because of:

- low quality inputs (e.g. breeding livestock, seeds, land in areas with major climatic or physical disadvantages);
- lack of economies of scale;
- low managerial efficiency (because of lack of experience, training, education);

- lack of investment.

2. marketing efficiency might be low because of:
- lack of experience in marketing;
- lack of economies of scale;
- lack of investment in on-farm storage and grading facilities;
- inadequate information about market prices and supply levels.

3. market efficiency might be low because of:
- little competition exists at certain stages of the marketing system, leading to exploitation of market power which raises prices of farm inputs and/or lowers prices of farm outputs;
- inadequate competition gives rise to inflexible organisations unresponsive to market requirements;
- price signals in the market are suppressed: farmers are not paid on the basis of the quality of their products (as perceived by consumers) and in the end do not produce what the consumer wants;
- no commonly accepted grading systems exist which allow producers and buyers to sell/buy on the basis of description and to interpret market information regarding prices and supplies.

4. government regulation and intervention may impose unnecessary costs on domestic producers; or
5. the industry might suffer none of the above specific disadvantage but is uncompetitive because of a different price structure (e.g. for labour) and/or inferior natural resources compared with those in competing countries.

Some of these problems are clearly within the realms of government responsibility but some clearly are not. Government cannot make each and every farm in any sector competitive, and neither can it expect necessarily to maintain the size of a sector (in terms of output) when market conditions change. Adopting different levels of protection and prices usually means some sectors expanding and some contracting. However, the size of any contraction can be minimised and the size of any expansion can be maximised by ensuring that, in those areas where government does have responsibility, barriers to competitiveness are eliminated. Thus, while individual farmers are responsible for their own production and marketing decisions and the efficiency and cost-effectiveness of their own operations, government is responsible for creating the right environment in which farmers (and wholesalers, processors, distributors, etc.) can operate effectively. The government, therefore, will increase competitiveness by ensuring the proper working of the market[1].

If market failures exist, the market outcome (production levels, technology used, production costs) is unlikely to be the most economically efficient at present. If not corrected, these market failures will also adversely affect the competitiveness of Polish agriculture on accession. There are three types of market failures of relevance to the competitiveness of Polish agriculture:

[1] The assumption here is that real competitiveness from a national perspective is the objective. From a farmer's perspective, an extra subsidy will always make him more competitive, but this will reduce rather than increase national welfare.

a) Monopoly or inadequate competition at different stages of the marketing system

Most agricultural production is characterised by large numbers of relative small businesses, so that at this level the exploitation of monopoly power is hardly a problem. However, farmers buy from and sell to industries, which are much more concentrated. In countries like Poland this is potentially an important source of market failure if the centralised state institutions involved in supplying inputs or purchasing farm output still exist to some extent and can wield considerable market power in certain regions. Privatisation of a state monopoly may not solve the problem: if the monopoly still exists, then the monopoly power is only removed from the state and given to a private firm, and there is no necessary improvement in market efficiency. Market efficiency will only increase if there are several competing companies in the market.

b) Public goods

Some goods or services would never be provided if it was left to the market. These public goods have the characteristic that it is impossible (or prohibitively expensive) to confine the use of the good to those that pay for it. Because people who do not pay can also enjoy the good, in the end nobody is willing to pay for the good, and therefore nobody provides it. Another characteristic of public goods is that the use of the good by one group often does not diminish the stock of the good for use by others. Examples of public goods in agriculture are the establishment of a market information system, or investments in research, extension, education and skills training, or investments in land reclamation projects. If left to the market, investment for these goods may be much lower than the optimum because those who pay for it may not be able to recoup their costs.

c) Market externalities

Correcting all market failures does not necessarily lead to an increase in efficiency and competitiveness. If farming or food processing produces negative external effects, then correcting them will impose costs on producers. Market externalities exist when the costs and benefits of production (or consumption) activities affect those who are not directly involved in the market. For example, intensive pig farming may produce slurry which pollute water or air, to the detriment of neighbours or even people living a long way off. The farmer receives no market signals to reduce or eliminate the pollution which reduces the welfare of others, because there is no price penalty for producing pollution. When government intervenes to reduce pollution through either the imposition of regulations or taxes, production costs will increase. On the other hand, some externalities are beneficial (for example, the landscape produced by particular types of farming activity; grazing livestock or certain mowing regimes on pastures which produce a particular type of ecosystem). If government encourages the production of these positive environmental externalities through various payments (as the EU does increasingly) then effectively the costs of *agricultural* production are reduced. With respect to future competitiveness it is important to consider whether Polish agriculture will face any increase in production costs due to (future national or EU) environmental, animal welfare and food safety regulations or may benefit from payments for positive externalities.

The existence of any market failure provides a *prima facie* case for potential government action to improve the workings of the market, or substitute for the market if the market does not exist.

4.4 Potential sources of uncompetitive ness due to market failures

This section considers potential problems affecting competitiveness that may affect the different commodity sectors and whether and what type of government action may be most appropriate to overcome them.

4.4.1 Low technical efficiency

Problem analysis

Lower technical efficiency can be indicated by lower levels of physical output relative to inputs, compared with performance elsewhere. It may be that the market is better at solving the problem rather than government action. The key issue is the reason for the low technical performance. It may be that some inputs (like genetic material or machinery) are of low quality. Upgrading the inputs would improve economic gains but the question is who should encourage and finance the upgrading? In a normal functioning market, the encouragement to upgrade comes from the financial incentives from better economic performance. If a farmer believes that genetically better livestock or plants would give better returns then the farmer invests in this more expensive input and subsequently derives the benefit. The benefit is a private one and the cost of the investment should be private too. There is little argument for government involvement here. If the farmer has not the foresight to invest, then he or she will eventually go out of business.

If, however, the market is not functioning normally then there may be a case for government intervening in some way to correct the market failure. Lack of investment in better genetic material or in better equipment may be due to the farmer not being able to borrow from a bank or because the farmer is not aware of alternative technologies. If the farmer cannot borrow from financial institutions, then the question is naturally 'why not?' The problem at present may be 'solved' by the use of credit subsidies, but this does not address the question why farmers cannot borrow from the banks on normal terms, and it is at best a temporary solution. Very often, credit problems at the farm level can be traced to problems in the credit market itself and the perceived creditworthiness of the farmer.

Creditworthiness depends *inter alia* on the borrower's collateral, the legal environment that makes it possible for the lender to obtain back his money if the farmer defaults on the loan, and the perceived profitability of the proposed investment. The first two are legal problems (ensuring the farmer's title to land is complete and secure, and ensuring contracts can be enforced). The third is linked to many issues, not least of which is the efficient operation of the market discussed later.

Options for government action

Clearly, the government has responsibility for the legal environment and correcting any failures in it would assist the functioning of the credit market - and with it the access of farmers to credit. The other side of the credit problem might lie with the banks themselves.

Since they are relatively new to the ways of the market, it may be that they are not operating competitively. Large loans to organisations with historic connections may still count for more than an objective view of profitability and a balanced portfolio of loans. This is a reminder that problems in one sector might arise from problems in other sectors.

Another reason for low technical efficiency may be poor managerial skills. Farmers who have moved from a planned to a market economy may not have the managerial skills to operate efficiently and effectively. These skills take time to acquire. The process of acquiring these skills and the knowledge about modern farm management can be speeded up by appropriate state-financed schemes, as *education* is often considered as a public good.

Finally, in this sub-section, there is the possibility that farms are too small to produce economically. Whatever the reason for the existence of these small farms, there is little that can be done to overcome this particular problem. In the long term, these farms will merge with others to form larger more economic viable units. Provided it does not conflict with any rural social policy that the government might have, the most appropriate policy is *to develop a rural policy which encourages non-agricultural employment* in rural areas and which will provide the incentive for the less efficient farmers to leave farming.

4.4.2 Low marketing efficiency

A farmer may be technically efficient at producing goods, but the benefit of this may be lost if the marketing is poor. This may occur because of a lack of economies of scale in the distribution of the product, which increases unit costs excessively, or the farmer may not be producing the product that the market wants. If the former, then governments can often *assist the formation of producer groups* so that farmers can combine to get the necessary scale economies. Certainly, in the EU, producer groups are seen as an important way of reducing marketing costs (because there are scale economies in the shared use of storage and grading facilities and marketing expertise) as well as giving producers countervailing power in the market. Government help in establishing producer groups helps to overcome a market failure[1].

If the problem is that the farmer is not producing what the market wants, or the returns from the market do not reflect quality differences then this may be a symptom of a poor *market information system* or an inefficient market (discussed next).

4.4.3 Low market efficiency

An efficient market is one where prices effectively transmit information (about supply costs and consumer preferences) from one end of the marketing system (farmers) to the other end (consumers), and vice versa. An efficient market will also ensure that these prices are as low as possible. This ideal state of affairs is usually attained by ensuring the market is competitive. That is, there are a number of players competing in the market to drive the price down to its lowest possible level (consistent with organisations in the system earning a 'normal' return on their capital investment).

[1] However, this help should not go beyond assisting the group's establishment (for example, by helping with the operational costs of such groups) because this would undermine the competitiveness of the market by discriminating against private traders.

One way of obtaining a competitive market is to ensure that there are no barriers to entry into the market. Firms should be free to enter the market and compete on the same terms as existing firms. Thus, any health and safety standards should be identical for all firms, existing and potential, as should any other requirements that the government wishes to impose. Again, in order to ensure that opportunities exist for businesses to develop (and maintain a competitive market) the government has to create the right investment climate.

Where an existing organisation already has a considerable market power, additional measures are often necessary, such as limiting by regulation the size of the market (regional and national), which any one firm can control. Then, the government can improve market efficiency by *setting rules and drafting laws on competition* (Competition policy).

A further indication of an inefficient market is the lack of price differentiation for different products. Consumer preferences will never be transmitted to farmers (and farmers will stop supplying the goods that consumers prefer) if the prices for the preferred goods are similar to prices for non-preferred goods. Preferences can cover variety, appearance, size, even method of production (organic!), and prices at different stages of the marketing system should reflect supply and demand. If a market pays one price for a product, good or bad, large or small, the right incentive cannot be provided to farmers to produce what consumers prefer. Associated with this problem is the lack of grading schemes to classify produce. This is important not just for price differentiation purposes, but also to make buying and selling more efficient since goods can be bought and sold on the basis of description without necessitating a physical inspection. In both these areas, government may stimulate the establishment of grading or classification schemes and promoting their usage in the market.

4.4.4 Government regulation

Government has an important role in ensuring work practices and products meet certain minimum health and safety requirements. Government may also specify measures that an industry has to comply with for environmental reasons. Government, in fact, can require firms to do a large number of things for various reasons. If those requirements become very burdensome and if there are no comparable benefits to weigh against the costs imposed on firms, the government itself may be contributing to a lack of competitiveness. The provision of data for statistical purposes, obtaining export licences via complex procedures, and various registrations of activities can all consume an organisation's time, which would be better spent on their business activity. If regulations are complex and numerous, their existence can also provide an effective barrier to entry to an industry for new firms. Governments should therefore always consider the private costs of any of their regulations as well as the public benefits.

4.5 Concluding remarks

The competitiveness of agricultural production in Poland in an enlarged EU will depend upon the changes in the level and type of support measures and improvements in the efficiency in the production and marketing system. Support in the framework of market

organisation will be part of the Common Agricultural Policy. At the time of writing (September 2002) the Commission's proposal is to discriminate between farmers in old and new member states and pay farmers in EU-15 higher direct payments than those in CEECs. It is obvious that any inequality of market support inside the EU might affect the countries' competitive positions, yet it is impossible to say to what extent because – as emphasised in this paper - so many other factors play a role. One important factor is the efficiency of the production and market system. Improvement of market efficiency with government action as indicated above is largely in the realm of the Polish government itself. Therefore, in order to improve the competitiveness of its agricultural sector, it is very important for Polish policy and decision makers to identify the constraints (the market failures) to increased efficiency within each agricultural sub-sector and to identify what policies could help overcome them. To some extent the Polish government already considered the policy areas suggested in this note, yet there is probably room for improvement of policies implemented so far. This could be done with help from SAPARD and/or rural development programmes of the EU.

5. Polish Agriculture, Rural Areas and Food Processing Sector before Accession

(*This is an abstract of the draft Sectoral Operational Programme for agriculture and rural areas, prepared by MARD)*

5.1 Agriculture and rural areas

The agricultural sector has greater social and economic importance for the Polish economy than in many other countries. There are still regions where agriculture is a major influence in the economy and as such has a crucial impact on the development of these regions and the standard of living for its inhabitants.

In 2001 agriculture accounted for 2.9% of the Gross National Product. This had deceased from 12.9% in 1989, 9.3% in 1990 and 6% in 1995.In 2001, there were 1,885,800 farms above 1 ha in Poland, out of which 1,884,200 farms were privately owned and 1600 were state farms.

In 2001 the average farm size was 9.5 ha of which 8.3 ha was farmland. In 1996 there were 2 million farms (over 1 ha) of which 48% produce for sale, while the remaining group produced mainly to meet their own needs.

5.1.1 Land structure

Within the group of holdings involved in marketable production, 73% of farm owners generate income exclusively or mainly from agricultural production, whereas in the case of **all** individual farms only 45% obtain their income from agricultural activities. Over 90% of agricultural holdings involved in marketable production have an arable area of 15 ha or more.

As many as 75% of farms between 1 and 5 ha in size produced mainly for their own needs, occasionally selling any surpluses. Furthermore, almost 4% of farms are not engaged in agricultural production at all (on a permanent or temporary basis). These figures show that small farms participate in marketable production to a negligible extent.

Poland has extensive land resources but the farmland structure of holdings is varied. In the year 2000, farms between 5 and 10ha accounted for over half of the total number of agricultural holdings (56%) and farmed 24% of the agricultural land. Over recent years both the number of farms and the agricultural land has declined only slightly. Agricultural holdings with an area over 30 ha account for only 2% of farms, but they utilised about 19% of the total arable land. Since 1996 the highest increases in area were noted in the holdings with an area between 30 and 50 ha (by 39%). At the same time there are over 3,000 large holdings with an area over 100 ha.

Table 1. Number of individual holdings and the use of land broken down into farm surface groups in 1996 and 2000

Agricultural land groups (HA)	Total number of holdings (thousands)		Agricultural land surface (thousand of ha)		Changes in agricultural land surface over 2000/1996(%) 1996 = 100
	1996	**2000**	**1996**	**2000**	
Total	**2041**	**1880**	**14259**	**13510**	**94,7**
1-2	462	448	651	645	99,0
2-3	282	270	690	651	94,3
3-5	386	345	1509	1336	88,6
5-10	521	448	3713	3183	85,7
10-15	217	185	2631	2246	85,4
15-20	89	83	1530	1442	94,2
20-30	56	62	1323	1478	111,7
30-50	19	27	719	997	138,7
50 and more	9	12	1493	1532	102,6

Source: Agricultural Census report 1996, Central Statistical Office, Warsaw, 1997;Characteristics of agricultural holdings in 2000, Main Statistical Office, Warsaw 2001.

The land plots of the majority of individual farms have a very fragmented, "chessboard" structure, which is illustrated by the fact that 20% of them have 6 or more dispersed plots of land. In some cases the distance between the plots exceeds 10 km.

Table 2 Fragmentation of Polish farms in 1996.

No. of plots making a farm	Percentage of farms	Percentage of farmland
1	16,5	8,8
2-3	40,6	28,2
4-5	22,3	21,9
6-9	14,3	18,7
10 and more	6,3	22,4

Source: 1996 Agricultural census report, Central Statistical Office, Warsaw 1997.

The highest fragmentation level is observed in individual farms in the southern Voivodships where the average size of farm is about 4.0 ha. The farms of the largest average size are found in the northern Voivodships where an individual farm covers more than 12,0 ha.

Generally, Polish agriculture has preserved its traditional character. The majority of farms have a mixed production pattern and apply extensive methods of cultivation. In 1998 the productivity in the agricultural sector was as low as 25% of the average productivity in

the national economy. The use of mineral fertilisers in 2000 amounted to 90.8 kg of NPK/ha. The use of pesticides is several times lower than the EU average – i.e. 0.62 kg/ha of farmland.

Extensive systems of animal production are used, based mainly on the farm's own supply of feedstuffs. Due to low productivity the impact of agriculture on the environment and landscape has been limited. The natural qualities of rural areas and abundant labour resources will provide opportunities for the development of labour consuming farm production, particularly in sustainable agriculture.

Farm fragmentation constitutes a major weakness of Polish agriculture. It has many social and economic effects such as low incomes for farmers and their families, and limits investment capital for efficiency improvements. It is also difficult to maintain product quality and efficiency (especially in milk production) on farms that produce only small quantities of different products.

The development of organic agriculture in Poland is less advanced than in Western Europe with only about 1700 farms which have been granted sustainable agriculture conformity certificates. However, many of the conditions in which Polish agriculture operates are conducive to sustainable farming.

5.1.2 Professional activity of the rural population in Poland

38,3% of the total population of 38,6 million, in the year 2001, lived in rural areas (14,8 million people). Traditionally, the structure of a rural family consists of several generations. Households with families of 5 or more people constitute 30% of all rural farmsteads whilst in towns the figure is only 12.%. Families in rural areas are characterised by having more offspring than families in urban areas. It should also be emphasised that over 40% of the rural population is over 40 years of age with limited mobility and therefore unlikely to leave the rural area.

A considerable improvement in the level of education has been observed over the last ten years, however, both the general and vocational education levels of people working in the agriculture sector is still very low (see Table 3). In 1988 as much as 60% of people involved in farming had only primary education; in 1995 this percentage fell to 55%. Only 1.8% of the population has a university education (in urban areas it is 9.4%).

The population employed in the agricultural sector is much higher than that of EU Member States. This is partly due to the differences in the methodology of counting the number of people working on farms. In Poland farms of 0.1ha-1.0ha, who produce food for their own needs are included in the figures.

According to the economic activity survey of the population undertaken in 2001, there are 2.67 million people employed in the agriculture, which corresponds to 19% of the total number employed.

Employment in agriculture is decreasing very slowly due mainly to the lack of new jobs in non-agricultural sectors. Bearing in mind that there are generally high levels of employment in agriculture, it should be noted that in some regions (mainly in Eastern Poland) there is a problem of a lack of successors on farms resulting in depopulation of rural areas.

Table 3 Educational structure of the population over 15 years old between 1988 and 1995

Education level	1988			1995		
	Total	towns	rural areas	Total	towns	rural areas
University	6,5	9,4	1,8	6,8	9,8	1,9
Post-secondary education	1,6	2,0	1,0	2,6	3,3	1,3
Secondary education	6,7	9,3	2,6	7,1	9,6	3,0
Vocational education	39,9	43,8	33,7	43,3	45,9	39,2
including basic vocational education	23,6	23,2	24,2	25,9	24,6	28,0
Primary	38,8	32,2	49,2	33,7	27,6	43,8
Incomplete primary or no education at all	6,1	2,9	11,2	6,3	3,6	10,8
Other	0,4	0,4	0,5	0,2	0,2	0,0

Source: 1988 general census, 1995 representative sample survey.

The transformation process in Poland has resulted in high unemployment in rural areas. In June 2002 there were 1,4 million registered unemployed in rural areas (43% of the total number of unemployed in Poland). This figure corresponds to the national unemployment rate of 17.4%. The owners of farms with over 2 ha of land are not registered as unemployed - according to the estimates about 1 million individual farmers cannot find a job and are referred to as 'the hidden unemployed', while 70% of people only have part-time employment. This and the fragmented farmland structure cause overpopulation in rural areas. There is observed regional variation of density of population which has historic reasons (state owned and co-operative farms wound up in the 90s were located in the northern and western territories of Poland, where lower population is noted).

Rural populations' incomes are far worse than that of other social groups. In 2000 the average monthly income per capita in a household was PLN 610[1]; however, in urban areas it was PLN 695 and in rural areas – PLN 483. A survey carried out in 2001 shows that the incomes of rural households and farmers decreased considerably compared to other groups.

Table 4 Population of individual farms. Breakdown by sources of income

The only or main source of income	Total (thousands)	%
Total population	8 196,8	100,0
Work on own farm	1 909,0	23,3
Work outside own farm – wage-work in agriculture	41,0	0,5
Work outside own farm – wage-work outside agriculture	1 245,9	15,2
Work outside own farm – self-employment	123,0	1,5
Retirement pension	1 114,8	13,6
Disability pension	663,9	8,1
Family pension	114,7	1,4
Unemployment benefit	205,0	2,5
Other social benefits	82,0	1,0

[1] 1 EURO=4, 14 PLN

Dependants,	2 696,7	32,9
including: children 0-14 years old.	1 950,8	23,8

Source: Agricultural census report1996, Main Statistical Office, Warsaw 1997.

5.1.3 Rural and agricultural infrastructure

An insufficient level of technical infrastructure in rural areas is one of Poland's main barriers to rural development. A poorly developed infrastructure brings down the standard of living and also discourages investment. Problems with access to the technical infrastructure affect farms because of dispersed housing, the high cost of connecting houses to services and the lack of funds for co-financing construction work.

Table 5 Sanitary equipment of households (% of the total number of households as at the end of 2000)

Elements of infrastructure	Rural areas	Urban areas
	%	
Water supply systems	83,1	97,6
WC	63,8	90,3
Gas supply network	15,9	76,7
Central heating	54,4	80,8

Source: 2000 Statistical Yearbook, Central Statistical Office, and Warsaw 2001.

The technical production infrastructure utilised in Polish agriculture is growing systematically. By the end of 2000 individual farms were already equipped with 1,3 million tractors, 111,000 combine-harvesters 86,000 potato harvesters, 33,000 sugar beet harvesters and 130,000 forage harvesters.

However, if calculated in terms of equipment units per unit farmland area, the figures differ considerably from those in the EU Member States. The number of tractors per 100 farms in Germany, France or Great Britain exceeds 2 or even 3 times that in Poland. Poland has significantly fewer combine-harvesters per 100 ha of crops than the majority of EU Member States. Other comparisons of farm equipment, per 100ha of crops, are significantly lower in Poland compared with EU Member States.

In absolute numbers, Polish farmers are sufficiently equipped with tractors and basic machines to ensure mechanisation of basic farm work. However, this equipment and these machines urgently require modernisation or replacement. These machines depreciated in about 70% of cases. Due to the financial problems faced by the majority of farms, the operation period of the equipment is extended beyond reasonable limits and replacement with more advanced machines is difficult. The average lifetime of a tractor in 2000 was 20 years and its power was 31 kW. By contrast the average tractor power in France exceeds 40 kW, in Italy - 41 kW, in the Netherlands - 42 kW, and in Denmark - 45 kW. About 50% of holdings (mainly small farms) are not equipped with a tractor, and the collective use of farm machinery is not popular.

In conclusion, Polish farms are not sufficiently equipped with farm machinery. In order to ensure the competitiveness of Polish agriculture at the moment of accession it is necessary to increase the number and range of new machines used by farmers and to develop mechanisation services for farm work.

The statistical survey results produced every year by the MSO in respect of building structures indicate the number of buildings put to use, but do not take into account the state of the structures. Therefore, the state of farm structures may be identified on the basis of the returns from the agricultural census which is carried out every few years.

5.2 Agri - Food Industry

The food industry is one of the most important sectors of the Polish economy in terms of the volume of production sold (over 20% of the total sales value of Polish industry), the number of industrial establishments (about 30,000) and employment (411,000 people, i.e. 8.4% of the total national employment, and about 16% of the total employment in industry). Its share in the total industrial production is almost 24% and exceeds that of the EU food industry, which it accounts for on average about 15%, by about 9 percentage points. Outside Poland the share of the food industry is higher only in Denmark (28%) and in Greece (27%). The gross value added generated by the Polish food industry (including the soft drink and tobacco industries) amounts to about 6 billion USD, i.e. over 4% of gross value added generated by the whole national economy, and about 6% of GDP.

The Polish food market still has large growth potential. Growth in the Polish food processing sector, through improved technology and production quality, is hampered by serious problems including:

- shortage of domestic capital;
- an unstable raw material base in the case of many industrial establishments (loss of contract links with raw material suppliers);
- lack of strong processors' groups.

Because of the approaching accession of Poland it is necessary to modernise the agri-food processing industry in respect of veterinary, hygiene and environmental protection standards. This is particularly true in the case of the milk, meat and waste utilisation sectors, and, to some extent, in the case of the poultry sector. As far as the required standards are concerned, they are met only by 38 dairies, 60 meat processing plants, and 29 poultry processing plants. A further 2,186 plants are likely to comply with the EU requirements by January 1, 2004, and another 466 plants may adjust themselves to these requirements during transition period.

Those plants which have been recognised by the EU as exporters represent a small percentage of the total number of industrial establishments (particularly of meat processing plants and dairies), though they have an important share of the total production potential in the respective sectors. As for the meat processing industry, their share amounts to about 30% of slaughters and 25% of processed food articles, in the dairy sector to about 40% and in the poultry sector to over 70%.

Due to the shortages of investment capital in the food processing sector the measures required to comply with the EU standards must be supported with public funds. It should be recognised that a number of plants will not complete their investments by the accession date and will be forced to operate only on the local market being, therefore, less competitive or to close down completely. Adjustment of the animal product processing plants to EU standards may change the structure of this sector of the food processing industry, as it must result in a concentration of production, particularly in respect of slaughterhouses.

To improve the competitiveness of the Polish food processing industry the continuation of the modernisation process is a basic requirement; particularly as only a few food processing establishments have modern equipment for all stages of production.

Investment must be associated with the modernisation of the technical infrastructure of food processing plants. This could include:

- improved management of water supply, waste water and power consumption;
- improvements in processing sugar, potatoes, fruit, cereals, vegetables, dairy products, poultry and in the milling and distillery sectors;
- improved refrigeration for the animal product processing sector.

Milk Production and Processing

In 2001 milk production in Poland amounted to 11.6 billion litres of which 8.4 billion litres was intended for marketable production (of which the Extra class amounted to 58%). Some 1.3 million farmers keep dairy cows. Milk processing and collection is dominated by dairy co-operatives, the market share of which is estimated at more than 80% and market sales at 70%. In 2001 there were about 330 dairy co-operatives in Poland and 280 of them employed more than 50 employees. This number includes about 130 private companies with or without foreign capital involved. In 2002 only 38 of the 400 existing dairy plants were allowed to export to the EU. However their share in the market amounts to 40%. According to the Veterinary Inspectorate estimates the next group of 171 dairies will comply with EU standards before accession. The priorities for modernisation in the sector include improvement of milk quality, organisation of milk collection and adjustment of the plant to the required sanitary standards. The next priority is the modernisation of production lines.

Meat Production and Processing

In 2001 pig and cattle production amounted to, 2,415,000 tons and 562,000 tons respectively. In Poland almost 1.4 million farmers keep bovine animals and 1.2 million keep pigs. However only 56% of farmers deal with marketable production. In the case of pigs over 63% of farmers deal with commercial production (out of which 37% have at least 10 pigs).

At the present time, the meat sector is very varied and unevenly dispersed due to private investments and the privatisation of State plants. There are 290 red meat processing plants which employ over 50 people each, around 270 plants employing 6 to 50 people, and about 4,500 small slaughterhouses and local processing plants which are not considered as industrial undertakings.

Currently there are about 2,800 cattle slaughterhouses, almost 400 poultry slaughterhouses and about 100 poultry processing plants. EU export authorisation has been given to 19 cattle slaughterhouses (as compared to the 2,800 existing plants), 23 processing plants (as compared to 2,650 existing plants), 6 beef meat refrigerating plants, 17 beef meat cut-

ting plants, 20 poultry slaughterhouses, 8 poultry meat processing plants, 4 poultry refrigerating plants, and 22 poultry cutting plants. A further 1,892 plants will have complied with the EU requirements by January 1, 2004.

The elimination of over capacity is an important factor in the modernisation of the meat processing sector. Particularly in the animal slaughter sector where a strong concentration is needed to allow the remaining plants to comply with EU sanitary and veterinary standards. The meat processing plants also face the problem of liquid waste management. These plants must be equipped with environmental protection facilities and should improve their water and power consumption efficiency.

Production and processing of fruit and vegetables

In 2000 about 3.4 million tonnes of fruit and 5.2 million tonnes of vegetables were harvested. This year fruit production was carried out on 800,000 farms and vegetables were grown on about 1.6 million farms. However, only between 15 and 20% of farmers (between 350,000 and 400,000) went in for commercial production. The remaining farmers grew fruit and vegetables for their own consumption. Fruit and vegetable processing is extremely dispersed. This sector currently includes between 1400 and 1500 processing plants. About 90% of the processing plants are small and employ between 1 and 50 people. The proportion of large processing companies is about 5% of the total number of processing plants. The share of newly established small companies is estimated between 80 and 90%. In 2000 about 60% (2 million tonnes) of fruit and about 11% (830 000 tonnes) of total vegetable production was processed. The majority of processing plants face problems with the lack of a stable raw material base, crop dispersion and the lack of a homogenous quality of raw materials.

Currently very few producers are registered in this sector who could comply with the producer organisation requirements of the EU regulation. Recently, supply has exceeded demand on the domestic market for processed fruit (mainly juice and traditional processed products) and is still growing. Competition among the producers leads to concentration of the sector.

Cereal Processing

There is a reduction in the rate of decline in the consumption of processed cereal products. Over the period 2001/2002 consumption amounted to 21.8% of domestic cereal utilisation and 3.7% of cereals were used by industry. For some years industrial processing has been rising.

The industrialisation process of cereal milling is slowly developing. A relatively high level of investment in the cereal processing sector is maintained - mainly in the milling and bakery sectors - and less intensive in secondary cereal processing (such as pasta production). Restructuring of the businesses leads towards an increase in labour productivity, which in early 2001 exceeded that of the previous year by at least 5 to 10%. Investment in the milling industry is rising, and, simultaneously, there is a drop in the investment rate in the secondary cereal processing sector, which has already modernised its production potential.

Sugar Industry
During the last 10 years production of white sugar has amounted on average to 1,8 million tonnes. Since 1994/95 the production of sugar in Poland is limited by means of a quota system. There is as many as 74 sugar plants operational. The majority operate still within State Treasury companies.

The sugar industry will need investment in respect of environmental protection and sugar distribution channels. The investment should be particularly targeted towards environmental protection and the utilisation of by-products and industrial wastes.

Potato (Starch) Industry
Poland is a major European and world producer of potatoes. The potato is grown on about 1.3 million ha. Poor soils and the abundance of labour, associated with fragmented farmland, means that potato production in Poland is much more significant than in neighbouring countries. For many small farms with poor soils and ample labour resources there is no alternative.

5.3 Problems related to the development of agriculture

Labour force
The surplus of labour committed to farm production is a major barrier to the development of the Polish agricultural sector. This phenomenon is regionally differentiated with a high regional intensity in the southern and south-eastern regions of Poland. Excessive employment slows down the rate of improvement of the agrarian structure, farming efficiency, technological progress, and this in turn leads to low income in the agricultural sector and incomplete use of the competitive potential. The gradually worsening price relations make the situation more serious.

Though the limitation of employment in agriculture is one of the basic challenges to be confronted in the immediate future, the opportunities for labour to leave agriculture are and may remain few due to the general unemployment level and low mobility of farmers and the rural population on the labour market[1]. It is obvious that the social function of the absorption of domestic labour by the agricultural sector (at the expense of economic effectiveness of the sector) should be limited in the interest of competitiveness.

Migration of the population from agriculture is considerably hampered by a worse access to education and thereby a worse level of education of farmers and the rural population. Hence, there is difficulty in competing with the urban population for attractive jobs. The growing costs of secondary and university education also play an important role (costs of commuting, board and accommodation) for the relatively impoverished rural population.

A low level of human resources (rather low education level) may be a barrier to the structural transformation process, technological progress and for the opportunities arising from participation in the EU Single Market. The search for off-farm jobs which require ap-

[1] Unemployment in Poland has exceeded the level of 3.2 million persons, i.e. about 18% of economically active population and is 2.5 times higher than in the OECD States.

propriate qualifications is hindered not only by a low level of general education but also by poor agricultural education (a too slowly changing curriculum).

Therefore, we should be prepared for the fact that a large proportion of the population employed in the agricultural sector will remain on farms until retirement age even at the expense of a lower income. Opportunities for a quick and substantial reduction of the employment level in the agricultural sector are mainly associated with the possibilities for general economic development.

Farm Structure

Small farms prevail in the agrarian structure of the sector. The land resources of the majority of farms are too small to ensure sufficient income. A small scale of production also obstructs the achievement of technological progress both for financial and technical reasons.

Another serious structural problem lies in the low level of farm specialisation which undermines farming efficiency, technological progress and the competitiveness of farmers on the market. However, we can assume, that the stabilisation of markets under the CAP on the one hand, and the access to investment support programmes on the other, are very likely to be conducive to the establishment of specialised farms.

The number of commodity (production) farms, i.e. producing for the market, is limited by the poor agrarian structure and low level of specialisation. Thus, there is a large number of subsistence holdings. This situation is neither propitious for the improvement of the conditions of production (technical and quality standards) nor for the improvement of farming efficiency.

However, it should be noted that the transformation process in agriculture is very slow. Despite a slow reduction in the number of agricultural holdings and a statistical increase in the average farm area, a growing number of very small and very large farms has been observed over the period of the few last years – evidence of the tendency of the large and more effective farms to take over land on the one hand, and of an increasing number of subsistence holdings on the other. As the agrarian transformation process occurs in two parallel planes, agricultural policy should take into account both the development of modern capital and science-intensive areas and the support of labour-consuming tasks which may be implemented even on small farms. Support to a differentiated production structure in small agricultural holdings and the creation of jobs in rural areas will contribute to an increase in their profitability. This process is contingent on the simultaneous development of market institutions, marketing and rural infrastructure.

Vertical and Horizontal Integration of the Agri-Food Sector

The dispersed structure of agricultural production justifies and implies a necessity for the development of all forms of cooperation among producers both in the form of horizontal integration (producers' groups, machinery partnerships etc.) and vertical integration (links between producers and recipients, agricultural product processing plants). The need for horizontal and vertical integration will increase sharply in view of the approaching accession to the EU Single Market and the necessity for reducing transaction costs. As Polish agriculture is facing the problem of the lack of such relations, the risks and costs of operations are increased at each level of the food production chain. Moreover, the international

competitiveness of individual agricultural holdings and companies (both in the processing and trade sectors) and of the whole sector is reduced. Despite their unquestionable advantages, the integration processes develop very slowly both due to errors and encumbrances inherited from the past and to the currently reduced financial and organizational support.

Shortage of Capital

One of the major barriers impeding the development of Polish agriculture is the shortage of capital resulting from declining trends in agriculture (declining price relations) and the high costs of credit facilities (high real interest rates). Between 1996 and 2000 only 4% of farmers invested in cow-sheds and pigsties, whereas 6% of farmers intend to invest in these production sectors by 2004[1]. The agricultural machines owned by farmers are obsolete and depreciated. The main reason for the technical stagnation of agricultural holdings is the lack of own capital and external resources.

In past years only 9 - 10% of farms demonstrated a capacity for accumulation. This is due to price relations disadvantageous to farmers (squeezing price scissors) and low levels of agricultural support[2] (measured on a PSE basis). The appreciation of the Polish currency expressed in real values has intensified the difficulties in agriculture, particularly for exports, though it helped to reduce inflation. These macroeconomic conditions have led to the reduction of farmers' income for several years past. Between 1995 and 2000 the reduction in available gross income in real terms amounted to as much as 50%[3]. In 2000 the real available gross income on individual agricultural holdings fell by 12.6% as compared with the previous year (1999).

Lack of capital accumulation has deprived many agricultural holdings of the possibility of development. Investment needs funds and farmers who have no capital of their own (low incomes) cannot apply for credit facilities as banks require collateral and guarantees which hardly can be provided by the farmers.

The reduction of nominal and real interest rates resulting from further macroeconomic stabilisation and the accession of Polish agriculture to the CAP will certainly enable the approximation of the economic conditions in which the Polish agricultural sector is operating to those of EU-15 and will reverse the unfavourable trends in the reconstruction of fixed assets.

Adjustment of Farms to EU Requirements

Agricultural production must comply with quality requirements taking into account consumer safety and the impact on the natural environment. In many aspects such requirements are now much more stringent in the EU than in Poland. In order to adjust Polish farming to these higher requirements it is necessary to modernise the production base of agricultural holdings, to provide agricultural holdings with new equipment and to ensure higher expenditure aimed at obtaining proper sanitary conditions in agricultural produc-

[1] In the group of 20 - 50 ha farms only 8% of farmers invested between 1996 and 2000, whereas in the group of 50 ha and larger farms 12.5% of farmers invested..

[2] The PSE is considerably lower in Poland than in the EU and in recent years has had downward tendency. Between 1999 and 2000 in the EU this index amounted to 39%, 34%,35%. Over the same period of time PSE in Poland was 19%, 7%, 10%, respectively

[3] During the same period of time the household income in the whole sector amounted to 21%.

tion. The majority of these investment requirements refer to animal production (compliance with sanitary requirements in milk production and the conditions in which animals are kept). Given the difficult financial situation on agricultural holdings, these measures are expensive. The needs in this respect may be illustrated by the situation on dairy farms. Currently (mid-2002) there are only approximately 12750 farms (3,19% of about 400,000 farms) delivering milk to the dairies, that comply with EU production conditions and milk quality standards (i.e. have obtained a Veterinary Inspection certificate).

Opportunities for the Development of Agriculture: production resources and condition of the natural environment

Poland has comparative advantages over the EU market in these sectors and in types of production which require relatively high expenditure of labour and land and which are difficult to mechanise. Agriculture as a whole, and several types of production in particular, meet this criterion. In some cases, such as horticulture, the abundant production resources are accompanied by a long tradition and existing infrastructure. High marginal cost effectiveness of invested resources[1] and improving access to the newest technology may appear as another important potential basis of competitiveness in the Single Market.

Because of traditional production methods and the low use of chemicals, Poland may successfully produce "high quality food" the demand for which will grow both between EU and Polish consumers. Poland provides conditions for organic farming, i.e. using methods which are environment-friendly and satisfy consumers' needs. Taking advantage of this "old-fashioned" character of Polish farming for the development of the competitiveness of Polish agricultural holdings which use organic farming methods requires, however, the improvement of farmers' knowledge and the implementation of appropriate investment and marketing activities.

Age structure

The relatively advantageous age structure of the farming population represents a chance for Polish agriculture. In Poland, about 17% of managers of agricultural holdings are under 34, whereas in the EU the figure is only 8%. Rejuvenation of the farming population is largely due to a sharp reduction in migration, limited possibilities of finding work and a faster replacement of generations encouraged by the possibility of obtaining a retirement pension in agricultural sector. In the period of adaptation to new conditions of operation following accession, young farmers are more inclined to take risks and to cope with the challenges imposed by the new circumstances.

Non-productive functions of agriculture

The social debate carried out in Poland on the development strategy for this sector points to the necessity for changing methods and priorities aimed at increasing the significance of the non-production functions of agriculture. This evolution follows the changes in the social perception of the sector, new challenges pertaining to the protection of the natural environment and the decline of local traditions. There is growing social awareness that the future development of agricultural production must be carried out in a sustainable fashion

[1] Consequence of low saturation of the sector with capital.

and, if possible, in a way ensuring the provision of additional public goods. A relatively low intensity of farming, well preserved traditional production methods and the diversity of agricultural and rural microstructures present an opportunity to develop Polish agriculture in harmony with the European model for the development of this sector identified within the framework of Agenda 2000.

Problems of rural development: rural employment

Rural unemployment and limited opportunities for finding a job in rural areas seem the most important and the most difficult problems to be overcome. Counteracting unemployment in rural areas, e.g. facilitating access to the labour market or the generation of non-agricultural jobs in rural areas, is, therefore, one of the most important challenges.

At present, the labour market does not allow one to quickly move surplus rural labour outside rural areas. This is because the unemployed rural population fails in competition with the urban unemployed in local labour markets which are concentrated in towns. Moreover, investors tend to generate new jobs in towns rather than in rural areas. Low mobility of the rural population on the Polish labour market is another problem aggravated by the lack of appropriate housing infrastructure - thus, unemployment persists not only in rural areas but also in many regions in Poland.

Level of education among the rural population

The transition to a market economy initiated in Poland in 1989 deepened the educational disproportion between rural and urban areas, and between the agricultural sector and other sectors of the economy. Education for the rural population has become less accessible, particularly at university level.

Access to professional information in rural areas is also problematic. The information gap in rural areas is bridged to some extent by extension services, and to a lesser extent by the professional press. The use of Internet in rural areas is negligible. Computerisation of agricultural holdings barely crawls on all fours.

Opportunities for Rural Development: generation of a supplementary source of income on farms and off-farm jobs

About 38% of the Polish population live and work in rural areas and 45% of this number depend on farming. Farming activities do not need to be the only source of income in rural areas as there are many opportunities to develop other activities which may become an additional source of income.

The economic uplift of rural areas may only be ensured by small businesses in which private individuals can invest their capital. A growing number of inhabitants of rural areas have responded to the market economy by getting engaged in trades, services and crafts based on the use of the resources of their own farms. However, given the limited availability of funds, off-farm economic activities in rural areas are still poorly developed.

The diversification of farm activities into non-agricultural areas (such as farm tourism , trades and handicrafts) is an important way to develop the economic activity of a significant proportion of the rural population. In this manner a number of households may obtain a supplementary source of income in the future.

Sustainable development is the long-term objective for rural areas. It is understood as involving parallel activities along several lines: multifunctionality of agriculture and rural areas, the alleviation of unemployment, the improvement of standards of living of the rural population and the economic/social functions of rural areas.

The preservation of traditional forms of spatial development and environmental values
The varied landscape of rural areas, rich in trees, baulks and other semi-natural features with a diverse variety of plants and animals, epitomises the non-production values of rural areas and agriculture. The environmental awareness of the Polish public is growing and environmental protection needs are taken into account to a wider and wider extent. The cultural and natural diversity of Polish rural areas can be considered a special asset worth preserving and maintaining.

Development of Farm Tourism
Polish rural areas present favourable conditions for the development of rural tourism. This is particularly true in the case of industrially underdeveloped regions with low employment in the non-agricultural sector, and which possess attractive natural, landscape and cultural assets. The number of agricultural holdings that offer farm tourism oriented services is continually growing. However, farms with farm tourism constitute less than 1% of all agricultural holdings in Poland.

For the majority of agricultural holdings the development of farm tourism provides the local population with additional job opportunities, makes use of existing housing resources, offers the possibility of the direct sale of "wholesome food" produced on the farm, and, at the same time, enables cultural development and the improvement of the environmental infrastructure, the protection of historic monuments, the environment and natural/landscape features. Farm tourism is a source of considerable income in the regions which are capable of taking advantage of their attractive location.

Processing Sector Problems
The improvement of the competitiveness of the Polish agricultural sector must go hand in hand with that of the food processing sector, and, therefore, it is necessary to study and identify its basic problems and to carry out measures aimed at improving its condition.

Efficiency and Productivity
Agricultural and food processing plants in the main sectors achieve poor financial results. The low return of the Polish agricultural and food processing industry, as compared with the level in EU member states, results from, *inter alia*, low productivity per worker (EUR 105 000 in 2000). The turnover per company (EUR 12.9 million) is half that in the EU and the average production per capita in 2000 amounted to EUR 985, i.e. 65% of the national average in the EU member states.

The competitiveness of the Polish agri-food industry is also reduced due to excessively high production costs. The cost index for the whole food and beverage production sector in 2001 (the relation of the expenditure incurred in order to generate revenue from overall activities to the revenue from overall activities) amounted to 98.0%.

Technical Equipment
About 33,000, mainly small, private processing plants, were established within a few years of the start of the process of transformation. These mainly produce for the local market. This resulted in the dispersion of processing potential which is neither advantageous nor optimum from the economic point of view. Such small and medium size plants have had limited opportunities for investment and, therefore, problems with modernisation and the rationalisation of their production.

The pre-existing large State owned plants have been systematically privatised during the last ten years, mainly with the participation of foreign capital. This has permitted their accelerated modernisation and restructuring. Between 1990 and 2001 the food processing sector received USD 5 billion of foreign capital, i.e. 10% of all direct investment in Poland; 65% of this amount originated from EU member states.

The modernisation process in the food processing industry differs from sector to sector. During the last five years the highest investment level was observed in the secondary processing sector, whereas investments in primary processing were negligible.

There is a need for investment, particularly in the fruit and vegetable processing sector, the conservation sector and contemporary storage management.

Since 2000 a decline has been observed in investment in the food processing sector. Therefore, in order to achieve an improvement of competitiveness in the Polish agri-food sector, it is extremely important to apply appropriate measures to support investment processes in this sector.

Raw Material Base
The effective operation of the Polish agricultural and food processing industry also depends upon an adequate source of raw materials. The processing sector mainly relies on domestic raw materials and frequently faces barriers associated with the destabilisation of sources of raw materials and the heterogeneous quality of raw materials. Fluctuations in the supply of farm produce and the lack of uniform quality produce limits the necessary installation of new technology in processing.

The Polish processing industry is still poorly integrated with agricultural production and, therefore, is more sensitive to supply fluctuations and the unstable quality of raw materials than in the EU member states. Stronger links between farmers and processing plant (vertical integration) and the establishment of producers' groups (horizontal integration) supplying the industry with uniform quality raw materials may help overcome the problems. These solutions also help to increase and stabilise a farmer's income (due to the better quality of raw materials supplied).

Safety and Quality of Products and Compliance with EU Standards
Raw material supply problems and under-investment in many Polish agricultural and food processing plants also contribute to insufficient safety and often the unsatisfactory quality of finished goods as well as to poor compliance with EU standards.

At present, few meat, milk and fish processing plants comply with EU veterinary and sanitary standards. Polish meat processing plants (slaughterhouses, carcass cutting plants, meat processing plants) must, in the first instance, conform with EU sanitary and veterinary standards. The necessary adjustments include, *inter alia*: finishing floor and wall

surfaces complete with corners to a standard which enables their washing and disinfection, elimination of points where personnel routes between different plant zones cross transport routes, separation of "clean" and "dirty" zones, separation of livestock facilities from slaughter halls and mechanical processing rooms from heat treatment areas. Compliance with EU standards also implies a better cooling of carcasses and carcass partition rooms, improvement in animal welfare, etc. Another problem faced by the Polish agricultural and food processing sector is compliance with EU standards in the area of food safety.

Apart from unsatisfactory sanitary conditions of production, the Polish agricultural and food processing sector is poorly adjusted to EU environmental protection requirements. The volume of waste (including sludge) produced by the food industry is between 3% and 90% of raw material, depending upon the sector. The largest volumes of waste are produced in the meat, potato and sugar sectors. The problem of liquid waste treatment is, in particular, faced by small and medium sized meat processing plants due to the large volumes of waste and under-investment in technology. In order to comply with EU environmental standards, these plants will have to ensure proper management of offal, the construction of liquid waste treatment or pre-treatment plants, the reduction of pollution emissions to the atmosphere, etc. It is estimated that e.g. 30% of untreated liquid waste produced by the meat processing sector is discharged into surface waters.

Given the significance of the agricultural and food processing sector to the national economy, farmers and local labour markets, it is necessary to support modernisation processes in those plants that are likely to comply with EU standards, will most likely remain on the market and will also be competitive after accession.

Management, Marketing and Distribution

The Polish agri-food sector still does not attach sufficient importance to management and marketing activities. In the opinion of many agricultural producers and businessmen marketing is expensive and its results uncertain.

During the second stage of restructuring in the agri-food sector after 1998, the marketing, distribution, supplies, financial management, development and investment functions became concentrated in the headquarters of concerns and holdings. In small and medium size businesses these processes are little developed and, therefore, their competitiveness on the domestic and foreign markets is reduced.

6. Changes in agricultural policy instruments in Poland in 2002

(a paper prepared for the OECD to be included in annual Monitoring and Evaluation)
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6.1 AMA INTERVENTION MEASURES - Purchases and sales[1]

The Annual Programme of Agricultural Market Agency Intervention Measures for 2002 envisaged intervention measures on the following markets: wheat, rye, pig half-carcasses, bee honey, rapeseed and tobacco. The plan of purchases and sales of agri-food products by AMA and its implementation is presented in Table 1.

Table 1. Intervention measures (purchases and sales) by AMA in 2002 - plan and its implementation

Product	Plan of purchases		Plan of stock sales		Purchases made		Sales of stock effected	
	Volume '000 tonnes	Price zł/t (cereals) or zł/kg (other)	Volume '000 tonnes	Price zł/t (cereals) or zł/kg (other)		Volume '000 tonnes	Price zł/t (cereals) or zł/kg (other)	Price zł/t (cereals) or zł/kg (other)
Wheat: -direct purchases	270	453,2[1)]	230	296[5)]	269,6		248	
Rye: -direct purchases	30	334,75[1)]	12	422,3[1)]	29,3		12	
Butter:	-	-	2,0	3,21[1)]				
Pig half-carcasses:	90		20	4,00[1)]	47[6)]		13,9	
- "Annual…	20	ca 6,28[1)] [4)]			20			
-Council of Ministers' Resolution	15				15			
- Amendment to "Annual …	55	ca 5,18[1)] [4]			12			
Honey	Up to1,3	Up to 9,27[1)]	1,3	Up to 9,27[1)]	1,5		1,3	

[1] Based on *Information on Agricultural Market Agency Intervention Measures in 2002*, ARR, Warsaw 12 November 2002

[1)] including VAT
[2)] at a purchase price of extra grade milk not less than 0,70 zł per litre (excluding VAT)
[3)] at a purchase price of extra grade milk not less than 0,85 zł per litre (excluding VAT)
[4)] an average price for grade E, U, R
[5)] a price that can be obtained for export and domestic market sales
[6)] situation on 02 November 2002
Source: AMA.

6.2 AMA payments[1]

6.2.1 Storage aid

Food Products
In 2002 the Agency, within the framework of integration with the EU, could apply storage aids with regard to certain products (Table 2).

Table 2 Volume covered by storage aids and amounts of aid in 2002

Product	Plan		Implementation	
	Volume '000 tonnes	Amount '000 zł	Volume '000 tonnes	Amount '000 zł
Butter	3,0	1.900	0,377	250
Pig half-carcasses	10,0	9.000	-	-
Hard ripening cheeses	4,6	2.000	3,320	1.400
Skimmed milk powder	40,0	8.200	0,25	200

Source: AMA.

Cereals
On 30 July the Council of Ministers adopted a resolution granting aids with regard to wheat and rye storage by producers of these cereals. Cereals storage aids for producers are targeted at farmers who produce cereals and store them in their own storage facilities until 31 October 2002 and who will submit a declaration on their intention to make use of aids by 30 August 2002. The aid will be 120 zł per tonne and 80 zł per tonne of wheat and of rye respectively. Producers of cereals from this year harvest who will not participate in intervention purchases will be eligible for aid. The second condition will be to produce at least 300 tonnes of cereals.

[1] Based on the *Information on Agricultural Market Agency Intervention Measures in 2002*, AMA, Warsaw 12 November 2002.

Table 3. Cereals volume covered by storage aids in 2002

Cereals	Volume, '000 tonnes		Rates of payment, zł/t
	Plan	Implementation	
Wheat for human consumption	500	356,7	120
Rye for human consumption	200	37,6	80

Source: AMA.

6.2.2 Payments to purchase prices

Cereals

In 2002 AMA continues to apply the system of payments to purchase prices of cereals within the period from July to October. As compared to the previous year, rates of payments went up (Table 3). However, the level of minimum prices applicable in the above mentioned system decreased to 440 zł/t for wheat and 325 zł/t for rye.

The possibility of wheat sales was lowered to 6 tonnes per ha, whereas the previous year limit for rye was maintained: 4 tonnes per ha of the area sown.

It was agreed that in 2002 the Agency could give guarantees up to 250 million zł with regard to repayment of preferential credits taken for cereal purchases covered by AMA payments.

Table 4. Volume and rates of payments to cereals purchase prices in 2002

Cereals	Volume, '000 tonnes			Rates of payments zł/t	
	Plan	Implementation		Plan	Implementation
Wheat for human consumption	4.000	3.726	110	120	130
Rye for human consumption	700	502	75	80	85

Source: AMA.

Tobacco

In 2002 payments to purchase prices of raw tobacco bought in from domestic growers and entrepreneurs entitled to tobacco product manufacture are continued. The rate of payment is 2,30 zł per 1 kg of raw tobacco bought in within the period from 1 September 2002 to 31 March 2003, and the total amount of tobacco contracted by entrepreneurs cannot be less than 26 070 tonnes - based on a separate Council of Ministers' resolution.

Table 5. Volume of tobacco purchases and payment rates to purchase prices in 2002

Product	Volume, '000 tonnes		Payment* zł/kg
	Plan	Implementation	
Tobacco	ca 26	2,9[1)]	2,30

* to 1 kg of raw tobacco
[1)] Situation on 15 Oct. 2002
Source: AMA.

Milk
As from 1 July Agency for Restructuring and Modernisation of Agriculture has been granting payments to wholesale suppliers of "Extra grade" milk equal to 7 grosz per litre of milk sold to milk collection centres. This is the way how the Law of 6 September 2001 on the market in milk and milk products is implemented. According to the Law, by 30 November of a given year the Council of Minister determines rates of payments for the following year by virtue of a regulation. Payments to "Extra" grade milk sold by wholesale suppliers will be applied by the Agency until the date of Poland's accession to the EU.

6.2.3 Compensatory payments for entrepreneurs involved in buying in cereals covered by AMA payments

Entrepreneurs involved in buying in, at their own cost and risk, cereals covered by AMA payments will be eligible for compensatory payments in case market prices fall to the level making it impossible to recover the financial resources employed.
A compensatory payment is a difference between the intervention price increased by 6 zł per tonne of cereals, calculated monthly from November 2000 to the end of July 2003, and the actual sales price of wheat or rye.

6.2.4 Payments to milk powder production

On 16 July 2002 by way of the Council of Ministers' Resolution, AMA was entrusted the task of granting payments to domestic milk powder manufacturers. Payments may be granted to 40 000 tonnes of milk powder, totalling 36,6 million zł. By 8 November 2002 payments equal to 32,8 million zł were made with regard to 33 100 tonnes of milk.

6.2.5 Payments in the potato starch sector

Based on the Law of 11 January 2001 on the organisation of the market in potato starch, in 2002 AMA grants the following payments:
- compensatory payments for starch manufacturers;
- compensatory payments for starch potato growers.

In 2002, 32,7 million zł was envisaged for potato starch manufacturers and starch potato growers. Payments are effected by local AMA offices.
Starch potato producers were ensured steady raw material sales at a minimum price.

6.3 Disaster and preferential credits

6.3.1 Financial support related to natural disasters

Taking into account frequent occurrence of natural disasters and a difficult situation of affected farms and special sub-sectors of agricultural production, the Ministry of Agriculture made a decision to introduce amendments to the rules concerning the provision of "disaster" credits by the Agency of Restructuring and Modernisation of Agriculture (ARMA). The changes include the extension by one year, i.e. from 24 months to 36 months and from 30 months to 42 months of the repayment of disaster credits, contracted by farmers to resume agricultural production and alleviate the consequences of natural disasters that took place in 1999 and 2000.

6.3.2 Preferential credits

Throughout the period from 1 January to 30 September 2002 the Agricultural Advisory Services Centres and the Regional Advisory Centres for Agriculture and Rural Development gave a favourable opinion on 21215 business plans related to investment in agriculture and its environment covered by ARMA preferential credits (payments to interest). Applicants for preferential credits intend to carry out investment projects totalling 4 055 117 200 zł, applying for credits equal to 2759314100 zł. Credit funds equal to 129 500 zł per project will permit to finance on average 68% of the planned investment costs.

The interest rate on preferential credits covered by ARMA payment is variable depending on the rediscount rate on bills of exchange accepted from banks by the National Bank of Poland (NBP) for rediscount. The current interest for borrowers on credits for projects in agriculture, food-processing industry and the creation of new jobs is 4,844% annually (by the end of 2001 - 8,75%), for the implementation of projects under sectoral and regional programmes - 2,422% (in 2001 - 4,375%), for land purchase or establishment or purchase of an agricultural holding from the "young farmer" credit line - 1,94% (in 2001 - 3,5%).

Investment credits. In 2002, in addition to the continuation of previous years' aids, ARMA provides support in the form of payments to the interest rate on bank credits for new investment projects in agriculture, agri-food processing, services for agriculture and for the creation of new jobs for the rural population under 13 credit lines.

In 2002 the rules for granting preferential investment credit for agricultural producer groups set up based on the Law of 15 September 2000 on agricultural producer groups and associations thereof were introduced. Currently, the interest rate for borrowers is 2,75% annually.

Payments to new investment credits planned for 2002 should enable banks cooperating with ARMA to grant credits worth approximately 3 billion zł.

Taking into account the present situation in the poultry sector and requests of the poultry industry, decisions were made:
To suspend in 2002 payments to interest rate on credits for projects implemented within the framework of a new application for credit, such as construction, completion of construction, extension, adaptation and modernisation of poultry houses if such investment contributes to the creation of a new or increase of the existing area used for production of live poultry and eggs;

To extend by one year the maximum period of payments to interest on credits to implement projects under the sectoral programme of restructuring and development of the poultry sector and poultry processing (Symbol BR/07) and on credit lines to implement projects in agriculture and special sub-sectors of agricultural production aimed at utilising the existing production facilities of agricultural holdings and special sub-sectors of agricultural production, by starting or increasing production on such farms and in special sub-sectors (Symbol RP);

To introduce the possibility of extending by 1 year the repayment of credits provided to implement poultry projects within the existing lines (in the framework of crediting periods specified in contracts concluded between the Agency and banks). In addition, ARMA President was obliged, where justified, to take measures aimed at helping borrowers in extension in 2002 of repayment of credits contracted for poultry related projects.

Working capital credits for purchases of agricultural inputs. The credit amount cannot be more than the equivalent of 10 dt of rye per ha of utilised agricultural area according to the prices adopted for the purposes of agricultural tax calculation in the year when the credit contract was signed. In 2002 the amount is equal to 371,9 zł. The crediting period is 12 months. The interest rate paid by the borrower is 0,4% of the rediscount rate of bills accepted from banks for rediscount by NBP and not less than 4%. For the present rediscount rate on bills of exchange, it is 4%.

In 2002 payments to interest on credits for purchase and storage of agricultural produce is granted to:

Purchase from domestic producers and storage of domestically produced seeds of cereals, rapeseed, maize, flax, papilionaceous crops: fine-grained and coarse-grained, winter colza, mustard, grasses, sugar beets and fodder beets, seed potatoes and vegetable seeds;

Purchase from domestic producers and storage of cereals, rapeseed, sugar beets and sugar, potatoes, natural and processed potato starch, dried potatoes, potato starch and potato glues, dextrin glues, herbs and dried herbs, fruit and vegetables, semi-processed and processed fruit and vegetable products, straw and bast fibres and seeds of flax and root chicory, dried chicory, mustard, excluding alcohol products and raw materials for the manufacture of alcohol products,

Storage or purchase and storage of seasonal surpluses of milk powder, butter, hard cheeses, pig half-carcasses and honey produced domestically.

Interest paid by borrowers is 0,7 of the rediscount rate on bills of exchange and not less than 7%, i.e. 7 % for the present rediscount rate of bills.

Given a very difficult financial situation of many establishments involved in buying in agricultural produce, measures were taken to:

Create a possibility to grant payments to interest on credits to finance purchase and storage of agricultural produce, where the credit was not repaid by 30 September 2001, proportionately to the part of the credit repaid by that date;
To extend by two months (from 31 May to 31 July 2002) the period throughout which payments are applicable to interest on credits contracted for purchases of cereals from 2001 harvest by domestic establishments involved in storage activities.

Credits for purchase and storage of sea fish stock. Interest on credit paid by borrowers is 0,7 of the rediscount rate of bills accepted from banks for rediscount by NBP and not less than 7%. For the current rediscount rate on bills of exchange it is 7%. In the budget bill for 2002, 2,9 million zł for payments to interest on credits for purchase and storage of sea fish stocks is reserved. It is envisaged that in 2002, 1,5 million zł will be used for payments to interest to the afore mentioned credits.

6.4 Quantity restrictions on production

6.4.1 Sugar quota

For the marketing year 2002/03 A quota is 1 540 000 tonnes (for the period from 1 January 2003 to 30 June 2003)
For the marketing year 2002/03 the intervention price of white sugar was fixed at 1,80 zł/kg (excluding VAT).
Sugar beet growers were ensured the right to the cultivation and supplies of sugar beets under the sugar production quota and steady sales of this produce at minimum prices, determined on the basis of the base price, which guarantee the profitability of sugar beet growing. Sugar producers were guaranteed sugar export subsidies and sugar processors subsidies to sugar processing for non-human consumption purposes.

6.4.2 Potato starch quota

As from 2002 the domestic quota of potato starch production, fixed by the Council of Ministers, is as follows:
From 1 July 2002 to 30 June 2003 - 200 000 tonnes;
From 1 July 2003 to 30 June 2004 - 220 000 tonnes;
From 1 July 2004 to 30 June 2005 - 242 000 tonnes.

6.4.3 Tobacco quota[1]

According to the Law of 29 November 2000, AMA President is required to allocate the limit of raw tobacco production under the national quota. 30 June 2002 was the deadline for submission of applications by raw tobacco producers for the raw tobacco production

[1] Based on on the *Information on Agricultural Market Agency Intervention Measures in 2002*, AMA, Warsaw 12 November 2002.

limit and for applications for the limit reserve for 2003-2005. 16 300 applications were submitted.

6.4.4 Implementation of individual milk quotas[1]

Due to forthcoming accession to the EU, Poland started to implement the milk quota system. The national milk quota will be determined by the Council of Ministers based on the quantity of milk produced and marketed in Poland in the reference year, i.e. from 1st April to 31 March 2003, and on the envisaged increase in the demand for milk and milk products. This will be a period of crucial importance for milk suppliers as the size of the finally granted quota will depend on the quantity of milk produced and sold in this period.

To obtain an individual quota, a (wholesale and direct) supplier must lodge a relevant application in the AMA local office appropriate for the farm location. The deadline for application submission is 31 October 2003. After examining applications, directors of AMA local office will issue decisions as to the granting of individual milk quotas to suppliers. The deadline for issuing decisions is 31 January 2004.

6.5 Trade policy instruments

6.5.1 Customs tariff rates[2]

Based on the Council of Ministers' Regulation of 27 August customs tariffs for tobacco were raised from 30%, minimum 1,13 EUR/kg, to 105%, minimum 2,17 EUR/kg.

6.5.2 Additional customs duties[3]

The Regulation of Minister of Economy of 2 April 2002 laying down the obligation to collect additional customs duties on certain imported agricultural products (Dz. U. [OJ] No 38, item 355), specifies products to which additional customs duties will be applicable based on the price clause. They are:

- edible meat and poultry offal;
- eggs of birds, not in shell, edible;
- tomatoes, fresh or chilled;
- cucumbers, fresh or chilled;
- flour from common wheat, spelt wheat, rye-wheat and rye flour;
- tomatoes processed or preserved otherwise than in vinegar;
- sugar syrups.

The list was expanded by way of the Regulation of the Minister of the Economy of 20 June 2002, amending the Regulation laying the obligation to collect additional customs duties on certain imported agricultural products (Dz.U. No 96, item 859) by:

[1] Based on *Biuletyn informacyjny ARR*, Nr 1-2/2002 [AMA Bulletin].
[2] Based on *Biuletyn informacyjny* 10/02, MRiRW [MARD Bulletin].
[3] Based on *Biuletyn informacyjny* 10/02, MRiRW [MARD Bulletin].

Pork, fresh, chilled or frozen;
Cut flowers and flower buds (roses, chrysanthemums);
Wheat and rye and wheat mixtures;
and the Regulation of the Minister of the Economy of 19 July 2002 (Dz.U.No 122, item 1045) by:
Hen chicks;
Wheat bran.

6.5.3 Preferential import quotas[1]

In 2002, tariff ceilings for goods whose domestic production is sufficient were closed (e.g. butter, tomato concentrate).
At the same time ceilings were established for imports:

- From Estonia: a) 25 tonnes of pork at a 0% tariff rate, b) on 22 January 2002 the tariff ceiling for imports of 500 tonnes of butter at a 0% tariff rate was closed;
- From Slovakia: a) 40 000 t of wheat, other, at a tariff rate reduced to 15%, b) 40000 t of maize, other, at a tariff rate reduced to 0% c) on 11 February 2002 the tariff ceiling for imports of 1500 t of tomato concentrate at 11% tariff rate was closed;
- from Hungary: a) 2000 t of pork at a tariff rate reduced to 25%, b) 5000 t of poultry meat at a tariff rate reduced to 28% including four tariff headings (poultry livers), c) 200000 t of wheat at a tariff rate reduced to 15%, d) 10 000 t of tomato concentrate a tariff rate reduced to 11%.

Based on the Decision of the Council of Ministers of 11 June 2002 and after consulting the European Commission (17 June 2002) the opening of a 0% tariff rate quota (780 000 tonnes) for wheat imports from the EU in the marketing year 2002/03 was delayed by one quarter.

6.5.4 Bilateral trade agreements[2]

By the end of October 2002, following two years of negotiations, Poland signed with the European Commission the agreement on mutual liberalisation of trade in processed agricultural products. The European Commission granted to Poland a zero rate tariff quota for sugar confectionery equal to 15 000 tonnes, whereas the existing quota is 7200 tonnes at a tariff rate from 1,7 to 24,8%. It also granted to Poland a zero rate tariff quota for 20 000 tonnes of chocolate confectionery (the existing quota is over 5000 tonnes at a rate from 2% to 8,2%). Moreover, Poland was granted a zero rate tariff quota for other sugar confectionery equal to 15,000 tonnes (the hitherto quota was 2300 tonnes at a rate from 3 to 9,8%).

As for Poland, it granted quotas for the same products imported from the EU at a tariff rate reduced by 30%, equal to 9000 for sugar confectionery, 20 000 tonnes for chocolate confectionery and 10 000 tonnes for baker's ware. Currently the tariff rate for imports from

[1] Based on: *Information on Implementation of the Polish Government Agricultural Policy*, 24 May 2002, MARD except for information on the quota of wheat imports from the EU.
[2] PAP.

the EU is from 4% to 25% for sugar confectionery, from 15% to 37% for chocolate confectionery, and from 20% to 33% for baker's ware.

The EU granted to Poland unilateral preferences (without Poland's reciprocity) for imports from Poland of such products as: coffee essences, extracts and concentrates (cappuccino), tea and chicory. However, Poland will reduce tariff rates for these products by 25%. Unilateral preferences covered also pasta (an increased quota).

Full liberalisation of EU imports (abolition of tariffs without quota limits) will only pertain to non-sensitive products, which in majority are not produced in Poland and which are raw materials for confectionery industry; coral, natural sponges, Paraguay tea, sea weeds, bamboo, cane, cocoa paste and powder, soy sauce, nut butter.

6.5.5 Export and import licences[1]

In the framework of adjustments to the Common Agricultural Policy (CAP), on 21 April 2001 responsibilities for issuing import licenses for agri-food products under tariff and non-tariff regulations were transferred by law to AMA President.

In 2002 automatic registration of trade, related to the requirement of import licences, covered 113 commodity groups (Regulation of the Minister of the Economy). Appendix I contains the list thereof. The list of commodities, for the importation of which import licences are required in the framework of automatic trade registration, was significantly expanded as compared to 2001 (by 609 PCN codes not listed in previous regulations) including, among others, the following:

- pigs and live poultry;
- certain processed meat products;
- milk, cream and whey;
- natural honey;
- fruit and vegetables (onion, carrot, cucumbers, apples, apricots, bananas and other);
- hop cones;
- animal fats and vegetable oils;
- molasses and sugar confectionery,
- processed cereals products;
- baker's ware;
- fruit and vegetable juices;
- tarch production residues;
- cake;
- cigars and processed tobacco;
- flax.

6.5.6 Export subsidies

The Annual Programme of Agricultural Market Agency Intervention Measures for 2002 envisages subsidies to the export of milk powder, pork, beef, potato starch, rapeseed (Table 6).

[1] *Information on Implementation of the Polish Government Agricultural Policy*, 24 May 2002, MARD.

Subsidised exports of pig half-carcasses took place based on tenders. Within the framework of the first tender the subsidy of 2,20-3,00 zł/kg of pig half-carcasses was applied, and within the framework of the second tender - the subsidy of 2,45 - 3,00 zł/kg of pig half-carcasses.

Also subsidised export of boned beef was based on tenders. The subsidy of 2,20 - 4,00 zł/kg of meat was paid.

For rapeseed it has been decided that:

- export subsidies will be paid to domestic operators selected by way of tender who will export double low rapeseed or turnip-like rape produced in Poland, purchased from domestic producers;
- export subsidies will be paid to rapeseed produced in 2002, bought in by 30 September 2002 at a net price not lower than 890 zł/kg and exported by 5 December 2002.

Table 6. Volume of subsidised exports and subsidy amounts in 2002.

Product	Volume, '000 tonnes		Subsidy amount, '000 zł	
	Plan	Implementation	Plan	Implementation
Milk powder	37,00[1)]	36,00[5)]	23.632	
Pig half-carcasses	7,63	3,13[6)]	21.247	
Boned beef	0,94	0,74[6)]	3.059	
Potato starch[4)]	34,10[2)]	22,48[7)]	11.678	[5)]
Rapeseed	341,50[3)]	0	54.438	0

[1)] Under WTO commitments, in 2002 Poland has a possibility of exporting 37 000 tonnes of milk worth USD 5,6 million, which is equivalent to PLN 23 630 000 according to the exchange rate provided for in the budgetary law (4,22 zł/USD)
[2)] Pursuant to WTO provisions, in 2002 Poland may subsidise the export of 34 100 tonnes of starch.
[3)] Pursuant to WTO provisions, in 2002 Poland may subsidise export of 341 500 tonnes of rape for 12,9 million USD, which, according the exchange rate of 4,22 zł/USD, is equivalent to PLN 54 438 000.
[4)] Starch produced during 2001/02 and 2002/03 campaign
[5)] Situation on 10 Nov. 2002
[6)] Situation on 02 Nov.2002
[7)] Situation on 03 Nov.2002
Source: AMA

6.5.7 Import and export bans[1]

The Council of Ministers' Regulation of 28 December 2001 banning exports of live geese and goose hatching eggs.

On 28 March 2002 the Chief Veterinary Officer suspended export approvals for meat plants in Białystok and Koło after information from the British veterinary services that two spinal cords were detected in two beef transports of 506 quarters. The establishment in Koło confirmed the fact of leaving part of spinal cords. The establishments will regain export approvals provided they have procedures in place preventing such event.

On 24 April 2002, due to the occurrence of the classical swine fever in Bulgaria, the Chief Veterinary Officer issued a ban on imports of pigs and wild boars, pig and wild boar

[1] General Veterinary Inspectorate.

raw meat, intestines and offals, processed pig and wild boar meat products not subjected to heat treatment at a temperature above 72°C, pig and wild boar hides, all inedible raw materials not subjected to heat treatment at a temperature above 72°C.

On 24 April 2002, due to the occurrence of the classical swine fever in Romania, the Chief Veterinary Officer issued a ban on imports of pigs and wild boars, pig and wild boar raw meat, intestines and offals, processed pig and wild boar meat products not subjected to heat treatment at a temperature above 72°C, pig and wild boar hides, all inedible raw materials not subjected to heat treatment at a temperature above 72°C.

On 7 May 2002, due to the occurrence of the classical swine fever in France (Moselle department), the Chief Veterinary Officer issued a ban on imports of pigs and wild boars, pig and wild boar raw meat, intestines and offals, processed pig and wild boar meat products not subjected to heat treatment at a temperature above 72°C, pig and wild boar hides, all inedible raw materials not subjected to heat treatment at a temperature above 72°C.

On 14 May 2002 the Chief Veterinary Officer ordered the lifting of the ban on pig intestine imports from Germany (Brandenburg).

On 28 May 2002 the Council of Ministers expanded the list of countries from which import or transit of certain goods due to the risk of BSE transmission was banned. The ban concerns, *inter alia*, live bovine animals, bovine meat chilled and frozen, sausages and similar meat products and different types of edible offal and other processed bovine products used for pharmaceutical products. The ban pertains also to importation of human and animal blood prepared for therapeutic, prophylactic or diagnostic purposes. The following countries were added to the list: Austria, the Czech Republic, Finland, Greece, Japan, Slovakia, Slovenia and Italy. At the same time a ban on imports was lifted concerning imports of breeding heifers and bulls for insemination stations in Poland.

On 19 July 2002, due to the occurrence of the classical swine fever in Moldova, the Chief Veterinary Officer issued a ban on imports of pigs and wild boars, pig and wild boar raw meat, intestines and offals, processed pig and wild boar meat products not subjected to heat treatment at a temperature above 72°C, pig and wild boar hides, all inedible raw materials not subjected to heat treatment at a temperature above 72°C.

On 12 August 2002, due to the occurrence of the swine vesicular disease in Italy, the Chief Veterinary Officer issued a ban on imports and transit through the territory of the Republic of Poland of pigs and wild boars, pig and wild boar raw meat, intestines and offals, processed pig and wild boar meat products not subjected to heat treatment at a temperature above 72°C, pig and wild boar hides, all inedible raw materials not subjected to heat treatment at a temperature above 72°C, products obtained from these species intended for animal feeding and/or industrial and/or agricultural use not subjected to heat treatment at a temperature above 72°C, products obtained from these species for pharmaceutical or surgical use not subjected to heat treatment at a temperature above 72°C.

6.6 Other support instruments

6.6.1 Biological progress[1]

In 2002, funds allocated in the national budget for support of biological progress decreased in nominal terms as compared to 2001 from 217,0 million zł to 174,5 million zł, of which for plant production - from 88,7 million zł to 74,1 million zł, and for animal production from 128,3 million zł to 100,4 million zł.
Plant production. In 2002 funds for biological progress in plant production are intended for:

- plant breeding - 30239000 zł;
- subsidy to reduce the price of certified seeds sale - 23420000 zł;
- variety registration and inclusion into the plant breeders' rights book, post-registry variety experiments - 18130000 zł;
- gene poole protection - 1974000 zł;
- co-financing of seed orchards, elite plantations and varieties free and being freed of viruses - 333800 zł.

Animal production. In 2002 funds for biological progress in animal production equal to 100,39 million zł are intended for:

- breeders of particular farm animal species - 52617000 zł;
- establishments performing tasks for breeders as commissioned by the Minister of Agriculture - 10460000 zł;
- for performance and breeding value assessment, keeping breeding documentation and protection of genetic resources - 24124000 zł
- for implementation of sire evaluation and selection - 10220000 zł;
- for processing and publication of data concerning performance value assessment - 2970000 zł;

6.6.2 Other budgetary support

National budget. In addition, it is envisaged that the following tasks will be financed:

- payments to lime fertiliser - 51193000 zł;
- arable crops protection - 9561000 zł;
- organic farming - 4706000 zł;
- quality control of soils, plants, agricultural and food products - 2750000 zł.

Voivod budgets. It is planned within the budget law for 2002 that the following voivod tasks will be financed:

- European Integration - 21 298 000 zł;
- state Fishery Guards - 12 884 000 zł;
- dissemination of agricultural advisory services - 2 042 000 zł;
- control of animal infectious diseases - 12 332 000 zł;

[1] Based on *Biuletyn informacyjny* 5-7/02, MRiRW [MARD Bulletin].

- construction and maintenance of hydro melioration facilities - 12 911 000 zł;
- water companies - 3 033 000 zł;
- land surveying and management works for agricultural purposes - 25 864 000 zł;

Earmarked reserves. Within earmarked reserves funds are appropriated for:
- control of animal infectious diseases (including activities aimed at protection against the risk of bovine spongi-form encephalopathy (BSE) occurrence) - 76600000 zł;
- introduction of the voucher system for agricultural fuel - 40000000 zł;
  co-financing the Rural Development Programme - 50000000 zł, including 6000000 zł to support Agricultural Chambers in the first quarter of 2002;
- cholarships and material aid for the rural youth - 73384000 zł;
- construction and maintenance of primary land reclamation facilities - 30000000 zł;
- co-financing the SAPARD programme and foreign exchange rate differences - 160000000 zł.

VAT. Resulting from the decisions taken by the Polish Government on the motion of the Ministry of Agriculture and Rural Development:
- the period of 0% VAT rate application was extended until 31 December 2002 for, *inter alia*, agricultural machines, equipment and tools, agricultural tractors, agricultural inputs (Regulation of the Minister of Finance of 22 March 2002 amending the Regulation on the implementation of certain provisions of the law on VAT on goods and services and excise tax);
- Examination of slaughter animal and meat by veterinarians was exempted from VAT (Regulation of the Minister of Finance of 22 March 2002 on the implementation of certain provisions of the law on VAT on goods and services and excise tax).
- On 20 December 2001 the Government of the Republic of Poland signed a credit agreement with the European Bank for Reconstruction and Development. This loan alongside with the national budget earmarked reserve of the total amount of 285 million EUR will be allocated, under EBI-bis Project, for alleviating flood consequences and modernisation of flood control facilities in the Vistula catchments. The Programme that covers nine voivodships will be implemented in 2002-2004. Out of the total loan amount the Ministry of Agriculture received 154 million EUR. About 500 tasks relating to the revamp and modernisation of flood control facilities will be financed from these funds. The Programme implementation will significantly improve the safety of flood control facilities in Poland and create jobs for thousands of people.

6.7 Rural development

6.7.1 Rural Development Programme

In October 2002 a Component A of the Microloan was launched as a part of the Rural Development Programme. Under this Programme inhabitants of rural areas and small towns in the following voivodships: Zachodniopomorskie, Warmińsko-Mazurskie Kjawsko-

Pmorskie, Podkarpackie and Małopolskie can receive microlans amounting to the equivalent of 5 000 USD. In addition, people starting business can receive a single subsidy of 3 600 zł for the purchase of fixed assets. The microlan repayment period will be 3 years and the interest rate 12%. Microloans will be allocated for the start or continuation of off-farming operations.

6.7.2 SAPARD[1]

Up till now Poland signed two Annual Financing Agreements with the European Union for 346627000 EUR, including 175057000 EUR under the Agreement of 06 June 2002 for 2001. The Agreement for 2002 is being negotiated.

According to ARMA data as at 28 Oct. 2002, 2411 financial aid applications were submitted. The majority (2032) related to the support for development and improvement of rural infrastructure. The applications registered so far (2036) total 1 145 million zł. An increasing number of applications for on-farm investment support has been observed.
A measure related to the diversification of economic activities in rural areas, including creation of new jobs, is under preparation.

6.7.3 ARMA activities

ARMA supports multi-functional rural development by creating jobs in off-farming businesses, services and trade. The Agency provides no interest bearing loans for small business. The loan amount cannot exceed 70% of the project cost, no more than 200 000 zł per establishment, and for each of 20 000 zł loan provided one job must be created. The loan is repaid in quarterly instalments. The repayment period cannot exceed 4 years and the grace period - 12 months. There is a possibility that 50% of the loan can be used to finance working assets.

In addition, more favourable conditions were introduced for financing with a preferential credit projects for establishments that create new jobs for the rural population in rural and rural-urban gminas and towns up to 20 000 inhabitants at risk of structural unemployment. In these areas credit may be provided for trade in fuel, greases and tobacco products. An amount per one new job was increased to 35000 zł. The grace period for the principal sum repayment was extended to 2 years, and the credit may be provided for 8 years (for trade in fuels or greases for 4 years).

The Agency is involved in implementing and monitoring Component C - "Rural Infrastructure" of the Rural Development Programme financed from the World Bank loan. Aid is targeted at infrastructure projects relating to the construction and modernisation of *gmina* [commune] and *poviat* [county] roads, water pipeline systems, sewerage and the systems of solid waste collection and utilisation. Rural *gminas*, urban-rural *gminas*, gmina associations, towns up to 15 000 inhabitants can apply for aid with regard to *poviat* roads only.

The Agency started to implement the Law of 8 June 2001 on setting aside agricultural land for afforestation. Afforestation limits were fixed; due to the budgetary

[1] Based on the: *Information on agricultural situation,* MARD, Warszawa, 31 October 2002.

constraints in 2002, 5 million zł was ensured for payment of equivalents for setting aside agricultural land for afforestation.

6.7.4 STAPA activities[1]

State Treasury Agricultural Property Agency (STAPA) has been continuing its activities aimed at managing State Treasury agricultural property, improvement of the agrarian structure of private farms and upgrading the situation on the area where previously former state-owned farms (PGR) operated.

The programme supporting employment of former state farms employees is under implementation. It consists of reimbursing employers with a registered off-farm business as well as self-governments and education institutions that are employers, costs up to 50% of the lowest wage for each employee.

In 2002 STAPA commenced to finance early retirement benefits for former state farms employees. It is planned to allocate 207,3 million zł for this purpose in 2002.

The Programme of Improving Educational Opportunities for Children from former state farm Settlements was expanded. Children from families whose income is no more than 0,7 of the lowest wage can obtain scholarships. The maximum amount of such benefit cannot exceed 250 zł monthly. Scholarship beneficiaries were selected from schools located in areas affected by high unemployment in former PGRs all across the country. The cost of financing all scholarships in 2002 will be ca 63,8 million zł.

6.8 Legislative activities, including adjustments with the view to the EU integration

6.8.1 Laws[2]

So far the Polish Parliament of the present term of office has adopted nine laws on agriculture (inter alia on the organisation of the market in fruit and vegetables, sprits drinks, the Law amending the veterinary law, the Law on animal protection, the Law on the market in milk and milk products, the Law establishing AMA and ARMA). The Parliament is currently debating four draft laws. Legislative activities are carried out in MARD to develop 14 draft Laws. At the same time implementing regulations to the published laws are issued and those to the draft laws are under preparation. These are chiefly laws and regulations brining Polish legislation into line with that of the EU. Main laws relate to veterinary issues (including regulations on Veterinary Inspection, organisation of breeding and reproduction of farm animals, control of animal infectious diseases, animal feedingstuffs), operation of particular agricultural markets, changes in the functioning of institutions which are to perform the role of paying agencies after accession to the EU as well as plant protection and seeds.

A draft Law on the agrarian structure was developed. It is aimed at improving private farms' agrarian structure by regulating land sale and lease on more favourable financing

[1] Based on: *Biuletyn informacyjny* 5-7/02, MRiRW.[MARD Bulletin].
[2] Based on: *Biuletyn informacyjny* 10/02, MRiRW. .[MARD Bulletin].

conditions for farmers who enlarge their farms up to a certain size. It provides for detailed conditions for land acquisition (similar to those existing in many EU member states) such as agricultural qualifications, running a farm in person etc. It also envisages a 5% reduction in the first instalment of payment for the purchased land and the spread of the remaining instalment repayment within 25 years. It is assumed that it will contribute to a significant boost in demand for agricultural property and to fast land management. The draft Law on the agrarian structure was adopted by the Council of Ministers and will be submitted to the Parliament.

Amendment of the Law on the sugar market. On 24 August 2002 the Law of 18 July amending the sugar market regulation entered into force. The amendment provides for the establishment of a strong sugar market company controlled by employees and sugar beet growers, Polski Cukier S.A. In addition, the following drafts were elaborated:

- The rules for applying subsidies to exports of white sugar B and isoglucose B;
- The rules for granting subsidies to sugar processing for non-human consumption purposes,

The rules for intervention purchases of white sugar.

The Law of 14 December 2001 amending the law on veterinary surgeon profession and veterinary chambers, the law on control animal infectious diseases, examination of slaughter animals and meat and on the Veterinary Inspection and the law on the organisation of breeding and reproduction of farm animals.

The Law of 17 December amending the law on the market in milk and milk products. In connection with the entry into force of this Law on 31 December 2001, the date from which payments to "Extra" grade milk will be made was deferred from 1 January 2002 to 1 October 2002.

The Law of 25 July 2001 on the manufacture and bottling of winery products and trade in these products. On 10 November 2002 this Law will enter into force. It provides for the breakdown of winery products into fermented winery beverages, flavoured winery beverages and grape wine products. It specifies the rules of their manufacture and economic activities with regard to their manufacture and bottling. The Law requires that the Minister of Agriculture and Rural Development should define, by way of regulations the further breakdown, requirements and rules of winery products manufacture.

The Law of 13 September 2002 on spirits drinks. On 7 April 2003 this Law will enter into force. It implements EU legislation concerning spirits drinks. It requires that the Minister competent for agricultural markets should specify, by way of an implementing regulation, the method of agricultural ethyl alcohol analysis and the sampling method for the purposes of official control with the view to the marketable quality.

On 25 August 2002 the *amended Law establishing AMA entered into force*. It enables the government to adopt the food aid programme. Such programme envisages that the Agency will transfer gratuitously or partly against payment agricultural and food products to fulfil, in particular, the needs of social welfare institutions, hospitals, schools and education facilities, military units, prisons and non-governmental organisations performing tasks related to social welfare and providing humanitarian aid.

The draft law on the organisation of liquid bio-fuels market and eco-components for the manufacture thereof was elaborated and submitted to the Parliament on 24 July 2002.

The anticipated development of liquid bio-fuels market will require, as an ultimate goal, the annual eco-component production of 800 000 tonnes of rapeseed oil methyl ester and 260 000 tonnes of bio-ethanol. Introduction of the arrangements proposed in the Law and the output at the planned level will contribute to the creation of new jobs (ca. 100 000), reduction of unemployment in rural areas, stimulation and development of entrepreneurship, management of fallow land and in consequence to an increase in agricultural production and farmers' incomes. Moreover, it will have impact on the improvement of environmental protection and Poland's energy security.

6.8.2 Other[1]

At present the draft operational programme *Restructuring and Modernisation of the Food Sector and Rural Development* is under elaboration by MARD. Following Poland's accession to the EU, it will be financed from the Guidance Section of the European Agricultural Guidance and Guarantee Fund (EAGGF). Independently of the aforementioned programme which will be part of the National Development Plan, the *Rural Development Plan* will be developed. It will concern the CAP accompanying measures: agri-environmental measures, early retirement and aid for less favoured areas (LFA) and will be financed by the EAGGF Guarantee Section.

Appendix 4 List of products subject to automatic registration

In 2002 the following commodity groups are subject to automatic registration upon importation:

- 0102 Live bovine animals
- 0103 Live swine
- 0105 Live poultry, that is, fowls of the *species Gallus domesticus*, ducks, geese, turkeys and *guinea* fowls
- 0201 Meat of bovine animals, fresh or chilled
- 0202 Meat of bovine animals, frozen
- 0203 Meat of domestic swine fresh or frozen
- 0206 Edible offal of bovine animals, swine, sheep, goats, horses, asses, mules or hinnies, fresh, chilled or frozen
- 0207 Meat and edible offal of poultry of heading no 0106, fresh, chilled or frozen
- 0208 Other meat and edible meat offal, fresh, chilled or frozen
- 0209 00 Pig fat, free of lean meat, and poultry fat, not rendered or otherwise extracted, fresh, chilled, frozen, salted, in brine, dried or smoked
- 0210 Meat and edible meat offal, salted, in brine, dried or smoked; edible flours and meals of meat or meat offal
- 0401 Milk and cream, not concentrated nor containing added sugar or other sweetening matter

[1] Based on: *Biuletyn informacyjny* 10/02, MRiRW. [MARD Bulletin]

- 0402 Milk and cream concentrated or containing added sugar or other sweetening matter
- 0403 Buttermilk, curdled milk and cream, yoghurt, keepher and other fermented or acidified milk and cream, whether or not concentrated or containing added sugar or other sweetening matter or flavoured or containing added fruit or cocoa
- 0404 Whey, whether or not concentrated or containing added sugar or other sweetening matter; products consisting of natural milk constituents, whether or not containing added sugar or other sweetening matter, not elsewhere specified or included
- 0405 Butter and other fats and oils derived from milk; dairy spreads
- 0406 Cheese and cottage cheese
- 0407 00 Eggs of poultry, in shell
- 0408 Birds' eggs, processed [not in shell and egg yolks, fresh, dried, cooked, by steaming or by boiling in water, moulded, frozen or otherwise preserved, whether or not containing added sugar or other sweetening matter]
- 0409 00 00 0 Natural honey
- 0504 00 00 Intestines, bladders or stomachs of animals (excluding fish), whole and in pieces, frozen, salted in brine, dried or smoked;
- 0506 Bones and horn-cores unworked, defatted, simply prepared (but not cut to shape), treated with acid or degelatinised; powder and waste of these products
- 0511 Animal products not elsewhere specified or included; dead animals of Chapter 1 or 3, unfit for human consumption
- 0602 Other live plants (including their roots), cuttings and slips; mushroom spawn
- 0603 Cut flowers and flower buds of a kind suitable for bouquets or for ornamental purposes, fresh, dried, dyed, bleached, impregnated or otherwise prepared
- 0604 Foliage, branches and other parts of plants, without flowers or flower buds, and grasses, mosses and lichens, being goods of a kind suitable for bouquets or for ornamental purposes, fresh, dried, dyed, bleached, impregnated or otherwise prepared
- 0701 Potatoes, fresh or chilled
- 0702 00 00 Tomatoes, fresh or chilled
- 0703 Onions, shallots, garlic, leeks and other alliaceous vegetables, fresh or chilled
- 0704 Cabbages, cauliflowers, kohlrabi, kale and similar edible brassicas, fresh or chilled
- 0705 Lettuce (*Lactuca sativa*) and chicory (*Cichorium spp*.), fresh or chilled
- 0706 Carrots, turnips, salad beetroot, salsify, celeriac, radishes and similar edible roots, fresh or chilled
- 0707 00 Cucumbers and gherkins, fresh or chilled
- 0708 Leguminous vegetables, shelled or unshelled, fresh or chilled
- 0709 Other vegetables, fresh or chilled
- 0710 Vegetables (uncooked or cooked by steaming or boiling in water), frozen
- 0711 Vegetables provisionally preserved (for example, by sulphur dioxide gas, in brine, in sulphur water or in other preservative solutions), but unsuitable in that state for immediate consumption
- 0712 Dried vegetables, whole, cut, sliced, broken or in powder, but not further prepared

- 0713 Dried leguminous vegetables, shelled, whether or not skinned or split
- 0803 00 Bananas, including plantains, fresh or dried
- 0808 Apples, pears and quinces, fresh
- 0809 Apricots, cherries, peaches (including nectarines), plums and sloes, fresh
- 0810 Other fruit, fresh
- 0811 Fruit and nuts, uncooked or cooked by steaming or boiling in water, frozen, whether or not containing added sugar or other sweetening matter
- 1001 Wheat and meslin
- 1002 Rye
- 1003 Barley
- 1004 Oats
- 1005 Maize (corn)
- 1008 Buckwheat, millet and canary seed; other cereals
- 1101 Wheat or meslin flour
- 1102 Cereal flours other than of wheat or meslin
- 1103 Cereal groats, meal and pellets
- 1104 Cereal grains otherwise worked (for example, hulled, rolled, flaked, pearled, sliced or kibbled), except rice of heading No 1006; germ of cereals, whole, rolled, flaked or ground
- 1105 Flour, meal, powder, flakes, granules and pellets of potatoes
- 1107 Malt whether roasted or not
- 1108 Starches, inulin
- 1109 Wheat gluten, whether or not dried
- 1205 00 Rape or colza seeds, whether or not broken
- 1209 Seeds, fruit and spores, of a kind used for sowing
- 1210 Hop cones, fresh or dried, whether or not ground, powdered or in the form of pellets; lupulin
- 1302 Vegetable saps and extracts; pectic substances, pectinates and pectates; agar – agar and other mucilages and thickeners, whether or not modified, derived from vegetable products
- 1501 00 Pig fat (including lard) and poultry fat, other than that of heading No 0209 or 1503
- 1502 Fats of bovine animals, sheep or goats, other than fats of heading no 1503
- 1507 Fixed vegetable oils and their fractions, whether or not refined, but not chemically modified
- 1508 Ground - nut oil and its fractions, whether or not refined, but not chemically modified
- 1510 00 Other oils and their fractions, obtained solely from olives, whether or not refined, but not chemically modified, including blends of theses oils or fractions with oils or fractions of heading 1509
- 1511 Palm oil and its fractions, whether or not refined, but not chemically modified
- 1512 Sunflower - seed, safflower or cotton – seed and fractions thereof, whether or not refined, but not chemically modified
- 1513 Coconut (copra), palm kernel or babassu oil and fractions thereof, whether or nor refined, but not chemically modified

- 1514 Rape, colza or mustard oil and fractions thereof, whether or not refined, but not chemically modified
- 1515 Other fixed vegetable fats and oils (including jojoba oil) and their fractions, whether or not refined, but not chemically modified
- 1516 Animal or vegetable fats and oils and their fractions
- 1517 Margarine; edible mixtures or preparations of animal or vegetable fats or oils or of fractions of different fats or oils
- 1518 Animal or vegetable fats and oils and their fractions, not elsewhere specified or included
- 1522 00 Degras
- 1601 Sausages and similar products, of meat, meat offal or blood; food preparations based on these products
- 1602 Other prepared or preserved meat, meat offal or blood
- 1603 Extracts and juices of meat, fish or crustaceans, molluscs or other aquatic invertebrates
- 1701 Cane or beet sugar and chemically pure sucrose, in solid form
- 1702 Other sugars, including chemically pure lactose, maltose, glucose and fructose;
- 1703 Molasses resulting from the extraction of refining of sugar
- 1704 Sugar confectionery (including white chocolate), not containing cocoa
- 1806 Chocolate and other food preparations containing cocoa
- 1901 Malt extract; other food preparations
- 1902 Pasta, whether or not cooked or stuffed (with meat or other substances) or otherwise prepared, such as spaghetti, macaroni, noodles, lasagne, gnocchi, ravioli, cannelloni; couscous whether or not prepared
- 1904 Prepared foods obtained by the swelling or roasting of cereals or cereal products (for example, corn flakes); cereals (other than maize (corn)) in grain form or in the form of flakes or other worked grains (except flour and meal), pre – cooked, or otherwise prepared, not elsewhere specified or included
- 1905 Bread, pastry, cakes, biscuits and other bakers' wares, whether or not containing cocoa; communion wafers, empty cachets of a kind suitable for pharmaceutical use, sealing wafers, rice paper and similar products
- 2002 Tomatoes prepared or preserved otherwise than by vinegar or acetic acid
- 2004 Other vegetables prepared or preserved otherwise than by vinegar or acetic acid, frozen, other than products of heading No 2006
- 2005 Other vegetables prepared or preserved otherwise than by vinegar or acetic acid, not frozen, other than products of heading No 2006
- 2009 Fruit juices (including grape must) and vegetable juices, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter
- 2102 Yeasts (active or inactive); other single - cell micro organisms, dead (but not including vaccines of heading No 3002); prepared baking powders
- 2103 Sauces and preparations thereof; mixed condiments and mixed seasonings; mustard flour and meal and prepared mustard
- 2104 Soups and broths and preparations thereof. Homogenised composite food preparations

- 2105 Ice cream and other edible ice, whether or not containing cocoa
- 2106 Food preparations not elsewhere specified or included
- 2203 Beer made from malt
- 2207 Undenatured ethyl alcohol of an alcoholic strength by volume of 80% vol or higher; ethyl alcohol and other spirits, denatured, of any strength
- 2208 Undenatured ethyl alcohol of an alcoholic strength by volume of less than 80% vol; spirits, liqueurs and other spirituous beverages
- 2209 Vinegar and substitutes for vinegar obtained from acetic acid
- 2301 Flours, meals and pellets, of meat or meat offal, of fish or of crustaceans, molluscs or other aquatic invertebrates, unfit for human consumption; greaves
- 2302 Bran, sharps and other residues, whether or not in the form of pellets, derived from the sifting, milling or other working of cereals or of leguminous plants
- 2303 residues of starch manufacture and similar residues, beet - pulp, bagasse and other waste of sugar manufacture, brewing or distilling dregs and waste, whether or not in the form of pellets
- 2304 00 00 Oil - cake and other solid residues, whether or not ground or in the form of pellets, resulting from the extraction of soya - bean oil
- 2309 Preparations of a kind used in animal feeding
- 2401 Unmanufactured tobacco, tobacco refuse
- 2402 Cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco substitutes
- 2403 Other manufactured tobacco and manufactured tobacco substitutes; 'homogenized' or 'reconstituted' tobacco; tobacco extracts and essences
- 3502 Albumins, albuminates and other albumin derivatives
- 3505 Dextrins and other modified starches; glues
- 3809 Finishing agents, dye carriers to accelerate the dyeing or fixing of dyestuffs and other products and preparations (for example, dressings and mordants), of a kind used in the textile, paper, leather or like industries, not elsewhere specified or included
- 5301 Flax, raw or processed but not spun; flax tow and waste (including yarn waste and garneted stock)

7. Implications of CAP Reforms for Poland

Waldemar Guba [1]
Władysław Piskorz [2] [3]

7.1 Introduction

By no means does the adoption the Common Agricultural Policy (CAP) by Poland after its accession to the European Union (EU) provide for the end of discussions on the appropriate agricultural policy for Poland. The possibility to co-decide on CAP matters following the accession is tantamount to the obligation to participate in ongoing negotiations concerning future CAP reforms. The provisions of the Nice Treaty (2000) and the conclusions of the Gothenburg Summit (2001) confirmed that Poland could join the EU in 2004. The Nice Treaty has also defined the principles of the new Member States' participation in the UE institutions and in the decision-making process. Poland's contribution to the Community decision-making shall not be negligible.

Moreover, Poland's accession to the EU shall coincide with the period of strong pressure for further CAP reforms, the EU enlargement to the east being only one of the sources of that pressure. Never before has EU public and political environment fostered CAP reforms so much, and the probability of reaching an agreement on new CAP modifications has significantly increased. Thus, it becomes more and more probable that following the accession to the EU, Poland will have to actively participate in the process of a radical CAP reform.

A following question arises: what are potential implications of CAP reforms for Poland and what could be Polish preferences as concerns the shape of Common Agriculture Policy? It is rather a new question, significantly different from the question to which the discussion on the agricultural policy of Poland - the country enjoying full autonomy in this scope - has been subordinated so far. Those differences are related to new challenges and opportunities provided by the EU membership such as: the necessity to maintain competitiveness and to adjust the production base to new marketing opportunities offered by the Single Market, as well as the need to improve the sector's efficiency in the time of high level of unemployment.

Following a presentation of reasons behind CAP in the introduction, the to-date CAP reforms and their mechanisms have been detailed in section two. It was assumed that those

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mechanisms would also create a base for the future reforms. Section three aims at a definition of CAP assessment criteria from the point of view of strategic objectives of Polish agriculture. In section four, based on the conclusions from the previous sections, the main directions of CAP reforms have been assessed. Section five concludes the overall analysis.

7.2 Cap reforms

A. CAP beginnings -objectives and instruments

The basis for including agriculture into the „common market" of European Economic Community (EEC) was provided by the Treaty of Rome, the art. 39 of which defined the objectives of Common Agriculture Policy. Those objectives presented a compromise between the Member States countries that established the EEC (6 states) and defined a balance of interest between producers and consumers. The objectives were as follows: increase in productivity, increase of agricultural income, stabilisation of agricultural markets, food safety, reasonable prices of food. The implementation of the CAP objectives was based on three superior rules included in legal regulations, namely: single market, Community priority, and financial solidarity. By the end of the 80s the main instruments of the CAP included the support of agricultural prices by means of a complex system of trade policy measures and a system of a direct market intervention. Such a mechanism was effectively isolating an internal market from the international market in order to generate transfers from consumers to producers, i.e. to support farm incomes. At the beginning, considering the low level of EC self-sufficiency in food, such a system provided net returns to the Community budget, as the revenues from levies exceeded the expenses related to export subsidies. Over time, technical progress, stimulated to a large extent by the CAP, led to a gradual increase of productivity and production. Excessive food surpluses meant an increase of budgetary expenditure related to export subsidies. Increasing surpluses and budgetary costs became the main problems of CAP and important rationale for its reforms.

B. To-date reforms

One can assume that a turning point in the CAP evolution was freezing of the level of subsidised agricultural prices on the turn of 1984/1985. In 1984 milk quotas were introduced in order to restrain production. The next important step was the introduction of the so-called stabilisers in 1988, leading to price or subsidies reductions if the total production of a given commodity within the Community exceeded the level of *maximum guaranteed quantities*. Establishing a system of a voluntary *set-aside* in return for a financial compensation was also an important element. In the next, crucial reform of 1992, MacSharry's reform, set-aside became a condition to receive support in the form of direct payments which compensated price support reductions. That reform was to the great extent a result of on-going multilateral negotiations on the liberalisation of agricultural market in the framework of the GATT Uruguay Round. The latest CAP reform, Agenda 2000 while being a continuation of the main directions of the previous one, was adopted at the Berlin Summit in March 1999. Both major CAP reforms have led to a modification of forms of agriculture support rather than to a decrease of the level of this support.

There is a common consent that the majority of those objectives was achieved successfully (increase in productivity, food safety, reasonable consumer prices) and that so far existing CAP instruments are ineffective or inefficient in achieving the remaining goals (e.g. lack of farmers' satisfaction in relation to incomes). Attention is called to concentration of transfers in a small number of large farms, to complex legislation and high administration costs, to excessive intensification of production providing threat to the environment[1] and to food safety, as well as to economic losses of the third countries exporting food products (including the poorest ones) - caused by the depressed World market prices. Maintenance of the high level of agricultural support distorts economic incentives throughout economy. It hampers reallocation of resources to non-agricultural activities, where they could be used more effectively. The prices of land for construction, industry and recreation purposes are overstated by an excessive demand for agricultural production purposes.

C. New objectives

The necessity to redefine the CAP objectives in order to reflect (i) new social preferences and expectations related with rural areas and agriculture as well as (ii) new challenges (e.g. related to the EU enlargement) is more and more often indicated in public debates. It is remarkable that many of these new rationales were reflected in the new instruments introduced by the latest CAP reforms (e.g. modulation, cross-compliance, unification of legislation, small farmers' scheme), nevertheless the significance of these instruments was marginalised by low budget allocations (only approx. 10 % of agricultural budget was allocated to rural development) or by their voluntary nature (e.g. modulation, cross-compliance).

A concept of the so-called *European model of agriculture*,[2] included in the Agenda 2000, is an attempt to address these new tasks and objectives of CAP. The main components of that model include:

- competitive agriculture, able to gradually increase export (to the world market), without excessive subsidising (or with no subsidising at all);
- sustainable development of rural areas in the entire EU;
- environmentally–friendly methods of agricultural production and provision of healthy high quality products, according to social demand;
- sustainable agriculture, with rich traditions, oriented not only towards commercial performance, but also to the environment and rural landscape, providing rural communities with food and employment;
- simpler and more comprehensible agricultural policy, that clearly divides common decisions (EU) from Member States' competencies;
- agricultural policy guaranteeing that its expenditures are justified by farmers' activities expected by the society (landscape protection and conservation).
- The concept underlines a dual role of that sector of economy: beside goals related to food production there are also different ones, related with new functions of agriculture

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1 It is estimated that abolishing of agriculture protectionism by the EU could decrease the use of fertilisers and pesticides by 18 %.

2 See, European Commission, *Agenda 2000*, Brussels, 1999.

and with rural development. It seems that this concept has already become a subject of the new consensus as regards updated CAP objectives.

D. Proposals for radical reform

The opinion that Common Agriculture Policy has caused millions of families to give up farming, contributed to the clearance of several hundred thousands hectares of field coppices, extinction of many plant varieties, disappearance of regional culinary specialities, is becoming more and more popular in Europe. Irreversible damage has been done for the sake of „cheap food" production. The awareness of this fact pushes many groups to seek ways of more radical CAP reforms.

Common Agricultural and Rural Policy for Europe (CARPE)

A report by Buckwell (1997)[1] prepared for the EU Commission was an important attempt to outline future evolution of CAP towards *Common Agricultural and Rural Policy for Europe* (CARPE). The essence of the change of the sectoral CAP into the territorial CARPE, as proposed in that report, comprises a decrease of agricultural prices down to the level of world prices and redirection of the whole support towards: (i) stabilisation of agricultural market, (ii) direct payments for land managers for the purpose of safeguarding public environmental services, (iii) support of more sustainable development of rural areas and (iv) adjustment aid provided in the period of transition from CAP to CARPE by means of direct payments (assistance to those farmers who were previously encouraged by the policy to increase production excessively, and who would have to adjust their activity to new conditions of rural economy).

In the more recent period the governments of the EU member states, political parties and other social organisations have presented some proposals of the CAP reforms. The main reason for such an action is an approaching mid–term CAP review, scheduled in Agenda 2000 for the year 2002, as well as deepening crisis of consumers' confidence in the current CAP. These proposals are mostly derivatives of ideas included in Buckwell's Report and a development of the concept of *European model of agriculture*.

7.3 Criteria of the cap assessment

We suggest assessing the CAP and its reforms from the Polish perspective with the use of three crucial criteria. The first criterion is that of the level of compatibility of the CAP objectives with the strategic objectives of Polish agriculture. Attention being focused on the future of CAP, one can assume that the European model of agriculture proposed in Agenda 2000 provides an appropriate reference for such an assessment. The second criterion is the projected effectiveness of particular (alternative) CAP instruments in the pursuance of the major strategic objective of Polish agriculture - competitiveness on the Community and international markets. The third criterion is the distribution of costs and benefits of CAP

[1] See Buckwell, A. et al., *Towards a Common Agricultural and Rural Policy for Europe (CARPE)*, Report prepared for the European Commission, Brussels, 1997 (http://europa.eu.int/comm/agriculture/publi/archive/index_en.htm).

implementation in Poland. Some additional effects that should be taken into account in the assessment are also indicated here.

E. Compatibility of the long-term CAP objectives with the strategic objectives of Polish agriculture

Strategic objectives of Polish agriculture

As a result of a public and political debate on the development of rural areas and agriculture in Poland several important programming documents have been elaborated, where strategic objectives and methods of their realisation have been pointed out. The most important documents include*: Medium Term Strategy of Development of Agriculture and Rural Areas,* approved by the Council of Ministers in April 1998 and *Coherent Structural Policy for the Development of Agriculture and Rural Areas*, approved by the Council of Ministers in July 1999, covering the period 2000 - 2006. The scope of activities implementing these strategies can be found in *Pact for Agriculture and Rural Areas* prepared by the Government in a co-operation with social partners representing various rural communities in Poland.

Compatibility with the European model of agriculture

An analysis of the aforementioned programming documents mentioned above implies a far–going compatibility between the tasks and objectives faced by Polish agriculture and the objectives set out for the EU agriculture in the framework of the ongoing public debate on European model of agriculture. In both cases the superior goal is an improvement of competitiveness, including an increase of agricultural incomes. Indeed, Polish as well as EU agriculture face a challenge which is typical of the majority of the developed countries, and relates to the deteriorating sectoral terms of trade, including the increasing (opportunity) costs of labour[1].

The need for a sustainable development of rural areas is underlined in both cases, though in the case of Poland, the leading motive is the need to reduce employment in agriculture, while in the EU it is the determination to stop the process of rural areas depopulation (assurance of appropriate incomes, creation of attractive life conditions in the rural areas) and to meet new social expectations concerning agricultural products' quality and environmental protection. This is why strategic objectives of rural development in Poland include an increase of employment opportunities in non-agricultural sector, an increase of the level of education or the improvement of technical infrastructure, i.e. actions aiming at the so-called multifunctional rural development. All these actions are of secondary importance in the case of the EU, where major emphasis is upon the need to develop and support new aspects and functions of the agricultural production itself, namely environment- and biodiversity -friendly production methods and maintenance of landscape and tradition in the frame of the so-called multifunctionality of agriculture, which are strongly underlined.

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[1] It is worth pointing out that a pressure for structural changes in agriculture resulting from a low relative labour productivity (in comparison to the country's average) is not much smaller in the EU-15 than in Poland. See e.g. W. Orłowski, *Przeciw stereotypom. Rozszerzenie Unii Europejskiej o Polskę*, Serie: Understand negotiations. Office for the Committee of European Integration, Warsaw, 2001.

The current discussions in the EU concerning a desired model of agriculture and rural areas implies a need to re-evaluate the existing assessments of Polish agriculture. A large part of Polish farms is far less modern than those in the EU. The level of specialisation is low; the latest achievements of agricultural technology and science are under-utilised. The scale of production is often too low to enable generation of reasonable incomes. These farms - not voluntarily but due to economic necessity – remained multifunctional in nature, which is not the case any more in the agriculture of numerous EU Member States. The features of Polish farms, originally perceived as primitive and provincial, are slowly gaining appreciation in the EU as a model which may be accepted by the society grossly disappointed with recent food scares resulting from industrialised agriculture. Probably, as social preferences are rapidly changing, a part of Polish farms which are non-competitive from the point of view of the market, could be given a chance to survive.

F. Implications of the CAP instruments for competitiveness objective in Polish agriculture

A pathway to a competitive agriculture in Poland

As it was already mentioned, the improvement of competitiveness is a superior objective in the strategies of Polish agriculture. Competitiveness should be understood as the ability to use of the existing production resources effectively: land, labour and capital, with the lowest possible transfer or even without financial transfer to that sector and in a way that will assure a satisfactory level of agricultural income. It is particularly important in Poland for competitiveness so understood to satisfy a macro-economic goal, i.e. ensuring best possible contribution of agriculture to the national wealth.

Considering the present state of Polish agriculture and conditions of its development, including the systemic transformation and quite a rapid economic growth in recent years (changes of price relations, including a real appreciation of zloty) one can assume that the competitiveness requires improvement of productivity factors, i.e. (i) modernisation of production technologies (mainly by an increase of investments in new technologies), (ii) changes of its structure (through the allocation of resources - mainly land - to more efficient, better specialised, larger farms) and (iii) an increase of farmers' education level (human capital).

Due to the volume of the necessary structural changes and constraints of the domestic labour market, a pathway of the restructuring would need to differ from the one followed in past decades in other countries, where a rapid transfer of labour force from agriculture to other sectors was possible. Considering this, a comprehensive policy towards rural areas and agriculture is suggested; one that would promote development of off-farm enterprises and equal educational opportunities in the rural areas (the so-called multifunctional rural development).

Current CAP instruments and the competitiveness objective

The present CAP features a very complex set of instruments. The main groups of the CAP instruments will affect an increase of productivity of production factors, and as a result, an improvement of Polish agriculture competitiveness, in the following way:

- Instruments of production support – price support and direct payments. Those instruments are inherent to the *Common Market Organisation*. They include the instruments of the so-called first pillar of CAP, which dominate in the current policy and consume about 90 % of Community budget expenditure on the CAP. This support has an ambiguous influence on the improvement of productivity factors: on the one hand it lowers a pressure for restructuring (pressure to lower the costs), and on the other hand it improves the access to the financing of investments targeted at modernisation. Though the statements about the slowing-down effect of direct payments on structural changes in Polish agriculture following the accession to the EU are exaggerated[1], nevertheless the production profitability support is not the best way to sustainable improvement of the competitiveness;
- Instruments of supporting restructuring and modernisation of agriculture and rural development. They cover payments in the framework of the so-called CAP accompanying measures, as well as the support to investments in holdings and food processing enterprises and the support to several actions aiming at rural development. They enable a sustainable improvement of agricultural incomes by means of cost reduction (technical progress and improvements in technical and scale efficiency and faster adjustments to Single Market trade opportunities) and improvements in quality of farm production factors (e.g. up-grading of farmers' qualifications). Some of these instruments serve conversion and development of rural areas, helping also to implement non-production objectives related to protection of the environment and maintenance of the cultural heritage of rural areas. Presently these instruments (the so-called second pillar of the CAP) account for only approx. 10 % of the CAP agricultural funds and approx. 10 % of the structural funds in Objective-1 regions;
- Instruments stabilising the markets including CAP stabilising actions (e.g. market intervention) and the effect of the size of the common market (buffer effect). Market stabilisation allows for more effective use of the production factors (higher allocative efficiency) and for increased farm specialisation. This aspect has usually been underestimated in the hitherto discussions on the effects of EU accession and CAP adoption in Poland.

Integration of Polish agriculture with the EU means not only adoption of the CAP together with its instruments of production support, but most of all, the incorporation into the extensive Community market. It is very important for Polish agriculture to benefit from this incorporation by exploiting its comparative advantages vis-à-vis this market. Specialisation in labour- and land-consuming branches of production could be expected since these factors are still relatively cheaper in Poland than in the EU-15. Moreover, it could make it

[1] The World Bank study of agricultural factor markets in Polish agriculture, presented on 26 June 2001 in Warsaw, MARD, implies that low profitability and difficult access to financial resources is an important – if not the main – barrier to an increase of the number of transactions on the market of agricultural land in Poland, and subsequently – a barrier to restructuring. According to the same research, the integration with the EU together with a full adoption of the CAP will not radically change either income disparity between agriculture and the remaining sectors of economy or the aptitude to give up farming and sell agricultural land by small farmers. Therefore direct payments (coupled, as now or decoupled, but still bound to the farm) could most probably have a vitalising effect on land market and restructuring.

possible to profitably involve a part of the surplus labour force, available in Polish rural areas, in agricultural production. Given the overwhelming distortive impact of CAP, it is often forgotten that this effect is one of the main sources of sustainable benefits resulting from economic integration. However, the current CAP mechanisms limit relative importance of gains from specialisation and trade due to distortion in relative prices and even more so due to production control instruments.

G. Other effects

Distribution of CAP related costs and benefits

The perspective of the EU membership strengthens the need of modernisation and reconstruction. In this situation, similarly as in the case of the previous EU enlargements, a crucial negotiation issue becomes the assurance of equal treatment of Polish and EU farmers in terms of the CAP support instruments and also the maintenance of the financial solidarity principle. Given the scale of adjustment costs during the first years of EU membership, it is important that CAP and structural policy of the EU provide for assistance in this process. It is also worth pointing out that redistribution of income between Member States is already an inherent element of CAP and other Common policies and an important factor of economic and political integration.

However the magnitude of this aid in the first years of membership is not predetermined since it will be an issue of accession negotiations. For example, reference values for direct production aid which would be based on the depressed production during the transformation period could most probably lower the EU budgetary transfers to Polish agriculture compared to the remaining EU Member States.

Implementation costs

One should remember that particular solutions could significantly differ as regards implementation and operational costs, which may represent a heavy burden to a Member State's budget and to national beneficiaries. These are the costs of building and operating appropriate institutions and necessary co-funding from the national budget. The transaction costs (application, reporting and other) borne by the beneficiaries may also turn to be high. In Poland, due to fragmentation of agricultural holdings, the burden of implementation costs could be substantially higher than in countries with more favourable structures.

Distribution of costs and benefits in time

In the short-term perspective the membership of Poland in the EU would mean significantly greater changes of market and institutional conditions (change of prices, target markets, institutions and legislation) for the Polish producers compared to the EU-15 ones. Therefore a full adjustment to new requirements, challenges and opportunities related to the enlargement could last much longer in the case of Polish producers than in the case of the EU producers. In practice it means, among other things, that shortly after integration one can expect worse performance of the agro-food trade than expected in the long term, when the adjustments have been completed.

7.4 Assessment of main elements of the cap reforms

This section includes an assessment of major CAP reform elements in relation to strategic objectives of Polish agriculture and taking account of the earlier defined criteria. It was already stated that the basic economic mechanisms of the CAP reforms included: (i) reduction of price support in favour of direct support, (ii) shifting objectives from direct production support to restructuring and modernisation of agriculture and rural areas, (iii) establishment (and consequently dismantling) of production quotas (mainly in dairy sector). Their goal is to improve the effectiveness and efficiency of the policy, limit the undesirable side effects and introduce new social objectives into CAP. One can assume that future CAP reforms will be a continuation of the evolution to-date, based on the same mechanisms. Beside the three elements mentioned above, the assessment will also cover two additional essential elements: (iv) decoupling of direct support, (v) reducing the difference in the level of support between small and large farms (*modulation*).

e would like to underline that the further assessment of the reform elements is based on an assumption that the major rules of the CAP, namely: (i) non-discriminatory use of all the CAP instruments in all the Member States and (ii) the rule of the financial solidarity, would not be abandoned. This assumption seems to be necessary, considering proposals to renationalise CAP. Additionally, the analysis assumed that in the foreseeable future (iii) a total financial stream of support to production and rural areas will not be substantially diminished, though certainly the proportions between these two pillars of the agricultural and rural policy could change. The consequences of lifting these assumptions have been discussed separately.

H. Further replacement of the price support with the direct support

A partial replacement of the price support by direct payments, made for the first time in 1992 in the framework of the Mac Sharry's reform, constitutes the crucial economic mechanism of the former CAP reforms. In the frame of the Uruguay Round of GATT, the EU was forced to establish such a mechanism as a precondition for progress in negotiations on the liberalisation of the world trade in agri-food products, i.e. as a way to decrease CAP distorting effect on international trade in agricultural products. Among other reasons of a possible further replacement of price support by direct payments there is a possible narrowing of the limits on export subsidies in the framework of the next round of WTO negotiations (Millennium Round). Beside the pressure there is a distinct economic incentive too, as the EU -being a large exporter - can benefit from the increase of the world farm prices following the elimination of export subsidies by all trade partners.

One can indicate the following benefits for Poland (as a prospective EU Member State) resulting from the shift from the price support to direct payments:

- Such a shift moves a part the financial burden of support of Polish agriculture from Polish consumers to the EU tax payers (including Polish ones). Obviously, a share of Polish tax payers in the EU budget in the first years of the membership will be much lower than the share of Polish consumers in total food expenditures in the enlarged EU. A decrease of food prices will have a positive effect on the competitiveness of Polish economy - indirectly affecting the real incomes;

- Direct payments are much lighter a burden for the poorest social groups in comparison to the price support, as they are financed from taxes (which are proportional to incomes) and not from expenditures for food (which account for the largest part of total expenditures among the poorest social groups);
- This element of the reform improves the efficiency of transfers and guarantees that the support reaches a farmer, and does not serve to maintain inefficient trade and processing firms;
- A decrease of prices of many agricultural raw materials improves the conditions for agri-food industry development. It is of great importance for Poland taking into account that the competitiveness of the entire agri-food sector on domestic and international markets depends more and more on the efficiency of the downstream industries;
- Such a shift is an essential step towards a decrease of price distortions and improvement of the allocation of production resources. It opens an opportunity to bring the structure of agricultural production closer to comparative advantages. The use of such an opportunity requires additionally a decoupling of direct payments from production and freedom in terms of the level and product structure of output (dismantling quotas).

Despite a higher economic efficiency, direct payments are more sensitive and susceptible to criticism of the public (an effect of higher transparency of budgetary transfers), which implies an enhanced probability of their being withdrawn from the EU agricultural policy in the future (unless new strong arguments in favour of the continuation of these payments appear – see *multifunctionality of agriculture*). Interestingly, direct payments were difficult to accept by many EU farmers, by whom such a „direct" form of support could be treated as charity.

A further reduction of the price support in the dairy sector below the level established in the framework of Agenda 2000, hence their significant convergence on the world market prices, would mean de facto a possibility of quota system withdrawal in this sector. However, such a change of the support may require additional implementation costs. Establishment and maintenance of an integrated administration and control system (IACS) in agriculture as the institution responsible for the transfer of direct payments, is a complex and costly undertaking. Therefore a modifications of the system of direct payments which could simplify the payment system would be favourable to Poland.

I. Reorientation of agricultural budget from the production support to the support of agriculture and rural development

Several reasons for such a reorientation can be indicated. The first one is a pressure of trade partners within WTO. Such a redirection of support would mean a withdrawal of the questioned *blue box* support and an increase of the accepted g*reen box*, i.e. production and competition neutral support. The second reason, underlined by the latest BSE scare and FMD crisis, is the demand from the EU citizens to stop supporting intensive food production in favour of the production of risk-free food produced with more environmentally–friendly methods. Among the current instruments of the second pillar there are ones serving directly the support of methods of production which are safer for consumers and the

environment (agri-environmental programmes). In addition, a limitation of support directly related to agricultural production should diminish its intensity, *inter alia* by a decrease in the use of fertilisers and pesticides. The third reason is a more and more painful depopulation of rural areas resulting in the extinction of folk traditions and landscape changes, which can be observed in many EU Member States.

Such a shift could also have other important implications for Poland. The most important one is the capability to use these transfers for the acceleration of restructuring and the improvement of Polish agriculture competitiveness.

A negative aspect of such a reform is an increase of national budget expenditure, because every EURO spent in the framework of the 2nd pillar from the Community budget needs to be accompanied by a contribution from the national budget which accounts for 25 - 50 % of the total public expenditure (i.e. a sum of Community support and national funding). The additional funds from the national budget are allocated to national beneficiaries. The difficulties in rising national resources to fund the programmes in the framework of the 2nd pillar do not concern only the poorest EU Member States.

In contrast to direct payments, access to the EU aid for implementing the 2nd pillar programmes requires a preparation of a quite complex project documentation. The procedure of launching the SAPARD Programme for Poland, that has been substantially delayed, is an earnest of the scale of difficulties of following such procedures.

Though the current principles of funds allocating seem to be favourable for Poland, the way in which the reform would be implemented is not less important. The following questions have to be considered:

- *To what extent is this re-allocation between the CAP pillars going to be used as a measure to realise savings in the Community budget?*

One cannot exclude that a large reduction of expenditure for current direct payments and the prospect of increasing the national funding could become an excuse to make savings in the EU budget. For example, one might argue that a respectively substantial increase of expenditure for rural development measures could be constrained by an efficient utilisation of these funds. Such solution, however, would entail a partial re-nationalisation of CAP financing with its economic and political consequences (see further sections). Nevertheless, if the savings resulting from the reduction of direct payments were re-allocated mostly to the rural development measures, then the national funding would de facto mean an increase of transfers for rural areas and agriculture in the EU (each EURO reallocated would be accompanied by additional EURO 0.33 – 1.0 from national budgets).

- *Is reallocation going to take place on the Community budget level or in the framework of present transfers to the Member States?*

It is worth paying attention to the fact that the criteria of funds allocation in the framework of the 2nd pillar are different from those concerning the allocation of funds for direct payments in the framework of the 1st pillar. If the discussed shift of funds between the pillars happened in two stages - firstly the exchange at the Community level, and secondly, the allocation between the Member States according to the current criteria of the 2nd pillar, then Poland would benefit from such a transaction, because: (i) the criteria for direct payments allocation discriminate against countries such as Poland, i.e. countries having relatively

low intensity of crop production and low beef production (in the reference period), and (ii) the criteria of funds' distribution in the framework of the 2nd CAP pillar are largely subordinated to the cohesion objective, i.e. they privilege countries like Poland, i.e. countries facing more structural problems than the EU average.

J. Decoupling of direct payments from production decisions

Though direct payments under the CAP have been accepted during the Uruguay Round as a much less market distorting way of agriculture support, their classification to the so-called *blue box* category leaves other countries with the possibility to demand their withdrawal or modifications during the next rounds of negotiations. An important factor is the influence of these payments on production decisions and hence on the EU competitive position on the international market. Weakening or elimination of this influence (*decoupling)*, which could allow to classify these payments (or at least part of them) to the *green box* category is one of the greatest challenges that the UE is facing in the framework of the WTO Millennium Round. The EU might be threatened by possible repercussions of the EU trade partners in non-agricultural areas that are important for the Community exports.

The European Union has several options to avoid the WTO repercussions in relation to these payments: (i) to withdraw them and to reallocate the savings to other instruments (ii) to convince the trade partners that the payments are necessary due to important societal reasons (*non-trade concerns*), (iii) to modify and truly *decouple* them or (iv) to withdraw them (immediately or degressively).

Decoupling of direct payments based on flat-rating and linking to the historical level of production (option iii), as in the *small farmer scheme*, has several essential advantages for Polish agriculture:

- Elimination of the requirement to maintain harvesting areas and animal herds on levels corresponding to the level of payments would allow to continue adjustments in farm production structure in Poland (especially if quotas were dismantled simultaneously). This would be of great importance for the increase of efficiency and competitiveness of Polish agriculture;
- The costs of payment administration system would significantly decrease.

K. Modulation of support

Modulation embraces mechanisms that, among others, narrow the gap between large and small farms in terms of the per farm (or one farmer) volume of support. In 1995 about 68 % of the entire support, including 73 % of transfers generated by price support and 57 % of direct payments, were directed to 25% of the largest agricultural holdings. It means that the average holding in this group benefited from 9 times more direct payments and 24 times more market transfers than an average farm within a group of 25% of the smallest farms.

It seems that the present discussion in the EU Member States caused by a crisis of confidence as regards the basic CAP principles (e.g. in terms of food safety) and the accession of new, generally less prosperous countries, may back up the concept of modulation. It is sometimes claimed that the implementation of *European model of agriculture* requires limitation of market incentives concerning land concentration and intensification of production, which would require a decrease of the level of support for the largest agricultural holdings.

Under Polish conditions the level of transfer concentration in a relatively small group of farms would be similar as currently in the EU-15. Thus the lack of modulation would lead to a sizeable differentiation of incomes in the sector, and also in comparison with the poorest non-agricultural professional groups, which would negatively influence public sentiment for the CAP in Poland. Thus, such an unequal distribution of transfers would be undesired despite its probable positive effect on the improvement of farm structure. It seems that modulation based on aid reallocation from large farms to the support of reconstruction programmes is a beneficial solution for the majority of Polish farmers.

L. Abolishment of milk quota regime

The discussion on the withdrawal of milk quotas has two important reasons. The first one is a further pressure from the WTO – already nowadays the EU is not allowed to subsidise the entire export in this sector, mainly as regards cheeses. Secondly, considering tradition in production and natural resources, it would be beneficial for the EU to participate in an increase of the world market of these products which was announced to take place in the years to come. The possibility to replace price support by direct support as well as price reductions planned in the framework of Agenda 2000 allow to approximate the Community price of milk to the world prices to such a degree that the maintenance of milk quotas would lose its major rationale.

The elimination of milk quotas is estimated to allow for the increase of production and exports of the entire EU; however, at the same time it would cause a partial shift of production between countries, regions and farms according to the criterion of efficiency and long-term competitiveness. The unwillingness to effect such changes results from the fact that milk production is one of the most supported sectors in the EU, and has a relatively high share in the structure of agricultural production, especially in small farms often located in less favoured areas. In other words, the system of milk quotas, while slowing down the restructuring of that sector, has become a guarantee of financial transfers (so far price transfers, and as of 2005 - also budgetary transfers) to many regions and to the least efficient producers. The maintenance of quotas contributes to a decrease of the EU share in the world milk production and trade. Comparative advantages of several countries in terms of milk production (Portugal, Ireland, Austria, and Finland) are under-utilised, which contributes to increased costs of milk production in the EU.

Implications for Poland

The establishment of milk quotas for Poland will be one of the most important elements of the accession negotiations in the area of agriculture. It is highly probable that the EU will try to allocate as low a limit as possible to Poland, trying to link it with the production level in the recent years. According to Polish estimates, this level is much below a long-term Polish production potential under competitive (i.e. support and quota free) market conditions.

It is possible to put forward several theses regarding the implications of a possible withdrawal of the quota system after Poland's accession to the EU:

- Firstly, the potential benefits from the withdrawal of milk quotas in Poland after its accession to the EU would depend on the level of the quota allocated to Poland as a result

of negotiations. Low quota may reinforce Poland's preferences to support dismantling of the quota system in the future;

- Secondly, the quota system will have an unfavourable effect on the restructuring of the sector, development of its production capacities and a competitive position in the future. The main Polish argument highlighting the high milk production potential is in accordance with several analyses indicating the competitive potential of that sector, whose full utilisation, however, requires modernisation and concentration. It implies that the withdrawal of the milk quotas would in fact be a desirable solution for Poland;
- Thirdly, one can expect that the long-term interest of the dairy sector in Poland in relation to the milk quotas could contradict the interest of non-efficient producers (processors and farmers), who might perceive the milk quota system as a way to avoid modernisation and restructuring. Similar to some EU-15 Member States the quota (once introduced) may start to play a social security role for farmers in less privileged areas;
- Fourthly, milk quotas will have a market price; they will increase the costs of milk production and discourage extensive animal breeding, as the productivity level will increase significantly.

M. Cancellation of assumptions

An assessment presented so far was based on an assumption that the following principles would be maintained: (i) non-discriminatory use of all the CAP instruments in all Member States including Poland, (ii) financial solidarity and (iii) stream of support both to production and rural areas would not be significantly diminished. What would then happen, should the above assumptions be cancelled?

The consequences of unfair treatment of Polish agriculture in the CAP framework have been so far a subject of public debate accompanying the accession negotiations and as such will not be discussed here. On the basis of the existing proposals of the EU one could assume that there are no threats of a permanent exclusion of Polish farmers from the system of production support, but one cannot exclude a transition period, within which these payments would be gradually increased up to a full scale, while competitive imbalance would be dealt with by other countervailing transitory solutions. Conclusions from the above discussion would not lose their correctness if such a transition period were introduced, but then they would relate to a longer term perspective for gaining full participation in the CAP.

- Re-nationalisation of the CAP funding would be clearly not favourable for Poland, as it would lead to a very significant increase of the burden of the national budget with the costs of CAP implementation. Given the differences in the national budgets' financial capacity in an enlarged EU, violation of the principle of financial solidarity would in fact mean the end of CAP. A consequence of such re-nationalisation would than be a need to adjust the level of support to agriculture in the entire enlarged EU to the financial capacity of the poorest countries, remembering that unified support levels are a precondition of the EU single market in agriculture sector (i.e. a precondition of fair competition). Such a modification would invalidate some conclusions of the aforementioned analysis.
- The extent to which other Member States would support their own farms from their own budgets even without shifting to CAP re-nationalisation will be very important for the

competitiveness of Polish farms in comparison with their EU counterparts. The Community guidelines regarding admissible forms of state aid for agriculture are flexible enough to make quite a leeway for decisions - which is used by prosperous countries. For example in Germany, the national budget provides agriculture with almost the same amount of transfers as the Community budget. Poland will probably not be able to assure a similar high level of support for agriculture. That is why, in order to strengthen the competitive position of Polish farms on the Community market, Poland could be interested in a limitation of the scope of admissible state aid for agriculture. Thus, the rule of maintaining financial solidarity in terms of the Community policy seems to be a minimum condition in this respect.

On the basis of the former reforms and the accompanying discussions one might think that the probability of a substantial decrease of the financial support to agriculture and rural areas is not that big, though changes in the form of transfers could be expected, according to the directions/mechanisms presented above. It seems that increasing societal approval of rural development support is currently a crucial guarantee of the EU agricultural budget maintenance in the future, though it will require further reforms of the CAP. A possible large decrease of support, especially in the first years of the membership, would be unfavourable for Poland, considering the need for agriculture and rural areas modernisation and the fact that these transfers contribute to the objective of coherence in the framework of the enlarged EU.

7.5 Conclusions

If, as we suggest here, Poland has long-term comparative advantages in agricultural production versus the enlarged EU markets, then the main benefit for Poland and Polish agriculture from the integration in this sector should result from a mere opportunity to compete with other European countries on equal basis. Although, in the present CAP scenario, these advantages could be used only in a very limited scope, and subsequently Polish agriculture may be forced to seek the main benefits from accession in the increased market and income support. In such a scenario, the maintenance or even an increase of food prices with all the negative consequences for the economy would be inevitable.

An alternative scenario for the future CAP, based on limitation of production support, instead of an increased support to restructuring and modernisation of agriculture and rural development connected with the dismantling of quota regime, seems to be beneficial for Poland. It indicates not only better use, but also strengthening of Polish comparative advantages, which would be possible thanks to: (i) freedom of adjustments of the level and structure of production, (ii) acceleration of productivity improvement (due initial technological gap, the expected benefits of the structural and rural development policy in Poland might be higher than on average in the EU–15) and (iii) introduction of preferences for more extensive methods of production, which probably are easier to adapt in Poland than in the EU-15 (due to the low starting level of the production intensification and still low costs of labour). In this scenario, the main benefits to Polish agriculture from the EU accession would be based on utilisation of opportunities related to the Community markets, and to a much smaller extent, on the fragile political balance (in the entire EU and in the WTO), on which the maintenance of the EU agricultural production support is

WTO), on which the maintenance of the EU agricultural production support is becoming more and more dependent.

he assessment of the main elements of the CAP reforms was based on the assumptions that reforms would be based on the change of objectives and instruments, and not on the substantial decrease of the aggregate level of support for rural areas and agriculture, and that the principle of financial solidarity would be maintained. Last but not least was the assumption that Poland would participate in all the elements of the future CAP according to the same conditions as other EU Member States.

t is also necessary to remember that the restructuring and modernisation of Polish agriculture cannot be financed solely from the EU budget. For Poland, as well as for the EU, an important issue could be to adjust the CAP instruments in such a way as not to invoke certain processes in Polish agriculture post accession (e.g. excessive intensification, concentration and specialisation). Paradoxically, in such a case, Poland could have a chance of taking advantage of the lagged process of agriculture modernisation. In the longer perspective, CAP modifications to increase the support for non-commodity functions of farms would facilitate the process.

8. Agricultural Policy Dialogue Poland - Netherlands: Items for further discussion[1]

Kees de Bont, LEI

8.1 Introduction

In the meeting of delegations of Poland and the Netherlands in Warsaw in July it was agreed to prepare papers on issues to be discussed later on in September in The Hague as well as to prepare the 'Utrecht Conference' in October 2002. From the Polish side it was indicated that 'Factors conditioning competitiveness including the Mid Term Review of the European Commission' should be a central issue to be discussed in more detail. This paper contributes to that by discussing some key elements of agricultural and rural policy developments and by indicating the possible impact of policy developments on the agricultural sector in Poland and the Netherlands. The main aim of this paper is to provide information based on experiences and analyses, which can be used in the design of policies for the future as well as to formulate recommendations for the CAP in medium and long-term perspectives.

8.2 Agriculture in Poland and the Netherlands

The agricultural sector in both countries is quite different from each other. Yet, there are also some similarities with regard to agriculture and rural development. Their respective positions are important to have in mind in the process of evaluation and preparation of policy instruments.

Table 1 provides some basic information for Poland and the Netherlands. Polish and Dutch farm structures show big differences with regard to the number of farms and the value of production (output) per farm. Yet, there are some similarities too, for instance on the composition of the agricultural production. In both countries the production of milk, pigs and potatoes is important. In the Netherlands, however, horticulture (especially in glasshouses) is in economic terms more important than arable farming. In Poland arable farming is largely in the production of cereals, a situation quite similar to the situation in other EU countries (for instance France and Germany). In the Netherlands, however, arable farmers are more specialised on potatoes (with a strong position of seed potatoes), sugar beet, onions and a mix of other crops, such as flower bulbs and vegetables. The Dutch horticulture production (40% of total agricultural production) is using some 100 000 ha, which is only 5% of total agriculture area. Around 10 000 ha are 'under glass' (greenhouses using natural gas for heating). Excluding the horticulture sector would mean that Poland and the Netherlands have roughly speaking an equal value of agricultural production (some 10-12 billion euro). For this production however Poland has around ten times more land and at least 20 times more farms. Around 50% of the farms in Poland is not or only marginally producing for the market (subsistence farms). In the Netherlands such farms do not exist.

[1] This paper has been discussed at the meeting in The Hague, 26-27 September 2002

These figures (see also table 1) illustrate the gap in structure and development between agriculture in Poland and the Netherlands. Linked to this, with differences in the size of population (Poland has some 40 million, the Netherlands about 16 million inhabitants), the Netherlands has a much larger export volume of farm and food products. In addition, while more than 75% of Dutch exports is to other EU countries, for Poland nearly 50% of its exports is oriented to the EU. It is expected this will increase substantially after accession, partly because some neighbours, who are important markets for Polish products, will also join the EU market.

Table 1. Some basic data of the economy and agriculture in Poland and the Netherlands

Item	Poland	Netherlands
GDP growth	1% (2001)	1-2% (2001)
Inflation rate	6% (2001); 3% (2002)	4,5 (2001); 3% (2002)
Interest rate	15%	5%
Unemployment	15-20%	2%
Employment in agriculture	18%	3,2%
Agriculture in GDP	4%	2,1%
Number of farms (x 1.000)	1.800	90
Decrease of farms per yr	5%	3-5%
Agric. Area (mln. Ha)	18,4	2
Average farm size (in ha)	10	22
Composition of agriculture production (values, output 2001)	* Arable crops 38% (cereals 18%,potatoes 8%) * Horticulture 12% (mainly vegetables, fruits) * Animals 27% (pigs 18%) * Animal products 20% (milk 16%) * Agr. services 4%	* Arable crops 10% (cereals 1%, potatoes 5%) * Horticulture 40% (firstly ornamental crops) * Animals 23% (pigs 13%) * Animal products 19% (milk 17%) * Agr. services 8%
Agricultural output (in 2000, bln. euro)	12,3	19,2
Net value added (bln.euro)	3,5	6,3
Net farm income (bln. euro)	2,4	3,0
Net farm income per farm (x 1.000 euro)	1,3	33
Output per farm (x 1.000 euro)	6,8	215
Exports, agro and food products (bln. euro)	3,0	45
Imports (bln. euro)	3,2	26

Sources: FAPA, Central statistical Office, Warsaw; LEI, The Hague; Eurostat, Luxembourg

One of the reasons for the huge volume of Dutch agricultural exports is that exports are linked to high import volumes (for instance, handling, processing and re-export of coffee, tea, cacao, oilseeds as well as flowers and ornamental plants). The Netherlands has

developed these activities using its favourable geographic position (ports, rivers) near large markets (Germany, France, UK) in the Single market.

It is clear that Poland will have a different position in the European market in the coming years. Some specific aspects of the position of the Netherlands are perhaps not attainable given the geographic characteristics. On the other hand, Poland has the advantage of more 'natural' resources: the larger availability of land and space to develop agriculture compared with the Netherlands with a much higher density of the population and, as a consequence, many non-agricultural claims on the use of land. Linked to this and the present intensive production methods, the Netherlands has a number of major environmental constraints, which limits production expansion in some sectors (especially in the pigs and poultry sector).

8.3 Agriculture policy factors conditioning competitiveness

Next to issues such as the budget and environmental concerns, EU enlargement and WTO negotiations are triggering changes in the CAP. In the context of the policy dialogue between Dutch and Polish policy makers it is of interest to see what developments in the CAP can be expected and how these might affect the Dutch and Polish agricultural sector. The context to discuss these issues is that from 2004 onwards Poland and the Netherlands are both members of the EU. In this context it is important to find out which interests would be shared interests.

It should be acknowledged that besides agricultural policies many factors affect the development of the agricultural sector and its competitive position (see the paper discussing the factors affecting competitiveness).

Experiences in the Netherlands during the last century make clear that research, extension and education as well as land reclamation are good examples of instruments to improve the conditions for farmers to increase productivity and to expand the position in a more international market. Besides that it is clear that economic results in the farm sector benefit from sound general socio-economic developments, in which non-agricultural employment alternatives for the actual farming population are created.

The creation and development of the European Union and its Single Market gave many opportunities for the economy as a whole and to the farm sector in particular. The fast increase of agricultural exports from the Netherlands is an important indicator for this. The Single market gave opportunities for Dutch farming to specialise in products, as was discussed in earlier papers (July 2002).

The CAP was an essential political condition for the creation of the EU and the integration process in last decades. The CAP was instrumental to create free flow of goods among the EU member countries. On the other hand, the CAP contains many rules and regulations to accompany the (free) trade in the EU market. The CAP so far is the outcome of a political process to balance the interests of free trade on the one hand and on the other hand the protection of farmers as well as collective interests related, for instance, to environment and landscape preservation.

From this point of view it is very useful to discuss the following four policy instruments in the context of the future of the CAP and the interests of Poland and the Netherlands:

- market and price support and direct payments;
- production quota and mechanisms of supply control;
- state aid;
- sustainable production.

8.3.1 Market and price support and direct payments

Market and price support by guaranteed (intervention) prices has been the main EU policy instrument for agriculture in the period 1960-1993. The (McSharry) reform of the CAP in 1993 included lower prices for, amongst others, cereals and beef and the introduction of direct payments linked to hectares of eligible crops and to numbers of animals. Agenda 2000 decisions include a continuation of this policy from 2000 onwards, as well as an extension for milk, starting from 2005. The Mid Term Review (MTR) proposals include a decoupling of the direct payments. Farmers will receive an amount of money based on historical references per farm and as part of that per hectare of land regardless the crops produced on it or the animals on the farm.

Direct payments, as they were introduced, help farmers to maintain their income during the period that prices of products decrease. Small farmers who are not delivering products to the market also receive the payments. For them, the payments result in a higher income. However, direct payments in the EU are not adjusted for inflation and for increasing costs of production (higher prices of inputs and labour). To counter increasing costs, farmers may try to increase their productivity (yields per ha and per animal and production per labour unit). As far as this results in more production, the higher volumes of production may result in lower prices on the market, which may call for new adjustments (decreases) of intervention prices. The consecutive price decreases for cereal and beef since the late 1980s are examples of this process. So, direct payments linked to certain products have as a risk that markets deteriorate because the payments are linked to specific products without any relation to market demand. Furthermore, direct payments linked to the production of certain products may prevent farmers from allocating their production in the most efficient way, which is responding to market demands. Decoupling payments gives more room for that.

Countries with a high proportion of land in cereals and other crops with direct payments (oilseeds, protein crops) may benefit when direct payments will be decoupled. Poland is an example of such a country. Decoupling can stimulate a shift from cereals to more labour intensive and profitable crops, as cereals (and oilseeds and protein crops) face relatively low market prices and consequently have low added value. So, in fact decoupling direct payments offers the Polish arable farm sector better opportunities to develop a production structure related to the demands of the market than the actual EU system of direct payments linked to the acreage of cereals (and some other crops as well as the number of specific animals).

In the Netherlands only 10% of agricultural land is sown with cereals; most Dutch arable farmers produce cereals in rotation with other more profitable crops. The rotation is

necessary to prevent diseases and to diminish the use and costs of pesticides. In countries like the Netherlands, then, decoupling may result in lower prices of so far unprotected but important products (potatoes, vegetables). Dutch arable farmers fear a more intensive competition from countries presently more specialised in cereals and oilseeds. Furthermore, it is argued that decoupling would mean that farmers get no direct compensation or remuneration for their production and therefore will be more depended on political decisions. Such concerns, however, are not valid to resist the advantages of decoupled payments: the sector will become more market-oriented, the administrative burden of the system will be lower (for the farmer and governmental organisations) and it results in a better position to negotiate in WTO.

8.3.2 Production quota and mechanisms of supply control

Production quota

Production quotas were introduced in the CAP for milk (1984), sugar (since the 1960s), potato starch (after the CAP reform in 1992) and some other products. So far, they are not used for the majority of products. In fact the products concerned are processed by a decreasing number of factories that administer the volume of production per farm. Costs of controlling the production volume in this situation are not high. For instance, for cereals with many market outlets it would be much more difficult to manage a quota system.

In practice, however, the introduction of the milk quota in the Netherlands as well as in other member countries caused many disputes as regards the reference per farm. Many dairy farmers claimed an exceptional position. For a number of them their claims were based on recent investments in a new stall, others have had diseases of the herd resulting in lower than normal levels of production. To solve these problems the Ministry, advised by farmers unions, had to decide on criteria to be used in individual situations. The volume of (extra) milk quota allowed for such individual requests was around 2% of the national quota. This quota allocation could be realised by a reduction of all individual quotas. It is clear from this that the introduction of quota per farm results in conflicting interests among farmers when quotas are essential for the future of the individual farm and have a high (market) value.

Production quotas were introduced to maintain a certain guaranteed level of prices for producers. Concurrently, milk prices have not been adjusted for a long time. For efficient farmers the present price level is appropriate for having reasonable incomes as well as for investing in expansion of the farm. In countries and regions with good conditions for dairy farming prices for quota are relatively high as a consequence of the profitability of efficient farmers. However, the purchase of quota adds to production costs and this may undermine the position of the milk production and processing in such regions.

Seen that production quotas per member country were fixed on the base of production in the period before 1984, it has frozen the distribution of production amongst member countries and in most member countries amongst regions. This hinders an efficient allocation of milk production. This may be a disadvantage for countries as Poland with a high potential for dairy farming, as well as for the Netherlands with still opportunities to increase milk production, in part on arable land.

The discussion about the continuation of the quota system will centre around the positive aspects of maintaining the quota system, like the guaranteed prices at a reasonable levels resulting in acceptable producers incomes, and the disadvantages of the system such as disputes between farmers and governmental organisations in the period of introduction of individual quota, administrative costs, inefficiency of the allocation of production and extra costs for producers investing in increasing their production as well as higher prices for consumers and the necessity to maintain export subsidies to operate on the world market.

Set aside

Besides production quota, the EU introduced set aside of land to restrict the volume of cereals production. Different forms of set aside are applied, as a permanent obligation on a parcel of land or in rotation. It is difficult to oversee the impact of set aside on the volume of production. Farmers will select their less productive land for set aside and may intensify the production on the other for instance 90% of their land (slippage effect). Set aside of land may increase yields in the years ahead because the structure of the soil can improve.

Besides this remarks, set aside as such does not contribute to employment in and around agriculture (inputs, processing, services) neither to a more attractive landscape. In this context other forms of land use are more appropriate (management of landscape by contracts with allowances of the government). A system of direct payments under certain conditions (cross compliance) can stimulate this process and may create new economic opportunities and employment in and around the farm.

8.3.3 State aid

The EU Treaty of Rome (1958, articles 83-86) allows Member Countries to provide state aid only when approved by the European Commission. In fact for agriculture and agri-processing industry most of the stimulus to invest is related to directives of the farm structure policy and the general structure and regional policy of the EU. In other words, competition between Member Countries is fit in a common framework.

Some Member Countries, however, are more active in providing financial aid than others, depending on their ambitions, their (national and or regional) budget and priorities as well as the pressure of interest groups.

Sometimes the economic situation in the farm sector results in national decisions to support incomes by using specific, direct (amounts per hectare or animal or interest subsidies) or indirect measures (for instance, fiscal facilities) for all farmers or producers of specific products or in specific regions. Often such decisions are discussed and criticised by farm ministers of other countries as well as by farmers' organisations of other countries. The outcome of such a process is often that the member country in question can provide support under certain conditions to prevent unfair competition with farmers in other countries. In fact the European Commission then formulates the decision for this. Exceptional situations as drought and animal diseases with a severe damage to farmers income can justify such support.

Co-financing CAP
Linked to the budgetary costs of the CAP some countries are in favour of financing a larger part of the spending in their own country, for instance on direct payments. This means that these countries agree with a higher own responsibility for the development and support of the farm sector as well as for rural development. In fact this may weaken the financial solidarity among Member States, which is one of the principles of the CAP and the EU policies in general. At the same time, in a process that CAP is changing more and more from market and price support towards instruments stimulating a sound development of rural areas it is obvious that national concerns and interests get a larger weight. Specific local conditions may better be served by a larger (financial) responsibility of the national (and or regional and local) authorities. The shift towards more financial responsibility at national level bears the risk that the financially less favoured member countries (in the South and East parts of the EU) have less opportunity to create the desired policy for rural areas. Unfair competition may be the consequence.

As far as the market and competitiveness conditions of sectors are sensitive for specific policy measures it is necessary to have as much as possible an equal set of policy instruments. Progress in the development of common EU policies, for instance on non-trade issues (food quality, environment, animal welfare) as well as on fiscal and social policy will support this. This has to be guaranteed regardless the way of financing some elements of agricultural policy.

8.3.4 Sustainable production

Sustainable production can be defined in different ways but should relate to environmental and social-economical aspects. Sustainable production is often considered as a process to attain a more balanced situation between economic aspects (profit, income, employment, etc.) and the interests of the society in, for example as regards to agriculture, a pretty landscape and a minimum of emissions of pollution towards air, soil and water.

Over the last decades technical and economic opportunities to intensify agricultural production by using larger volumes of chemicals (mainly pesticides to protect crops, fertilisers to increase yields) have increased much. This resulted in environmental deterioration in a number of countries of the EU, mainly in regions with many 'high value crops' (potatoes, flower bulbs, vegetables). At the same time in some regions like in the Netherlands, Belgium and Germany, the density of livestock (in large part pigs and poultry on farms with often only few hectares of land, as well in some regions with a high density of dairy cows, for instance 4 per hectare) increased very strongly, resulting in a surplus of manure (minerals) for soil and water as well as emissions of ammonia.

In both cases measures were and still are necessary to adjust the agricultural production process and structure. It became clear that economic interests (incomes of farmers, volume of production of agro-industries) restrain a fast adjustment. Interest groups of farmers request often compensations of the government and only a small group of farmers is willing to restrict environmental deteriorating practices on a voluntary base.

For countries like Poland in which the farm sector moves towards a modern and larger scale structure, the experiences in old Member States may be worthwhile for the design of policies on the development of the sector. For instance, the use of chemicals such as

pesticides could be restricted by an intensive system of advice (extension, training based on research at experimental stations and experiences of farmers) to growers. The risk of an 'overuse' of minerals (manure) could be resisted for instance by rules on a maximum herd size in relation to the acreage of a farm (as in Denmark) or by requiring guarantees for a balanced outlet of manure (as in the Netherlands), both in combination with a set of initiatives to improve farm management.

Mid Term Review

The MTR proposals can support the development of a sustainable production:

- The decoupling of direct payments will finish the obligation to maintain the size of the herd cattle without losing premium rights;
- Lower cereal prices will decrease the advantages of regions importing cheap substitutes of cereals and more in general of farms buying compound feeding stuffs. This creates better opportunities for expansion in less intensive areas.
- Cross compliance with conditions set to production methods (controlled with a system of 'farm audits') will be implemented for farmers with direct payments above 5 000 euro.
- More money will be allocated for Rural Development Plans and structural policy instruments (second pillar).

On the other hand farmers may switch from cereals to crops with a higher use of chemicals and perhaps increase the use of these inputs to compensate the lower level of product prices.

Regulations and standards, preferably in a EU context on pesticides and minerals as well as agreements in the sector between farmers and the agribusiness (processing and distribution) are necessary to arrive in a more balanced situation. Codes of Good Farming Practices as well as (common) rules of super markets (united in EUROP) can support this under the condition that farmers experience remuneration for their efforts.

Organic production

Organic farming in the Netherlands is still a small part of total production (in 2001 some 1.5% of agricultural production value). So far, it is far behind Denmark and Austria, where some 10% of farms produce organically. Financial support based on the EU regulation help farmers to shift to organic production methods. Expansion of organic production is restricted because of bottlenecks in the markets (prices for organic products are relatively high and only a part of the consumers is willing to pay that extra for organic products) as well as limited labour supply (to pull out weeds in crops). The objective of the Dutch Ministry is to have 10% organic production in 2010. It is hoped that major stakeholders in the food chains, such as large retailers/ supermarkets and processors (dairies, slaughterhouses), will invest more in the marketing of organic products. Research activities of among others LEI are actually aiming to stimulate the collaboration between partners in the food chain. In the Netherlands SKAL standards act to control production.

9. Recommendations for European agriculture[1]

Kees de Bont, LEI

This paper presents - for discussion - some initial thoughts to recommendations for European agriculture policy in the medium and long run on issues discussed at the meeting in July 2002. The recommendations are formulated on the base of the analyses reported in separate papers and the discussion between the delegations of Poland and the Netherlands during the meeting in July.

9.1 CAP

The Common Agriculture Policy (CAP) has played an important role in the past development of EU's agricultural sector and will continue to play this role in the future of the sector in the European Union. However, the objectives of the CAP have broadened over time from mainly supporting farmers' incomes towards stimulating a sustainable development of agriculture and rural areas, while other interests (non-trade issues as food quality, health, animal welfare etc.) increasingly have been taken into account. This means that the policy instruments have regularly been adjusted and/or changed, while new mechanisms were introduced. In this process there has been a shift from general applied instruments (market and price policy) towards instruments with a large(r) role and responsibility of individual member countries (for instance on Rural Development Programs).

It is essential in this process to guarantee equal market conditions to farmers and the agribusiness in the individual member countries. The European institutions have an important role in safeguarding a fair trade situation on the European market.

Member countries like Poland and the Netherlands with good opportunities in agricultural production and trade in an open market have the opinion that it is important to support a balanced development of the CAP. In this process it is recommended to further reduce market and income support as well as the abolishment of the existing production quota systems. This has to be accompanied by more Common measures focused on structural improvements of the sector and sustainable production methods.

9.2 Single market

The Single market is one of the main achievements of the EU. It is very important for the economic development of EU member countries in general and for the agricultural sector in particular to have a market without trade barriers between the member countries.

It is only possible to maintain the Single market in an enlarged EU under the condition that member countries agree with common policies (regulations, directives, standards etc.) on issues concerning the production and market conditions of different sectors of the economy (level playing field). The Single market can only function for farm products on

[1] This paper was subject to discussion at the meeting in The Hague, 26-27 September 2002

the base of respect of Common (phyto-) sanitary and (minimum) quality criteria (see point 3).

At the same time the Single market requires an appropriate solidarity in financing the EU. Member countries with little economic opportunities and financial means may receive more EU support than other countries (cohesion), however, without undermining the own responsibility of the national authorities to stimulate desired developments.

9.3 Non-tariff barriers to trade

Farm production includes the use of several inputs and methods, which may have a negative impact on the environment (soil, water, air, nature) and may be harmful to human and animal health, as some recent incidents (animal diseases like FMD and BSE, contamination of food with dioxin, MPA, etc.) shows again. Therefore, governments as well as non-governmental organisations and consumers are critical of the quality of products presented on the market. Such incidents resulted in a strong decease of sales of, among others, beef during several months.

Discrimination between domestically produced products and products produced in another (EU-) country is not tolerated. To prevent disputes between member countries as well as enterprises in agribusiness it is important to have common legislation, rules and methods to control product quality and safety and to have objective criteria to decide whether products need to be excluded from the market because of human or animal health risks. Coordination and co-operation between national and European authorities and institutes on food safety, health and quality issues are very important in the coming years. Related to this it is essential that national governments stimulate the agribusiness (such as slaughterhouses, dairies and farmers) to do their utmost to respect sanitary rules.

9.4 Structural differences and policies

Differences in farm structures (acreage per farm, herd size etc.) between and inside member countries are the result of developments in the past. Many factors (social, economic, political) have influenced farm structure. Farms may not have the size to be economically viable on the longer term and farming cannot provide adequate incomes for the farming population.

Experiences in the EU during the last decades show that a Farm Structure Policy (FSP) can improve the sector's structure. FSP contains among others incentives for modernisation and investment as well as early retirement. These measures result at least for part of the farms in improved farming conditions. Other instruments may accompany the structure policy measures. Such measures may be land reclamation aimed at improving the infrastructure and production conditions, extension and training of farmers to improve farm management and financial incentives to improve the market structure (trade and processing industries). Direct payments to farmers can support investments in modernisation of the farm, but because of its general nature it may also result in a delay of the termination of farms and consequently of structural improvement of the sector.

The more recent adjustments of the EU Farm Structure Policy in the framework of Rural (regional) Development Plans provide opportunities to develop farms in a more society- and market-oriented direction. It is important that farmers are facilitated by research, extension, advice and training to develop their enterprise in a direction that provides good economic prospect.

9.5 Rural development

The role of the farmer is changing from (only) producing food and agricultural products for the processing industry towards a more multifunctional role, including the management of public goods as environment, landscape, nature, water resources etc. At the same time the contribution of the agricultural sector in the economic development of rural areas in terms of employment and added value is decreasing.

This development clearly requires an adjustment of EU and national policies. For the member countries with a large part of the population living in rural areas, in some cases with a high rate of unemployment and low incomes, it is desirable to receive extra support of the EU. This has to be based on clear and objective criteria. This support needs to stimulate new economic initiatives instead of increasing agricultural production in a market, which is at least for a number of major farm products under pressure of surpluses. For a part these new economic activities may be integrated in the farms, but it is important to stimulate at the same non-agricultural employment (small and medium size enterprises etc.).

Experiences in the Netherlands show that a growing number of farmers are keen to include new activities as landscape and nature management under the condition that this gives sufficient opportunities to continue the farm. A consistent policy is important to stimulate this. Besides this, farmers have to be stimulated to take initiatives for new activities on their farm, for instance agri-tourism or the processing of products. Facilities can be given for this by advice, training etc. Rural development through the creation of non-agricultural employment (small and medium size enterprises) is an important topic in the current EU-countries and in Poland as well. Accession to the Single market may support this process in Poland and other soon-to-be member states.

9.6 Organic farming

Organic farming is one way to arrive at a (more) sustainable situation of agricultural production. Experiences in the last decade in the Netherlands and other EU countries show that different factors are important for the development of this way of production.

Supporting the farmer to shift to organic farming can only help to overcome some of the bottlenecks to the farmer. Marketing is another important constraint to make organically produced products more popular. Relatively high marketing costs are due to the relatively low volumes produced and traded, and put organic products at a comparative disadvantage against 'mainstream produced' agricultural products. Furthermore, the major-

ity of consumers are rather reluctant to pay higher prices for organic products. At the same time organic products are only little available in the supermarkets, yet.

Given this situation it is obvious that it is important to stimulate the co-operation between the various stakeholders in the market chain of agricultural and food products to develop organic production, processing, marketing and distribution on a larger scale.

Next to organic farming, which may, however, reach a market share of 10% of the total food market in most member countries within 10 years, it is obvious that there is a need to stimulate more in general adjustment of production methods, especially with regard to the use of pesticides and minerals (fertilizers and animal manure) as well as the use of energy and water. This requires the implementation of legislation in these fields at EU and national levels, and to meet the requirements set in the framework of Good Agricultural Practice. Besides that 'cross compliance' may stimulate farmers to more sustainable production methods.