

SUSTAINABILITY OF FINNISH AGRICULTURE IN THE CONTEXT OF CAP REGIMES

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The article analyses the main trends of Finnish agriculture during EU membership. Finnish agriculture had to cope with essential changes after joining the EU in 1995. The relatively closed market has been opened and the competition within the single market increased. Due to specific unfavourable natural conditions the Finnish agrarian sector had only limited possibilities to face with increased competition. Finland lost the possibility to regulate its agrarian sector themselves because of the replacement its national agricultural policy by the Common Agricultural policy. Joining the EU accelerated structural changes in the Finnish agrarian sector. But Finland was also able to make use of offered compensations and its strengths. Despite its disadvantages, Finnish agriculture has not failed within the competitive environment of the single market and follows the ways towards sustainability.

Finland; sustainability; competition; agriculture; Common Agricultural Policy; Single Market

INTRODUCTION

Being a member of the European Union since 1995, Finland has a relatively long-term experience with managing its agrarian sector under the rules of the Common Agricultural Policy (CAP). Finland joined the EU at the time of the McSharry's reform, which was giving up the original strong support of agricultural production. Because of the need of a stronger support for agriculture in northern climatic areas, the CAP rules adoption meant really radical changes for Finnish farmers. Due to a rapid cut in producer prices caused by an implementation of the new market organizations, the competitiveness of the Finnish agrarian sector seemed to be threatened. A rapid transition from a relative closed market to an open market has brought many difficulties to Finnish farmers. Finnish agriculture had to cope with such disadvantages as unfavourable production conditions (for example, the Finnish crop yields are usually at the half level compared to average yields of middle European countries). The next handicap for Finnish agriculture is also its unfavourable structure. Finland is a relatively large country with a sparse population, and it is difficult to keep suitable economic activities in rural areas and to maintain the population there (Tomšík, Rosochatecká, 2007). The article aims to analyse the Finnish specific conditions and approach to maintain the sustainability of its agrarian sector under the CAP rules.

MATERIAL AND METHODS

The authors of the article have been focusing on the EU integration of the northern countries: Sweden and Finland since the late 90's within the institutional research activity "Effective Integration of the Czech Agribusiness within the European Structures – a Pre-Requisite of Sustainable Development". The subject of this article is an

analysis of adaptation of Finnish agriculture to the CAP regimes since joining the EU. As a background, the basic characteristic of the Finnish agrarian sector and its development during the EU membership is presented. Attention is paid to the way Finnish agriculture has been integrated into the CAP conditions and how it was able to eliminate its specific problems. Results of this article were elaborated within the institutional research intention MSM 6046070906 "Economics of resources of Czech Agriculture and their efficient use in frame of multifunctional agri-food systems". The article is drawing on results from the above mentioned research activities, official sources of the European Union, and from sources of the Finnish research institute MTT Helsinki and the Statistical Office of Finland. The results of the article are based on relevant document analysis; the conclusions included in the discussion are a synthesis of presented results.

RESULTS

The conditions for farming in Finland have changed essentially since joining the European Union. Implementation of CAP regimes, quite different from the former national approach, called for significant adjustment of all activities within the whole agrarian sector. Finland is a northern country of the European Union with a specific farming system forced upon it by natural conditions. The particular situation of Finland illustrates the statistical comparison of the European Commission (2009). The share of the utilised agricultural area (UAA) on the total surface is only 6.8% (2.3 million ha) which is very different compared to other EU countries. Despite the natural development, structural changes in Finnish agriculture have accelerated since joining the EU. A decline (in total numbers) of agricultural holdings was noticed, as well as of labour in agriculture. Whereas more than 100,000 agricultural holdings were active at the time of joining the

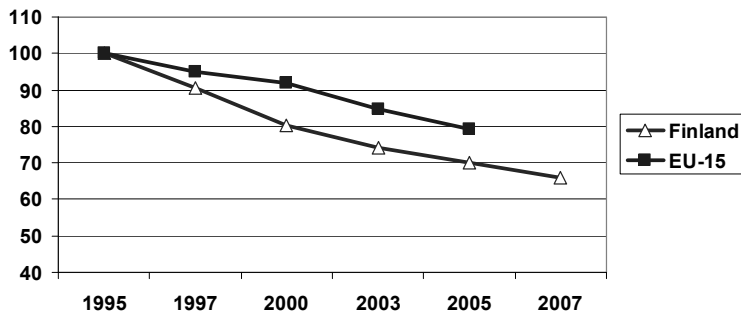


Fig. 1. Development of farm numbers in Finland and EU-15 (1995 = 100)

Source: European Commission: Agricultural Statistics

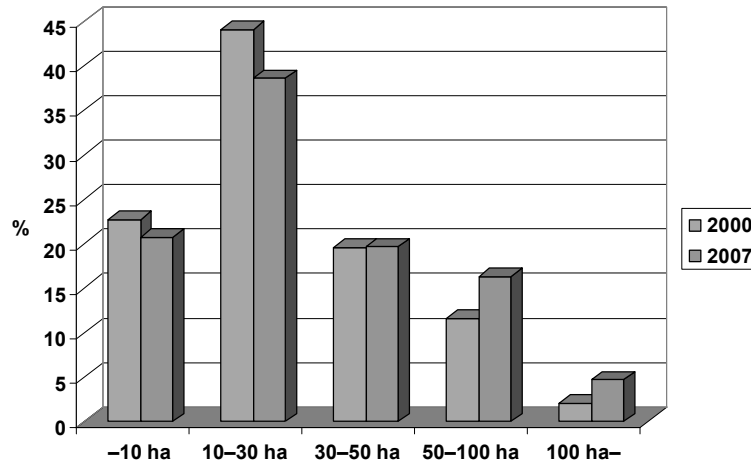


Fig. 2. Size class distribution of Finnish farms (number of farms as %)

Source: Statistics Finland: Finland in Figures

EU, only about 66,800 were reported twelve years later, in 2007 (MTT, 2008). As illustrated in Fig. 1, the decline of the number of farms in Finland has been more rapid (by about 3% in annual average) compared to the EU-15 average. The total number of employees dropped between 1995 and 2007 by 52,000 (by 37%) to 89,000 employees, which represents 72,000 annual working units (AWU), according to Eurostat (2009). On the other hand, a level of technical equipment and effectiveness of the production have been increasing which compensated the diminishing utilisation of labour. The higher concentration of agricultural production has led to specialization on a regional, as well as on a farm level. The specialisation resulted in a decline in farms' self sufficiency. An apparent drop in self-sufficiency was noticed in beef production in recent years.

The share of livestock farms (in the total number of farms) has fallen to 32% in 2007 while crop farms have increased their share to 62% (in 1995, this proportion was 52% of livestock and 39% of crop farms). For example, the number of milk farms has been falling by about 7% a year during the last decade. In total numbers, the number of Finnish milk farms has fallen to about 14,000 in 2007 (compared to 35,000 milk farms before Finland joined the EU and 16,500 in 2005). Crop production is the only agricultural sector where the number of farms has been growing in recent years. A decline in the total numbers of farms is typical mainly for small farms, whereas the number of farms over 50 ha of cultivated area has doubled during the EU membership period. The trend in farm size development is shown in Fig. 2. The average size of

a Finnish farm increased from 22.8 ha in 1995 to 33.5 ha in 2007.

The total cultivated area has increased during the Finnish membership in the EU. It has grown by more than 111,000 ha between 1995 and 2007 to 2.25 million ha, which represents an annual growth rate of about 3.6%. The main reason for this increase is the introduction of the CAP rules, which have made cultivation of less productive parcels more attractive due to area payments. The wheat area has almost doubled during the EU membership. Finnish cereal production is nowadays able to meet the domestic demand. Milk production was falling in the first years in the EU; however it started to increase since 1997 and reached a peak in 2001 and 2002. In recent years, the production of milk has again started to decline. The number of dairy cows has fallen to 296,000 in 2007, which represents an average annual decline by 2.15% during the EU membership period. This decline was compensated by increasing milk yield, which has gone up to 7,796 l per cow in 2007, whereas 5,982 l was the average level in 1995 (MTT, 2008). Milk production is a very important agricultural production sector in Finland.

The decline in total numbers was characteristic for cattle production in general. Whereas Finland was almost self sufficient in beef production in 1995, the level of self sufficiency reached only 90% in 2007 (Statistic Finland, 2009). The development of livestock and crop production in 1996, 2004 and 2007 is presented in Tables 1 and 2.

The sharp price decline in 1995 and further development to 2007 is presented in Figs 3 and 4. While the original Finnish agricultural policy enabled a very high level

Table 1. Development of livestock numbers and milk production (in 1,000 heads, mill. l)

	Cattle	Pigs	Poultry ¹⁾	Sheep	Milk
1996	1,146	1,395	5,429	150	2,261
2004	969	1,365	3,981	109	2,304
2007	927	1,448	8,898	119	2,226

¹⁾ Egg-laying hens

Source: Information Centre of the Ministry of Agriculture and Forestry, Helsinki

Table 2. Development of crop production (in 1,000 t)

	Wheat	Rye	Barley	Oats	Potatoes	Sugar beet
1996	459	87	1,860	1,261	766	897
2004	782	62	1,725	1,002	619	1,064
2007	797	87	1,984	1,222	702	673

Source: Information Centre of the Ministry of Agriculture and Forestry, Helsinki

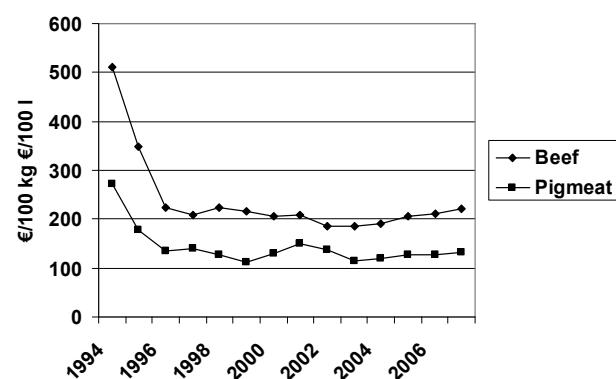
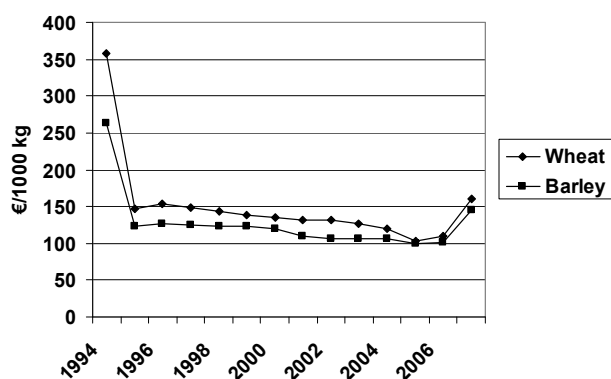
of producers' prices, the adaptation of CAP price regimes essentially reduced prices. Whereas a producer price for wheat was above EUR 350 in 1994, (that time expressed as ECU), less than EUR 150 (ECU) was reached a year later.

After several years in decrease, the agricultural income has again risen since 2007 and reached the level of EUR 988 million (a year before, it was only EUR 901 million). The cause was a higher increment of total return (due to crop and livestock production growth in 2007) than an increment of total costs. Despite such positive developments, the agricultural income remains almost 25% below the level in 2002. As presented in the Fig. 5, the most rapid fall in agricultural income occurred in the first years after joining the EU. Unfavourable long-term development was caused by increasing costs of production and a lower level of total agricultural return due to cuts in prices. Despite negative development of agricultural income after joining the EU, Finnish agriculture remained profitable for the whole period of the EU membership.

Adequate sales are one of the basic factors influencing an agricultural income. An implementation of quality strategy of the food sector is based on co-operation between different parties of the whole food chain (MMM, 2004). With respect to production possibilities, Finland is

an important exporter of food. The most significant destination is Russia with more than 22% of the total Finnish export value of agricultural and food products. The other important partners are Sweden (above 16%) and Estonia (nearly 10%).

The above described development of agrarian production in Finland and the income situation of farmers were developed under the influence of agri-political instruments. The Finnish agricultural policy is (like in all EU member states) based on support schemes set by the CAP. The CAP rules determine the market support, LFA support and environmental support for Finland (R o s o c h a t e c k á, T o m š í k, 2003). The total level of contributions based on CAP (financed full and co-financed by the EU) according to preliminary data reached the level of EUR 1,334 million in 2008 (about EUR 208/ha UAA). The EU contribution shares nearly 58% (EUR 769 million). Payments for arable crops and animals (CAP market support) are fully covered from EU sources, compensatory allowance for LFA and agri-environmental support are co-financed by the EU. The original aim of the national support was to reduce the negative impacts of sharp price reduction after joining the EU, but more than ten years later, it is still an important element of agricultural support. According to preliminary data, the national support was es-



Figs 3 and 4. Price development of Finnish agricultural products
Source: MTT Helsinki

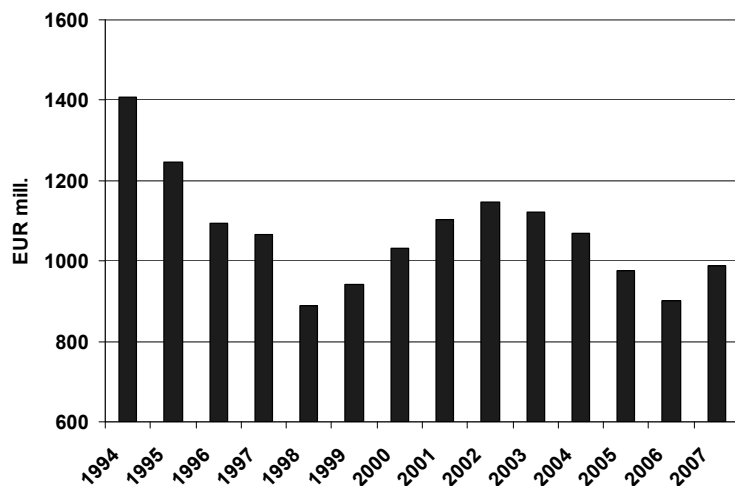


Fig. 5. Development of the Finnish agricultural income (at 2007 prices)
Source: MTT Helsinki

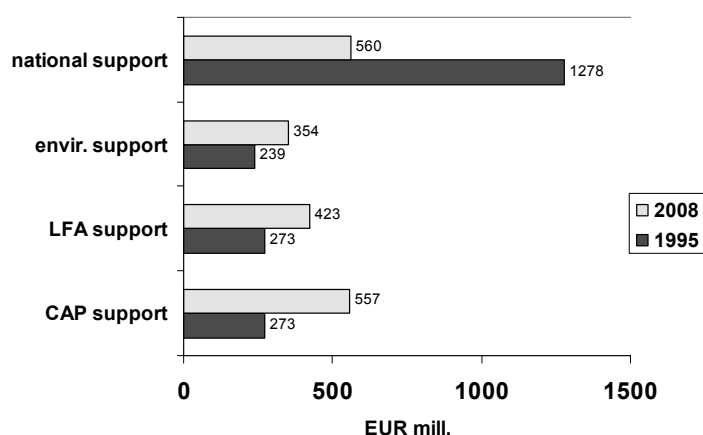


Fig. 6. Structure of Finnish agricultural support in 1995 and 2008
Source: MTT, own calculations
2008 – preliminary data

estimated at more than EUR 560 million in 2008. National support comprises northern aid (about 59% of the total national support), national aid for Southern Finland (17%), national supplements to environmental support (7%) and national supplements to compensatory allowances for LFA (21%). The rest is used for other national measures. National support aims to align conditions for farming in various climatic regions. For this reason, the northern aid is the most important part of the support schemes. The importance of financial support to Finnish agriculture can be seen in the return on agriculture. In 2007, about 30% of the total return on agriculture came from the above mentioned support schemes. The development of the agricultural support is shown in Fig. 6.

The current CAP regimes are divided into two pillars. Whereas the 1st Pillar consists of market support, the 2nd Pillar includes rural development policy. The Rural Development Programme (RDP) for mainland Finland for the period 2007–2017 proposes the total public funding of EUR 6,625.7 millions (which represents an annual sum of nearly EUR 1 billion on average), whereas the EU contribution should be at the level of EUR 2,062.5 (31% of the total funding). The strategy of the RDP is focused on Axis 2, to which nearly three quarters of the sources should be allocated (MMM, 2008). The emphasis on environmental aspects is much higher than in the majority of other EU countries.

Priorities of the Finnish rural development approach can be illustrated by following preliminary support allocations among the axes of the RDP:

Axis 1: Improving the competitiveness of the agricultural and forestry sector	11.0%
Axis 2: Improving the environment and the countryside	73.4%
Axis 3: The quality of life in rural areas and diversification of the rural economy	9.4%
Axis 4: Leader	5.3%
Technical assistance	0.9%

Natural preconditions for farming are the best and most diverse in southern and western Finland. These areas also offer better opportunities to work outside due to relatively short distances. On the other hand, the natural conditions restrict agriculture and other economic activities in northern areas of Finland. The importance of agricultural activities in rural areas can be stressed by a high share of agriculture in total rural employment (11.6% in 2004). The importance of agriculture is much higher in the sparsely populated areas.

Because of wide aims of the rural development policy, the CAP rules create opportunities for farm diversification and non-agricultural activities. Diversification of economic activities has a long tradition in Finland. Farmers always had to look for alternative income from various

sources due to uncertain yields. Diversification activities have been increasing since the 90's (there were more than 24,000 diversified farms in Finland in 2005). New farmers' activities are often oriented on services like contracting machines (MTT, 2007). It is also common that diversification activities result in more directions (more than one third of diversified farms practice at least two non-agricultural activities). Such additional activities are often linked in some way to agriculture. But rural areas are impressed also by the growing importance of other (non-agricultural) activities within small rural enterprises. Most of them are active in services or in the food processing industry. One of the fastest growing sectors is rural tourism.

Production of renewable energy is an opportunity for Finnish agriculture and rural enterprises. Finland is a significant user of bioenergy. Already in 2003, 23% of the total consumption of primary energy in Finland was produced using renewable energy sources, primarily wood and wood-based fuels and hydropower (MMM, 2006). But agriculture is also an important supplier of inputs for production of heat or electricity. In 2005, almost 9,000 ha of arable land were used to produce crop-based material for burning. Biofuels are currently manufactured in large factories, but a complementary small scale production will be promoted to create opportunities for local entrepreneurship. Interest to construct biogas plants on farms is rapidly increasing at the present time.

DISCUSSION

The membership of Finland in the EU resulted in essential changes in the agrarian sector. An increase of concentration reduced the number of holdings and employees; specialisation has changed the production structure and has decreased self-sufficiency. The lower degree of self-sufficiency could be seen as one of the negative impacts of joining the EU; but in general, the level of self-sufficiency in foodstuffs is still high enough in Finland (with regard to specific unfavourable production conditions) and the reduction has more or less reduced overproduction. Although a concentration can be seen as one of the consequences of the EU membership (reaction on the implemented CAP rules), this trend already appeared before membership.

Unlike other EU countries, the impact of the CAP rules in Finland is diverse. CAP encouraged farmers to extend cultivation of land due to payments; milk quotas suits the Finnish farmers because of limited competition within the Single Market. The acceptance of proposed abolition of milk quotas will require a further adaptation of Finnish agriculture, because the current system also enables a production in less favoured areas where other opportunities are scarce.

The development of the Finnish agricultural production can indicate that a structural adaptation due to the CAP rules was necessary, nevertheless no dramatic changes and expected downturn has occurred. The drop in prices

since 1995 did not lead to extreme reduction in agricultural production as illustrated in Tables 1 and 2. An impact of the CAP regimes resulted in a lower level of agricultural income due to rising inputs and low output prices. In any case, an increase of agricultural income at the beginning of the millennium indicates that a stabilisation under CAP rules can be achieved.

The sustainability of the Finnish farming system would not be conceivable without a specific approach of the agricultural policy. Sustainability of agriculture means following three main goals including environmental, economic and social aspects. To reach these goals, Finnish approach to the CAP reflected a necessity to compensate for the disadvantages of its agrarian sector. Finland had already attempted to cope with the expected problems during the pre-accession period for this reason.

Achieving the goals of sustainability of Finnish agriculture is supported by the CAP reform as well. Decoupling of the payments has the potential to bring advantages to Finnish farmers in the form of price stabilisation (a reduction in production due to decoupling would slow down a price decrease). Farmers who would continue in agricultural activities (and would probably expand) would then find more space on the market. However no radical changes are expected. Decoupled payments could slightly change the structure of agricultural production; more likely, they could encourage the shift from livestock production to crop production or to set aside, eventually to the production of plants offering new income opportunities. The reformed market support can thus contribute to an achievement of the economic goal of sustainability. It is necessary to stress that market support within the 1st Pillar has a higher importance in Finland than in other EU countries because of unfavourable production conditions.

Agri-political measures alone would be not enough to keep agricultural production at the current level. The consumer orientation and building up food chains belong to the factors, which can maintain revenues from sales. This approach is based on close collaboration between a primary production and processing.

Because the CAP does not consider the northern agriculture with small farms as a priority, national support has become of great importance. The model of support, which is however acceptable only in extreme production conditions, belongs to elements of stability of Finnish agriculture and rural areas within the Single Market. Stabilisation of sparsely populated areas has a positive effect on social goals by ensuring adequate income opportunities in rural areas.

The rural development policy is the next important factor, which can contribute to the sustainability of Finnish agriculture. Finnish rural policy was dominated by agriculture for a long time. Agriculture has always had a significant role in maintaining the settlement in rural areas. Finland is still a rural country where agriculture has different meanings depending on the type of rural area. The shift in the CAP orientation from a production support to sustainability and rural development support suits Finnish conditions. Finnish rural areas have never been purely ag-

ricultural areas. Besides typical farms providing agricultural and forestry activities, the structure of Finnish rural holdings consists of many diversified farms and other holdings with few or no relationship to agriculture. The support allocation within the RDP points out the importance of non-production functions of Finnish agriculture, oriented mainly on the environmental goal of sustainability.

CONCLUSION

Although the sustainability of Finnish agriculture was open to dispute at the time of joining the EU due to many disadvantages, the time horizon of more than ten years has confirmed the viability of Finnish agriculture in the competitive conditions of the Single Market. Joining the EU has led to many changes in the Finnish agrarian sector, not all of them were positive; nevertheless no dramatic downturn has occurred. Although the regimes given by the CAP have not the same impact in all EU countries and some of the rules will always be seen as inconvenient for certain countries, the Finnish approach can demonstrate that the CAP offers possibilities to strengthen competitive advantages despite some negative effects. The Finnish approach also pointed out that the success of an agrarian sector in the EU is not fully influenced by CAP rules, but a national approach and orientation on strengths are other important elements to reach the goals of sustainability.

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Udržitelnost finského zemědělství v kontextu pravidel SZP.

Scientia Agric. Bohem., 40, 2009: 90–95.

Vstup Finska do Evropské unie v roce 1995 znamenal pro jeho agrární sektor radikální změnu, kterou vyvolalo zejména zavedení pravidel společné zemědělské politiky (SZP). Nejvýraznější dopad se očekával od zavedení jednotných cen v rámci tržních řádů SZP. Nastolení nové rovnováhy bylo doprovázeno urychlením procesu koncentrace a rapidním úbytkem pracovních sil v zemědělství. Nové podmínky vyvolávaly tlaky rovněž na změnu struktury výroby. Ta se projevila v částečném přesunu orientace z živočišné produkce na produkci rostlinnou. Negativní dopad podmínek SZP byl zaznamenán u celkového zemědělského příjmu. Kvůli rostoucím vstupům a redukci cen se snížila celková rentabilita finského zemědělství. Udržitelný vývoj finského zemědělství byl zabezpečen využíváním relevantních nástrojů zemědělské politiky, především finančních podpor. Pro udržitelnost zemědělství v extrémních severských podmínkách sehrály důležitou roli národní podpory. K přednostem finského agrárního sektoru patří schopnost propojování prvovýroby a zpracovatelského průmyslu. Zemědělské a potravinářské výrobky se staly významným obchodním artiklem kompenzujícím vyšší tlaky v rámci jednotného trhu. Finské zkušenosti poukazují na to, že i zdánlivě handicapovaný sektor může v jednotných podmínkách SZP obstát díky orientaci na silné stránky a využívání všech dostupných nástrojů.

Finsko; trvalá udržitelnost; konkurence; zemědělství; společná zemědělská politika; vnitřní trh

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