

# The influence of state subsidies on the development of organic agriculture in the Czech Republic and in the EU

*Vliv státních podpor na rozvoj ekologického zemědělství v České republice a v EU*

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**Abstract:** The paper presents selected results of the research project NAZV QF 3278 focused on objectification of supply and demand development for organic products. The evaluation of state subsidies' influence on the development of organic agriculture in the Czech Republic and in selected countries of the EU is also included.

**Key words:** organic agriculture, development of organic agriculture, state subsidies for organic agriculture

**Abstrakt:** Příspěvek uvádí vybrané výsledky výzkumného projektu NAZV QF 3278, zaměřeného na objektivizaci vývoje nabídky a poptávky po ekologických produktech. Jsou posuzovány vlivy státních podpor na rozvoj ekologického zemědělství v České republice a ve vybraných zemích Evropské unie.

**Klíčová slova:** ekologické zemědělství, vývoj ekologického zemědělství, státní podpory ekologického zemědělství

Organic farming achieved a considerable development in the Czech Republic recently. In 2003, there were 810 organic business units farming on 255 thousands ha of agricultural land in the Czech Republic, which is 5.97% out of the total area of agricultural land in the Czech Republic. The extent of organic agriculture expanded greatly in the last decade. Growth can be seen regarding the organically farmed area as well as the number of organic farms, especially after 1997. Organic farmers are mainly focused on permanent grasslands and cattle breeding. Organic permanent grasslands represented the area of 231 683 ha in 2003, which is 90.86% out of total organic land in the Czech Republic. Organic farming on arable land represents only 19 637 ha, what is only 7.70% out of total organic land area. Organic agriculture is mainly practised by private farmers, they represent around 92% out of total number of the certified organic business units.

## GOALS AND METHODOLOGY

The goal of this paper is to analyse the present state of government support for organic products' supply in the Czech Republic as well as in foreign countries, especially in the EU member countries. The level of government

support is considered according to the following criteria:

- Absolute level of support provided in the Czech Republic for the development of organic agriculture and evaluation of its effectiveness,
- The level of support provided in the Czech Republic as well as in the EU countries per area unit of organic land,
- Supports stimulating the expansion of organic agriculture by the way of other measures favouring particularly organic agriculture in some EU countries.

This paper is a partial outcome of research project NAZV QF 3278 "Objectification of supply and demand development for organic products", solved at the Faculty of Economics of the Mendel University of Agriculture and Forestry Brno.

## RESULTS AND DISCUSSION

### Overview of the support state in the Czech Republic

Organic agriculture was supported in years 1990–1992 in the Czech Republic, since 1993 the payments of financial subsidies were suspended and organic agriculture was supported indirectly by the way of various environmental programs oriented e.g. at restructuring of plant production

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Table 1. Financial support paid for organic agriculture in years 1998–2002

Year	Paid financial support in CZK
1998	48 091 000
1999	84 168 000
2000	89 101 971
2001	167 966 104
2002	210 861 131

Source: www.mze.cz

by grass or forest plantation, maintenance of countryside in cultivated standards, maintenance of permanent grasslands, restructuring of the final use of agriculture production and the like. This state remained till 1998, when the subsidies for organic agriculture were restored as may be seen in Table 1. Till 1999, the subsidies were granted through supportive programs for support of the activities participating in countryside maintenance. In the process, the financial subsidy should compensate for the loss caused by organic farming on land with the average or lower price of 4.01 CZK per 1 square meter. The level of subsidy was covariant with the point rating of fulfilling the criteria of the supportive programs.

Since 2001, the state grants subsidies for supportive programs were based on § 2 article 3 of the Act No. 252/

1997, while fulfilling the criterion set by the government regulation No. 505/2000 as amended by the regulation No. 500/2001 for natural persons or legal persons.

While evaluating the support granted on the base of government regulation, it is necessary to highlight some aspects, which accompanied the introduction of these subsidies. It was first of all:

- Support of economic stability of agricultural companies in less favoured areas and thereby to keep rural population in these areas,
- Desirable expansion of grassland area and thereby lowering the area of arable land,
- Aforestation of less valuable agriculture land,
- Expansion of pastoral technologies,
- Expansion of organic agriculture,
- Adherence to the principles for the appropriate agriculture practice.

Subsidies for organic agriculture were realised on 194 495 ha in 2002, which is by 25.3% more than it were in 2001. This increase of supported areas refers to all cultures; the greatest increase was realised in permanent grasslands. The level of financial subsidy and the area of supported cultures can be seen in Table 2 and 3.

The principles of organic farming were applied on 4.5% of agriculture land in 2002. In 2001, the support for organic agriculture was as high as 168 mil. CZK and in 2002 it was increased to 210.8 mil. CZK. That represents 7.8% out of all subsidies granted to agriculture under the government regulation.

Table 2. Financial support for organic agriculture in the Czech Republic in thousands CZK

Plantation	2001		2002		Index 2002/2001
	thousands CZK	%	thousands CZK	%	
Orchards, vineyard, hop-fields	1 158	0.7	1 656	0.8	1.43
Arable land	23 661	14.1	28 954	13.7	1.22
Vegetables on arable land	202	0.1	232	0.1	1.15
Permanent grasslands	142 945	85.1	180 019	85.4	1.26
Total	167 966	100.0	210 861	100.0	1.26

Source: The MA CR report on evaluation of agricultural support according to Government Decree No. 505/2000 Coll., in wording of the Government Decree No. 505/2001 Coll., MA CR, Prague 2003

Table 3. Area of supported plantation and rates in organic farming in the Czech Republic

Plantation	2001		2002	
	ha	CZK/ha	ha	CZK/ha
Orchards, vineyard, hop-fields	331	3 500	473	3 500
Arable land	11 830	2 000	14 157	2 000
Vegetables on arable land	58	3 500	68	3 500
Permanent grasslands	142 935	1 000	179 979	1 000
Total	155 154	–	194 495	–

Source: The MA CR report on evaluation of agricultural support according to Government Decree No. 505/2000 Coll., in wording of the Government Decree No. 505/2001 Coll., MA CR, Prague 2003

At the end of the subsidy evaluation, it is possible to mention, that the support level in the Czech Republic does not compensate for the higher amount of expenses per one unit of realised production associated with organic farming. It is possible to find the solution for this problem in the area of prices, marketing, and suppliers' relations as well as the use of some untraditional proposals from abroad in particular from the EU countries (Jánský, Živělová, Novák 2003).

### Overview of the supports state in the selected EU countries

Organic agriculture achieved a great expansion in the EU countries lately. It was influenced mainly by the EU support policy, which since second half of 90ies allows for a direct financial support for organic farmers in the framework of support for environment-friendly agriculture systems. The different approaches to state support system – exercised in the selected EU countries e.g. Belgium, Denmark, Finland, France, the Netherlands, Italy, Germany, Austria, Spain, Sweden and the Great Britain – are characterised in this part of the paper (Živělová, Jánský 2002).

The direct support for organic farmers is granted in *Belgium* since 1994 in the framework of the Council Regulation No. 2078/92. Nowadays, this regulation was replaced by the regulation No. 1257/99. The support is different for the conversion period and for the actual organic farming. The level of support applied till 1998 is shown in Table 4.

In 2002, there was introduced by the government in the region Flanders the Plan for Development of Organic

Agriculture. This document contains 19 articles representing measures for the expansion of organic agriculture land. It contains for example investment support up to 40% of the expenditures cost, support of individual consulting for organic farmers in the conversion period, building network of sample organic farms, inclusion of the organic agriculture problems to the schooling system, support of research, concentration of information in one centre and so on. The total budget for this project represents 3 mil. EUR.

Financial support for organic agriculture in *Denmark* is limited for the period of 5 years, in first two years the farm goes through conversion. The overview of the granted amounts is shown in Table 5.

Pig breeding is specially supported in Denmark. The farms with pig breeding receive almost 2 000 DKK per 1 ha. However, the amount of subsidy is limited. The support can reach no more than 5 000 DKK per one farm.

The government also supports marketing, research and development of organic farming. In the first years of supporting organic agriculture, there were almost 2/3 of resources appointed for:

- Information for farmers and consumers,
- Education and exhibitions,
- Consulting, extended services for farmers,
- Research and field-testing,
- Sample farms,
- Products development.

*Finland* introduced the first scheme for support of conversion to organic agriculture in 1990. The farmers' price index decreased by 26% when Finland became the EU member; it caused a major problem in the first year of the EU membership, primarily in the section of the convention-

Table 4. Subsidies for organic farmers till 1998 (EUR for 1 ha of agriculture land)

The use of land	First and second year of conversion	Further years of organic farming
Annual crops eligible for payments for arable land	180.52	111.55
Other annual crops	300.87	223.10
Pastures	297.47	173.53
Vegetables	300.87	297.47
Perennial crops (fruit trees)	842.47	743.68

Source: Ecocert a Blik 2001/2002

Table 5. Support of organic farms (DKK/EUR)

Indicator	Year 1	Year 2	Year 3	Year 4	Year 5
Organic production	600/80	600/80	600/80	600/80	600/80
Conversion period	450/60	450/60			
Production without market milk production	2000/268	2000/268	1200/160	500/67	500/67
Production excluding market milk production and pig breedings			2000/268	2000/268	2000/268

Source: Strukturdirektoratet 1999

al cereal growing. A lot of farmers started to seek for other alternatives. Organic agriculture was one of the significant possibilities. A special payments for organic agriculture in the form of conversion support payments or support payments for organic production are part of the Finnish agrarian-environmental program FAEP and its supplementary protection scheme SPS introduced in 1995. The support payments for conversion are paid for the 5-year period. The farmer receives 147 EUR per 1 ha and year. The support payments for already converted areas are 103 EUR per 1 ha and year. The production support contracts are also made for 5-year period. The support of conversion made organic agriculture rather an attractive alternative in agriculture business. Organic agriculture is unprofitable only in the case of pork meat and vegetables.

Nowadays, organic farms in *France* are financially supported only in the conversion period. The existing organic farms do not receive any subsidies for the given kind of agriculture. The limit level of subsidies is 500 000 FRF (75 770 EUR) for one farm in conversion. The level of subsidies – as it is shown in Table 6 – is covariant with the use of organic agriculture land. A maximal length of conversion period is 5 years.

Training and consulting is also support for the organic farming. At the national level, the association FORMA-BIO, established at the end of 80, organises the training. In some institutions for adult training, it is possible to participate in courses oriented to organic agriculture or other organic components. This course lasts 1 200 hours and it also contains hands-on training.

Agriculture policy was previously an almost exclusively bio-products production- and export-oriented; nowadays it is oriented for quality production. The goal of French government is to set France as an European leader in organic agriculture.

In *the Netherlands*, organic farmers can use besides the standard system of support (similar as the one in Belgium) also a tax concession. In 2000, there was for this purpose provided 9.1 mil. EUR. Organic farmers and producers can deduct up to 10 227 EUR from their income taxes. Organic farmers can also get some financial means for their enterprise from the title for rural areas development. In this case, the Dutch government applied for the support from the EU at the level of 56.4 mil. EUR. Out of this amount, 38 mil. EUR is dedicated for sustainable agriculture, of which part is also organic agriculture. The EU validated this plan after the consultation with other member countries. Every year, there is provided 4.3 billion EUR for member countries. The plan quality sets the amount which is the EU willing to provide.

In *Italy*, the subsidies for organic agriculture are not paid directly as it is in other countries. In 2000, certain goals were set at the national level for organic agriculture development, first of all to attain 10% of organic land out of the total agricultural land area. The following instruments are used for fulfilling this goal: support and information for consumers, public campaigns, grants for experiments, support for research and development in the field of organic agriculture. The private sector had to rely only on own strength with the lack of government

Table 6. Subsidies for conversion in organic agriculture in France

Product type	Subsidies in EUR for ha and year	
Seed, vegetables, aromatic annual and perennial medicinal herbs	year 1 and 2	511
	year 3 and 4	255
	year 5	170
Orchards	year 1 and 2	511
	year 3 and 4	255
	year 5	170
Other annual crops	year 1 and 2	409
	year 3 and 4	205
	year 5	136
Grasslands	year 1 and 2	180
	year 3 and 4	90
	year 5	60
Olive groves	year 1–3	640
	year 4	385
	year 5	255
Other permanent crops	year 1–3	980
	year 4	588
	year 5	392

Source: Observatoire national de l'agriculture biologique, Resultats 2000

support. Mainly older associations invested a lot of financial means into production organisation, distribution and support of organic products on a local market, support of authorities, international movements for implementation and improvement of national and the EU regulations.

A lot of regions in Italy introduced their own agrarian-environmental programs. The public funds at the national, regional or local level invest more and more into organic agriculture, research, development and marketing. It means a greater chance of getting financial means for organic farmers and processors. In May 2001, a new campaign was launched for promotion of organic products including the TV commercials, newspaper and magazine advertising. The financial sources for this campaign come from new 2% tax for synthetic pesticides. The budget for this campaign was roughly 7 250 000 EUR.

In *Germany*, the organic farms receive government subsidies since 1989. As a consequence of this financial support, the number of organic farms expanded rapidly at the end of 80ies and at the beginning of 90ies, the supply of organic products was also increased.

Thanks to the federal structure of Germany, each state has to propose its own program for support of organic agriculture. Subsidies for arable land and permanent grasslands were circa 125 EUR per ha and year (100 EUR for already existing farms) and 600 EUR for perennial crops (500 EUR for already existing farms). The federal state can lower these subsidies by no more than 20% or increase them by no more than 40% according to the situation in the region. In 2002, the support for organic agriculture was increased. The marketing initiatives are also supported besides direct payments for farmers. According to the directive for marketing support of organic agricultural product, revised in 2002, the subsidies are determined for marketing producers associations, for processing and development of marketing concepts. This directive is implemented in all federal states.

The government subsidies were the main incentive for the great expansion of organic agriculture in *Austria* in 90ies. The way of providing subsidies went through a considerable development. In 1989, three Austria provinces – Upper and Lower Austria and Styria – provided subsidies for individual farmers transforming to organic agriculture. In 1991, the Federal Ministry of Agriculture and Forestry introduced subsidies for farms transforming to organic agriculture. In 1992, there were already provided subsidies for transforming as well as certified organic farms. In 1995, there was launched agrarian-environmental program under the name OePUL (Austrian national program for support of extensive agriculture protecting the environment). Farmers participating in this program were bound by contract for 5 years. The program was over in December 1999 and was followed by new 5-year contract with OePUL, launched in 2000.

The government subsidies received through OePUL included circa 95% of the registered organic farmers. Almost 50% of subsidies are paid from the EU budget, federal and state governments pay the remaining part in the

following ratio: 60% by federal and 40% by state government. The subsidies are provided for every hectare in the amount of: 327 EUR for arable land, 218 EUR for permanent grassland, 436 EUR for orchards, and 727 EUR for vineyards, vegetables and hops.

*Austria* is one of the countries, where the organic agriculture is one of the most expanded. A lot of farmers transformed to organic agriculture due to the subsidies provided by the Austrian government.

The Royal Decree No. 51/1995 integrated the EU regulation No. 2078/92 into *Spanish* legislation on January 20th 1995. It opened other possibilities for support of environment-friendly production processes such as organic agriculture. Financial supports are administered and allocated by autonomous regions. There is no financial support granted to organic farmers in Catalonia, Galicia and Madrid. Nowadays, there are no financial means available for research and marketing in organic agriculture sector in Spain. The group CRAE, compounded from representatives of authorities, private sector in organic agriculture, and consumers association, works on solution of this problem nowadays.

In *Sweden*, there came in force a new program for development of rural areas in 2001. The framework of payments was redistributed versus the previous program so that in general, a unit of livestock creates higher payments and a unit of crops lower payments. In contrast with the present state, the payments are not allocated by regions, but by species (more in Table 7).

The main effect of the new payment distribution can be seen as the increase in motivation for transformation of whole farm including animal husbandry, assuming that the budget for support of organic agriculture was doubled since 2005. This assumption is connected with realisation of government decision to increase the extent of organic agriculture to 20% out of total agriculture land area. It is evident, that the favourable agrarian policy with strategic supportive programs, which help the economic situation during and after the conversion period, is an important factor of organic agriculture development. In Sweden, also other factors contributed noticeably to favourable, sustainable development of organic agriculture (well organised sector with analysis of now-

Table 7. Support of organic agriculture in Sweden since 2001

Crop	Support for 1 hectare	
	SEK	EUR
Grass, clover	500	57
Cereals	1 300	149
Oil plants, sugar beet, potatoes	2 200	253
Vegetables	5 000	575
Fruit	7 500	862
Livestock unit	1 700	195

Source: Ekologiska Lantbrukarna 2000

adays problems, confidence and appreciation of consumers, good relations among conventional and organic farmers – it was always the goal of organic movement in Sweden).

In 1983 in *Great Britain*, there was by the organic associations established the British Board for Organic Standards. It was later changed into the British Register of Organic Food Standards (UKROFS). At present, the Ministry of Agriculture, Fishery and Food Industry uses annually more than 3 billion pounds (4.8 billions EUR) for the support of agriculture, but only 3% are used for agrarian-environmental programs, in comparison with the average 11% in other European countries. Nowadays, there are used 6.2 mil. pounds (9.9 mil. EUR) for support of organic agriculture, which represents 0.2% of the agrarian budget in the Great Britain. Due to the goal of sustainable development in agriculture, set by the government, the majority of the resources used in the form of subsidies or in the form of technology-investments e.g. genetic engineering are still directed to conventional agriculture.

The interest of consumers in bio-products is significantly increasing in the Great Britain; it is partially covered by import. In this respect, the interest of domestic organic farmers is increasing. Particularly in the last two years, the increase in prices of organic products and the decrease in prices of conventional agrarian products arose.

## CONCLUSION

Organic agriculture in the selected EU countries as well as in the Czech Republic according to Action plan for

organic agriculture development in the Czech Republic till 2010, set up by Ministry of Agriculture in co-operation with the Ministry of Environment, RIAE, CAFI and the representatives of organic farmers associations and other institutions, will furthermore develop and expand. It can be assumed that the development will be in correspondence with the previously declared intentions – 10% of organic land out of total agricultural land. For further development of organic agriculture in the Czech Republic, it is necessary to analyse the existing system of supports for organic agriculture and to complete it with some important experiences from the EU countries. Particularly it is necessary to support further development of organic vegetal food by the modification of tariffs as well as the additional marketing support, training and so on.

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