

# BIOPRODUCTION IN THE CZECH REPUBLIC

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## Abstract

*Organic farming in the Czech Republic is particularly located in Less Favoured Areas (LFA), which are often overlaid with environmentally sensitive areas. Acreage of organic farming in the Czech republic makes about 6% of the whole agriculture land. At present acreage of organic farming is 281 535 ha. More than 90% share of this acreage represent grasslands. Grasslands are linked with non-milk cattle breeding. Organic farming fulfils its environmental function good in contrast to its production function which is fulfilled much less. As the main product of organic farming in Czech Republic is produced beef, but most of this beef isn't certified as a bio-product. The amount of bio-products is not sufficient enough and does not cover both market and export need. This absence is also caused by uniform range of bio-production and by insufficient manufacturing capacities. At the same time only 24% of organic farmers can place more than 50% of their production on the market as a bio-product. Important limiting factor for increase of manufacturing capacities are in comparison to EU very strict zoohygienic and veterinary laws and rules, related to animal production. Structure of farming on arable land within organic farming is limited by the system of subsidies. Currently this system is not satisfactory enough to ensure higher motivation for farmers to produce bio-production and farm on arable land. The demand for bio-products outweighs current offer and the resultant difference is covered by import. In contrast with earlier members of EU where the direct sell from farm is the main method of distribution, in the Czech Republic is distribution of bio-products realized by many ways, mainly through selling in supermarkets and specialised shops in cities. In contrast with earlier members of EU, most of organic farms in the Czech Republic feature relatively large acreage. These farms are primarily focused on production and far less on manufacturing. This is one of the reasons of lower share of straight sell from farms.*

## Key Words

*Organic farming, Bio-production, distribution, structure, manufacturing*

The world bio-product market is approximately worth 30 billion dollars and represents 1% share of the whole food product market. In North America consumption of food products is worth 12 billion dollars, 90% of this amount falls on sell in USA. The share of 99 % is consumed in Europe, North America and Japan.

In Europe the value of annual retail market makes 11 billion Euro. The largest bio-products market is developed in Germany with 4 billion Euro. United Kingdom market represents 1,75 billion Euro, in Italy 1,4 billion Euro and in France 1,2 billion Euro. In the Czech Republic the sales of bio-products amounted 350 million CZK in year 2005. Bordering Austria rates 450 million Euro. Potential growth of the Czech market is significant. Necessary condition for rise of organic farming land consists in rising demand for bio-products. It is not sufficient to support production only there is necessary to support consumption as well. Just large demand leads to equal balance on the market (Šarapatka, Urban, et al, 2005).

Denmark shows a very good example of an effective state support of organic farming. Since the beginning of nineties the government have systematically supported the market demand, educated and informed consumers. Today Denmark and Switzerland belong to countries with highest rate of bio-production consumption in the world. Denmark leads in the field of average expenses for bio-product per person (more than 60 Euro), followed by Sweden (45 Euro), Austria (41 Euro) and Germany (cca 40 Euro), Belgium (29 Euro), Netherlands (28 Euro), France (25 Euro), Great Britain and Italy (24 Euro). In the Czech Republic an annual expense for bio-products reaches ca one Euro which is ridiculously low number. It even 10 times lower than consumption in Greece and Portugal where bio-products have minimally established yet (Anonymus 1, 2006). There is an evident fact that consumption of bio-products within EU and the Czech Republic dramatically rises 10 to 20% annually. The Czech bio-products market expectations present 25 to 30% rise per year in next 5 years, in year 2011 it should reach 1,3 billion CZK (Václavík, 2006a).

## **MATERIAL AND METHOD**

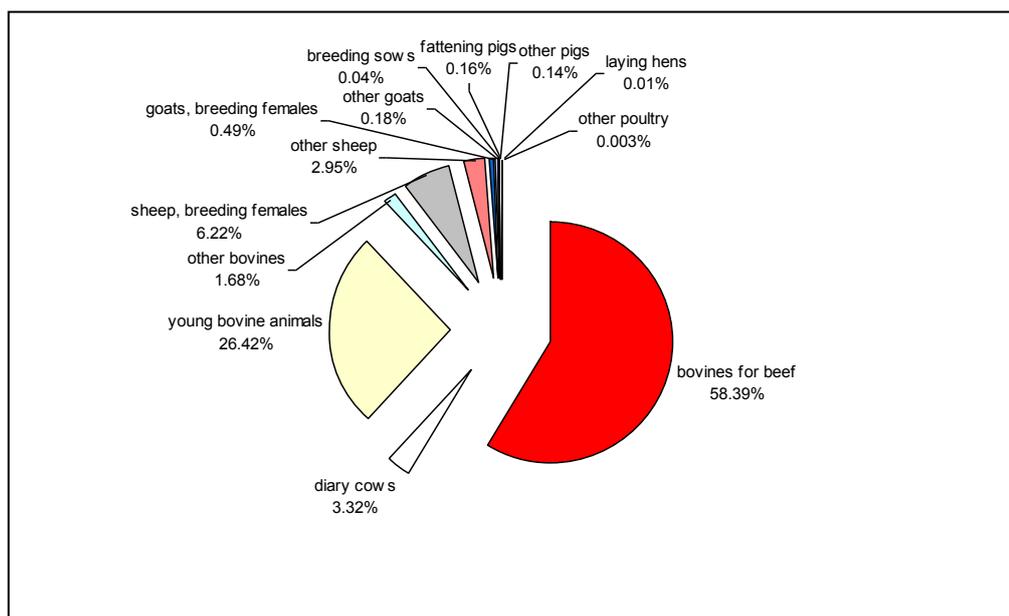
Bio-products market research in the Czech Republic were carried out by means of analysis of data file from databases owned by Ministry of Agriculture of the Czech Republic ([www.mze.cz](http://www.mze.cz)), control organisations ([www.kez.cz](http://www.kez.cz), [www.abcert.cz](http://www.abcert.cz)), Association of organic farmers PRO-BIO ([www.pro-bio.cz](http://www.pro-bio.cz)), marketing subjects (<http://www.greenmarketing.cz>) and other sources (see Bibliography). One part of the data file was provided from the analysis of the selective file of organic farms in the Czech Republic which contains 60 representative farms. This file was comprised in such a way so that the structure of organic farming in CR was covered.

## RESULTS AND DISCUSSIONS

### Structure of Bio-production

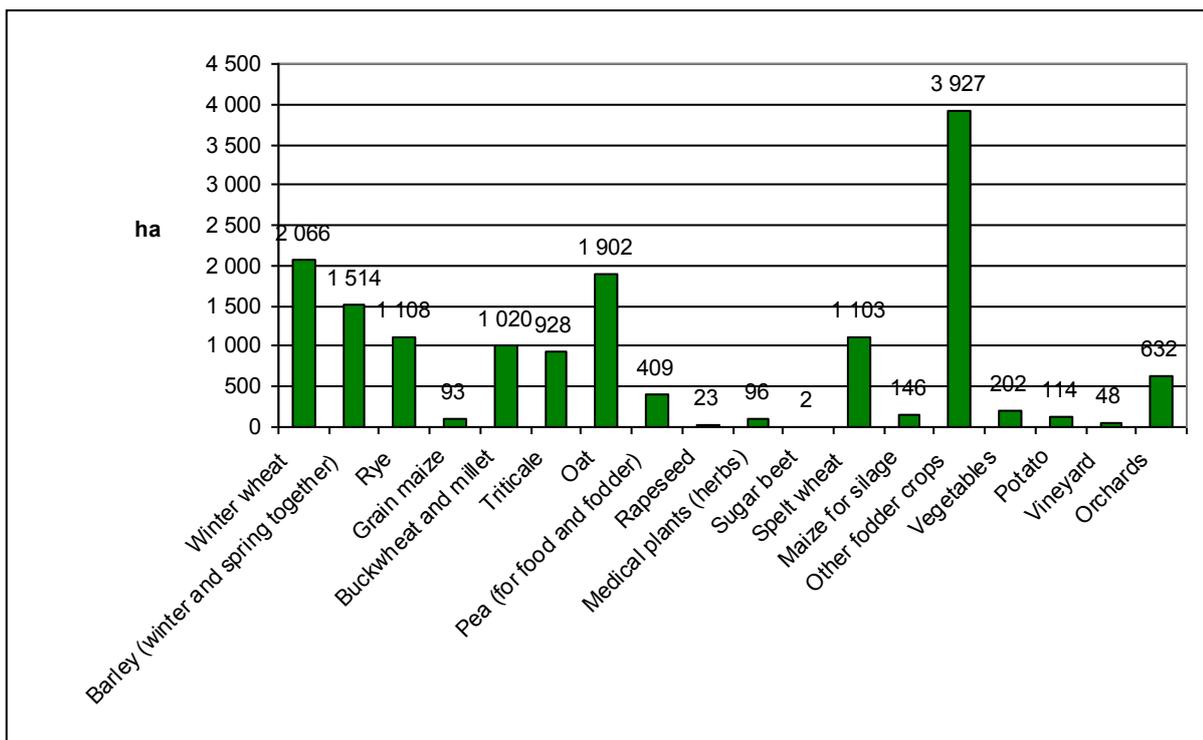
In the end of year 2005 in the Czech Republic the number of organic farms amounted 829 subjects. The rate of bio-production within the whole agricultural production (various commodities) makes between 0,5 to 3,5 %. Price bonuses for bio-products received by organic farms are still attractive and make 10 – 15% for beef, 15 –20 % for milk, 40 and more for crop production, 60 % and more for potatoes and up to 200 % for vegetables. Despite of these bonuses prices of most bio-products in the Czech Republic are nothing near so high in comparison to price level in West Europe.

Diag. 1. – Organic animal husbandry in LU In the Czech Republic



The major production commodities of plant production include cereals, spelt and buckwheat above all, herbs and spices. Animal production entails animal husbandry and milk production (with considerable rate of goat's milk. At the end of year 2005 125 bio-products producers were registered. Just this bio-processing industry is considered to be the most effective opportunity for further organic farming development in the Czech Republic. Cereals and herbs processing, manufacturing beef, cow's and goat's milk represents the main processing fields. Although the Czech organic meet and milk production is quite high, the limiting point means the insufficient processing capacity and lack of bio-certified slaughter-houses.

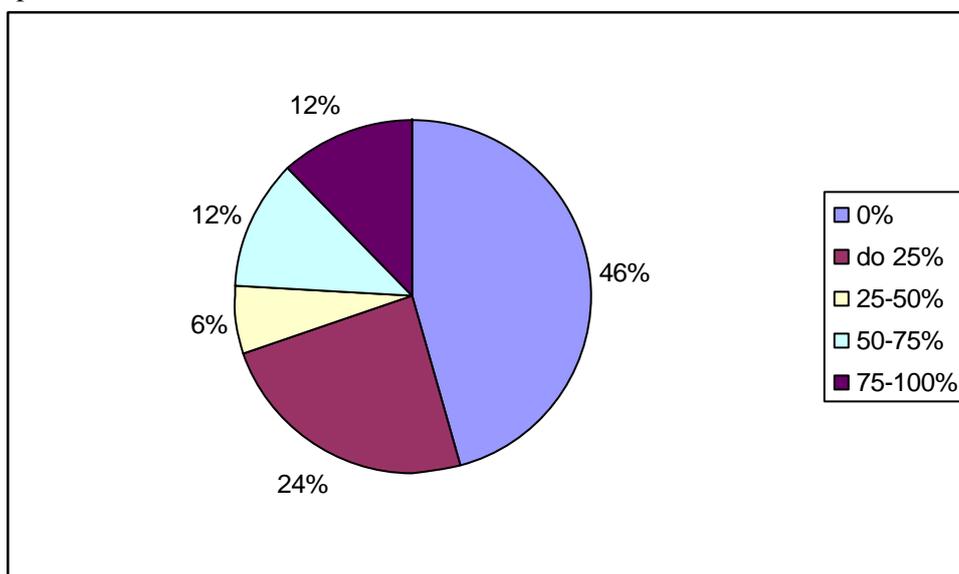
Diag. 1. – Cultivated Plants In Organic Farming (Ha) in the Czech Republic



### Bio-production distribution

Predominant share of organic farms production is not brought onto market as a bioproduct which means that there is no price compensation for lower production or higher laboriousness applied and therefore the added value is not economically valued. Carried analyse have proved that only 54% of all organic farms apply their production as a bioproduct and only 24% of all monitored farms apply on market more than half of their production as a bioproduct. By contrast 70% of farms apply less than 25% share as bio-production, 46% of all farms do not deliver on market any product as a bio-product.

Diag 2. – Bio-production distribution on market within the monitored file of organic farms in the Czech Republic.



The cause of this can be contributed to low spread on arable land of organic farming and low variety of bio-products in general even on grasslands. If considered that most of organic farmers in the Czech Republic farm on permanent grassland - representing ca 90% of organic farming acreage, bio-quality meat, bio-beef in most, would be the main bio-product. Unfortunately this amount of bio-beef cannot be adequately processed due to insufficient processing capacities which means that large share of this production is delivered on market as conventionally produced beef, of course for the same price. Other kinds of bioproducts are produced minimally only.

In consequence these conditions lead to poor development of bio-products market in the Czech Republic with a very low assortment of homemade products. Further development of the bio-products market using imported bio-product is very limited because of their prices, however the prices of Czech bio-product reach lower levels when compared to other EU countries. Producers receive 15 - 35% higher price in comparison with a conventional product (Anonymus 2, 2006). Combined with lower level of education and poor education in the field of environmental and nutrition themes together with higher household food cost all this contributes to lower run on bio-products by consumers. Unfortunately the interest is not even supported by a supply. Development of products of higher added value - regional products, special products and bio-products can help to economical stabilisation of farm and state subsidy reduction.

### **The ways of bio-production**

In the Czech Republic currently more than 60% of all bio-products is distributed in supermarket and hypermarket chains, 30% is offered via specialized bio-shops and healthy diet shops. In the Czech Republic there are ca 300 healthy diet shops, 4 of which only are bio-products specialized. All the other shops offer a share of bio-products between 5 to 60%. Approximately 4% of the market fall on independent food shops, 5% represents direct sale in farm. The share of sale via bio-clubs, internet or in any other way makes 1% (Šarapatka et al. 2005). According to the fact that most of the bio-production is distributed via hypermarkets, there is necessary to develop closer cooperation and coordination between primary producers (organic farms) and bio-product processors so that both the needs of wholesale customer (market chains) is covered and sufficient profit for primary producers was sustained.

## **CONCLUSIONS**

According to the domestic and external demand for bio-products dynamics future bio-product processing and production at all represents a very perspective investment opportunity. An optimal development of this market sector is necessary to change current structure of organic farming so that the share of arable land and subsequent volume and assortment of bio-product would be increased. The basic condition for bio-product market development consist in processing capacities expansion in combination with market structure oriented marketing strategy.

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