# Analysis of current situation in sales of selected organic products in the Czech Republic

Analýza současného stavu odbytu vybraných ekologických produktů v České republice

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**Abstract:** The paper deals with the analysis of current situation in sales of selected bio-products in the conditions of the Czech Republic. It is focused on the structure of plant and animal products, sold quantities, product prices, conditions of sale, common distribution channels and so on. Selected organic products are divided into two groups for the purpose of this analysis – products coming from producer to consumer through distributor and products coming to consumer through processor and distributor.

Key words: organic products, market of organic products, consumption of organic products

**Abstrakt:** Příspěvek se zabývá analýzou současného stavu odbytu vybraných bioproduktů v podmínkách České republiky zaměřenou na strukturu rostlinných a živočišných výrobků, prodaná množství, ceny produktů, podmínky odbytu, nejčastější distribuční cesty apod. Vybrané ekologické produkty jsou pro účely této analýzy rozděleny do dvou skupin, a to na produkty přecházející od výrobce ke konečnému spotřebiteli přes prodejce a na výrobky přecházející ke konečnému spotřebiteli přes zpracovatele a prodejce.

Klíčová slova: ekologické produkty, trh s ekologickými produkty, spotřeba ekologických produktů

The development of organic agriculture takes place in the EU countries as well as in the Czech Republic. It is influenced by a number of factors. One of the main factors is surplus of food, which forces the producers to reduce their supply. The farmers seek new possibilities how to break through. One of the possibilities is production of organic products. Organic production is the optimal solution for number of farmers, how to restructure the production in the context of changing market requirements. Increasing demand for organic products is linked with increasing consumers' interest in healthy food, which is also in the context with the general approach to environment protection.

# GOALS AND METHODOLOGY

The goal of this paper is to review the current situation in sales of selected bio-products in the Czech

Republic. The analysis of bio-products' sales is carried out according to the structure of plant and animal products. Quantitative as well as qualitative evaluating parameters as amount of production, price of production, conditions of sale and use of distribution channels are used here.

## **RESULTS AND DISCUSSION**

The development of organic agriculture, which is recently taking place in the Czech Republic as well as in the European and other countries, leads to increasing supply of bio-products. However, the supply of bio-products and notably its structure does not correspond to the dynamic development of land area under organic management and number of organic farms. It is caused first of all by the structure of organic farms' production, which is primarily focused

Supported by the Ministry of Agriculture of the Czech Republic (Grant No. QF 3278).

Table 1. Share of bio-products in total food consumption in selected European countries and in the Czech Republic (in %)

Country	Cereals	Potatoes	Fruit	Vegetables	Milk	Pork
Denmark	12.1	7.4	2.0	7.3	10.6	0.9
Austria	6.8	3.6	2.7	3.4	6.4	0.3
Switzerland	3.6	2.2	1.9	3.1	1.4	0.6
Finland	3.5	1.2	0.8	3.8	0.4	0.7
Germany	2.6	1.5	1.2	2.1	0.9	0.4
Italy	3.4	0.2	1.5	0.2	0.4	0.0
France	1.3	1.2	_	_	0.6	0.0
Czech Republic	0.2	1.0	0.2	0.3	3.5	0.2

Source: AGRA-EUROPE 2002

Table 2. Volume of plant bio-production in years 2002 and 2003

Product	Volume (in tones)				
Product	2002	2003			
Wheat	5 169.10	2 294.40			
Spelt	3 674.90	3 010.48			
Rye	1 415.10	1 303.60			
Barley	2 537.90	1 843.70			
Oats	5 369.30	2 307.70			
Triticale	1 785.00	125.40			
Buckwheat	1 068.00	935.60			
Peas	1 603.30	517.30			
Potatoes	1 369.80	765.50			
Vegetables	6 517.10	5 376.06			
Fruits	2 311.96	1 644.10			
Herbs	825.02	130.75			

Source: www.mze.cz

Table 3. Volume of animal bio-production in years 2002 and 2003

Product -	Volume				
Product	2002	2003			
Milk (1000 liters)	16 394	8 301			
Slaughter cattle (pcs.)	8 584	6 169			
Slaughter pigs (pcs.)	2 222	1 630			
Slaughter sheep (pcs.)	750	803			
Slaughter goats (pcs.)	78	509			
Eggs (1000 pcs).	187	78			

Source: www.mze.cz

on permanent grassland, in particular on pastures and cattle raising. The supply of plant products is very limited and does not cover the increasing demand. At the same time, the consumer demand for bio-products is increasing (frequently, consumers of bio-products are interested in environment and in the active approach of protecting their health), it is becoming significant in higher share of bio-products in the total food consumption. The gap in the share of bio-products consumption in the Czech Republic and in the selected countries is shown in Table 1 (Jánský, Živělová 2003).

The demand for bio-products is increasing in the Czech Republic, however, the supply is insufficient, namely considering the structure. Some products are totally missing in the market. The supply does not meet demand primarily for eggs, milk and milk products, pork and poultry, fruits and vegetables. Sometimes surplus of beef comes up. The total amount of selected bio-products made in the Czech Republic in years 2002 and 2003 is shown in Tables 2 and 3.

Small transparency of market and not fully developed distribution channels could be considered as the main obstacles for further development of bio-products' market in the Czech Republic. The respondents within the sample file of organic enterprises were asked about the assurance of their sales. This study was done with the goal of getting information about the techniques and assurance of sales (Živělová, Jánský 2004).

The following distribution channels were considered: direct farm sale, direct sale in the marketplace, shops with healthy food, supermarkets, processors and other forms of sales. Listed distribution channels were found out for individual commodities included in this study. Results of the study are shown in Tables 4 and 5.

Table 4. Distribution channels of organic plant production

		Winter wheat	Spelt	Oats	Rye	Triticale	Potatoes	Buck- wheat	Oil pumpkin	Wine
1.	Selected products are solo	d by way of:								
a)	Direct farm sale		x	x		x	x			x
b)	Direct marketplace sale						x			x
c)	Shops with healthy food									
d)	Supermarkets									
e)	Processors	X		x	x	x		x	X	
f)	Other distribution channel: feed						x			
2.	Sales of products are base	d mainly on:	:							
a)	Contract for more than 1year	x				x			x	x
b)	Contract for less than 1year	x	x	x	x		x			x
c)	According to random demand		X	x			x			X
d)	Other									
<b>3.</b> ]	Is the organic production	sold as orga	nic or as	conventi	onal?					
a)	As organic	x	x	х	x		x	x	X	x
b)	As conventional					x				

It is possible to observe that winter wheat and spelt are handed over for further processing, which is logical. Similar case applies also for rye, triticale and buckwheat. Part of respondents use direct farm sales for oats. A different situation stands for potatoes, the producers sell it on the market place or on farm, sometimes the producers use it as feed at the farm. Other commodity is oil pumpkin, which is sold for further processing.

Organic wine is sold directly to consumers. Slaughter cattle are sold by different ways. 56% of respondents sell meat to processors, 31% sell it directly on farm and 12% use combination of both mentioned techniques. One of the respondents sells the production for conventional processing to slaughterhouse. Milk is sold mostly to the processors, only a very small portion is sold directly on farms. Lamb meat is sold directly on farms, only one respondent sells the production to processor. Goat milk is sold directly to consumers as well.

It is clear from the obtained information, that none of the respondents, who were asked for techniques of sale, sells neither to supermarkets nor to shops with healthy food.

Besides the distribution channels, it was also found out, how the producers assure their sales. They had the following choice: sale based on long-term contracts (over one year), sales based on short-term contract (within the year), sales according to random demand and other. The mentioned ways of sales assuring were again found out for individual products. Detailed answers are shown in Tables 4 and 5.

The sales of winter wheat are assured first of all with long-term contracts. But then, the situation with sales of spelt is not as unambiguous. Short-term contracts are predominant (70%), rest of the respondents sells according to random demand. The combination of short-term contracts and sells according to random demand is predominant also for oats and rye. Long-term as well as short-term contracts are used for selling triticale. Buckwheat is sold according to short-term contracts, potatoes according to long-term contracts. Long-term contracts are typical for the sales of oil pumpkin. The situation for wine is various, short-term contracts are predominant, but selling according to random demand and according to long-term contracts are used as well.

Table 5. Distribution channels of organic animal production

	Cow milk	Slaughter cattle	Slaughter sheep	Goat milk
1. Selected products are sold by way of				
a) Direct farm sale	x	x	x	x
b) Direct marketplace sale				
c) Shops with healthy food				
d) Supermarkets				
e) Processors	x	X	x	
f) Other				
2. Sales of products are based mainly or	n:			
a) Contract for more than 1year		X		
b) Contract for less than 1year	x	X		x
c) According to random demand	x	x	x	x
d) Other				
3. Is the organic production sold as org	anic or as convent	ional?		
a) As organic	x	x		
b) As conventional	x	X	x	x

It is not possible to set an appropriate way of animal products' sales, because the respondents use all of the above mentioned possibilities. 50% of respondents use short-term contracts with customers for sales of slaughter cattle, only one respondent made a long-term contract. 50% of the respondents is selling according

to random demand. Milk sales are mainly based on short-term contracts, only very a small amount of milk is sold according to random demand. Lamb meat and goat milk are sold according to random demand.

The last problem related to sales of organic products, which organic farmers were asked about, is,

Table 6. Average farmers' prices (for unit of plant and animal production in CZK)

Production	•	s' price of organic ducts	Average farmers' price of conventional products		
	2002	2003	2002	2003	
Winter wheat	2 834	4 185	2 939	3 304	
Spelt	6 693	7 186	2 939	3 304	
Oats	2 715	3 139	3 758	3 020	
Rye	4 313	4 158	3 225	3 466	
Triticale	2 337	4 139	2 541	2 718	
Potatoes	5 504	5 785	3 307	3 703	
Buckwheat	8 982	8 896	_	_	
Oil pumpkin	72 524	72 524	_	_	
Wine	19 022	20 000	13 964	15 050	
Milk	7.86	7.76	8.16	7.83	
Slaughter cattle	49.97	43.49	36.28	35.18	

whether organic products are sold as organic or as conventional. For plant products it is possible to establish, that with the exemption of triticale, all of the addressed respondents sell organic production as organic. By far worse situation is for animal products. These products are only exceptionally bought out as organic, the majority of these products is used as conventional products. The main reason for this state is absence of processing capacities for organic milk and meat.

Prices given to organic producers for their production are very closely linked to the problem of selling the products as conventional.

In general, it is possible to expect, that organic products, according to the quality, will be sold for higher prices than conventional ones. However, the reality is different for individual products, as it is clear from information in Table 6.

It is possible to divide the selected organic products out of the organic sample file according to their price in comparison with the price of conventional products into two groups. The first group is formed by organic products, which price is higher than the price of the conventional ones. Spelt, rye, potatoes, wine, slaughter cattle belong to this group. These products are mainly sold as certified organic production. Wine from organic production is sold as organic wine. According to the fact, that the price quoted for the conventional sample file is quoted for wine grapes and not for wine, for comparison it is necessary to use the recalculation for one tone of wine grapes also for the organic sample file.

The second group is formed by organic products, which price is lower or similar as the price of the conventional ones. Oats, winter wheat, triticale (in year 2002) and milk belong to this group. The gap for cereals could be explained by the fact, that cereals are mainly used as feed. Here the problem with milk processing in context to the lack of processing

capacities for bio-milk arises. Therefore, organic milk is largely sold as conventional milk.

### **CONCLUSION**

The Action Plan of the Czech Republic for the Development of Organic Agriculture until year 2010 highlights increasing consumers' interest in bioproducts. It is based on the situation, when the Czech Republic succeeded in establishing the national market and exported small amount of bio-products. For fulfillment of the goals set in the Action Plan, it is also necessary among others, similar as in other European countries, to analyze sales from the standpoint of amounts and structure of bio-products, price of production, conditions of sales and use of distribution channels. It is necessary to use the presented analysis for further development of bio-food market as well as for increasing bio-production efficiency and consumers' positive perception of bio-products quality.

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Arrived on 2<sup>nd</sup> May 2005

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