

DOCUMENTED PRODUCTION OF HIGH QUALITY SAFE FOOD AND BEVERAGES IN VOJVODINA – TECHNOLOGY & MARKET ANALYSIS –

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SUMMARY

This analysis is made in order to determine the possibilities to realise one interesting idea, to produce locally specific and sometimes unique food, which has a very long tradition in Vojvodina. The leading thought in the light of the previous could be, to produce what we have and know best, in the best manner, remembering how people before us did it, but still allowing the new times guide and teach us the modern business and market rules. Family, as the basic cell of the society, would be in this case also the main actuator, and the whole production should be based on the well-organised family business.

The trends of global market in the last few years are aimed at total food safety introduced through documented production and traceability of the whole food producing cycle according to "From Farm to Table" policy. The documented production will be mandatory in EU next year as a prerequisite for entering the market. The next step toward better and safer food would be organic and partially organic food.

The relevant branches in Vojvodina are analysed in order to assess the production possibilities. The trend of agricultural population changing, number of employees and the share of agricultural production in total production were given. Some data on production and prices of possibly interesting and competitive products for EU market were analysed.

In the frame of this analysis, the contemporary trends in food production were described and EU market was analysed as a potential market for products from Vojvodina. Several EU regulative, laws and recent initiatives meant to provide the European citizen safe food, have been elaborated. Turnover and prices of few similar products were analysed. The analysis of German market, evaluated as the most suitable market for products from Vojvodina was separately given.

The starting point for introduction of documented production of safe food and beverages could be a pilot project co-ordinated by the

University, involving a certain number of families – traditional producers of some articles providing the thorough market analysis and evaluation of possibilities to expand the production throughout Vojvodina. The project would result with reliable data, which could be used as the basis for creation of Information Network of Vojvodina on safe food and beverages, as the part of global Information Network.

KEY WORDS:

Documented production, safe food, Vojvodina

1. INTRODUCTION

This analysis is made in order to determine the possibilities to realise one interesting idea, which is not entirely utilised. The realization of this idea should be carried out by the people who want to work, listen to the earth, remember how their ancestors lived and worked, but still allowing the new times guide them and teach them the modern business and market rules. The leading thought in the light of the previous could be:

Let us produce what we have and know best, in the best manner, remembering how people before us did it and listening to the ones willing to buy our products.

There are few simple facts proving that the food production will keep on growing and advancing, despite the society development and new “plastic” food production technologies, which put this human activity far behind contemporary industries:

- on earth is a demographic explosion, which of we cannot see end,
- human race has to eat,
- everybody wants to eat the best food their money can buy.

Group of people, which is the target group for these, rather expensive, but high quality, safe and locally specific products, is the people with sophisticated demands concerning flavour, scent and quality, but also package design and product promotion. Today’s market requires well and carefully organised marketing, as one of main aspects of any trade.

The trends of global market in the last few years are aimed at total food safety introduced through documented production and traceability of the whole food producing cycle according to “From Farm to Table” policy, *White Paper, 2000*. The documented production will be mandatory in EU next year as a prerequisite for entering the market. The next step toward better and safer food would be organic and partially organic food. The introduction of this production started last year in USA through their first national program. *Are we suppose to wait to be forced again to do what is most of developed World doing, or we can do it by our selves, perhaps for the first time without direct ultimatum, doing it all for the sake of possible profit.*

The first human activity on a global level was food production. So was also in this region, but one should emphasize that food production in

Vojvodina was also the main activity. Food production tradition with locally specific, and sometimes unique tastes and features is very long. Family, as the basic cell of the society, would be in this case also the main actuator, and the whole production should be based on the well-organised family business. The principle is very simple – produce as people are producing for centuries, following the instructions allowing certified safe food.

The final decision on which traditional food and beverages should be produced as competitive on the global market has to wait until new regulations and laws are well in practice. Some very locally specific products, possibly interesting for above mentioned group could be: Vojvodjanska slanina (Bacon from Vojvodina), Kisacki kulen, Banatsko dimljeno guscije meso (Smoked goose meet), Vina iz Sremskih Karlovaca (Vines), Fruskogorska sljivovica (Plum brandies), Futoski kiseli kupus (Sauerkraut), Domaci caj, (Tee) etc. As the final result we will have recognisable export products with protected brand names, and a bit better agricultural policy made for hard working families in Vojvodina.

2. RELEVANT BRANCHES IN VOJVODINA – STATE OF THE ART

In this part of the Technology and Market analysis almost all parameters show stagnation and degradation of activities in the last 15 years. The same is in the sector of agriculture and food industry, but presented data could help estimating the potentials of relevant branches.

Data used in this analysis are acquired from prices analysis and their relations, interviews, domestic institutions and agencies, ministries or foreign foundations. One of the World organizations, FAO (*Food and Agriculture Organization of the United Nations*) is now creating the profile on Serbia and Montenegro, and there are some web pages with approximate data, *FAO/WFP Crop and Food Supply Assessment Mission to the FR Yugoslavia, 2000*.

The data on population and agricultural population in Vojvodina are in the fig. 1. A significant decrease of agricultural population has been the trend from the beginning of nineteen seventies. Explanation could be found in the development of agricultural mechanisation and less labour intensive production, but also in industrialisation of rural areas.

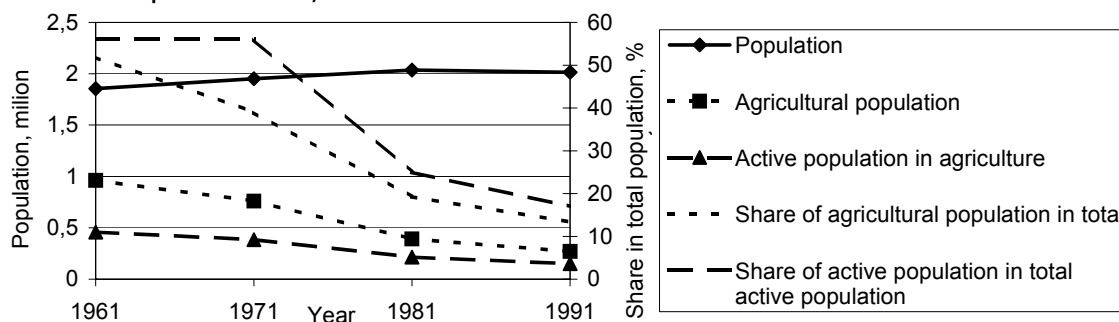


Fig. 1 Population in Vojvodina, Statisticki godisnjak 2002

Share of industry branches in total production in Serbia is shown in fig. 2. The largest share in 2002 has production of food and beverages, 21%.

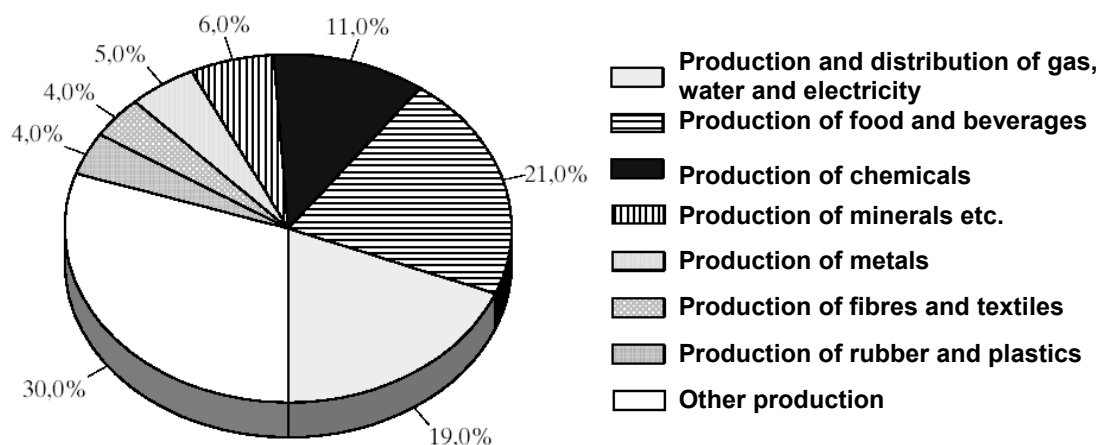


Fig. 2 Share of industry branches in total production in Serbia in 2002, Srbija u brojkama 2003.

Although agricultural production leads in Vojvodina, there are some very serious problems like out-of-date mechanisation. Collapse of metal working industry and total industrial production in the period from 1989 to 2003 is shown in Fig. 3. The production is only 10% in comparison with 1989. According to FAO report mechanisation in Serbia and Montenegro is 10 to 20 years old, FAO Special Report, 2000, which today is some 5 years more. For overcoming of this problem purchase of new equipment is necessary, i.e. yearly some 10% of total number of machines should be purchase, which is about 100.000 units of machinery. This problem had almost all countries that entered EU this year, which was solved or partially solved by certain finance programmes, e.g. SAPAD, Tesic, 2004.

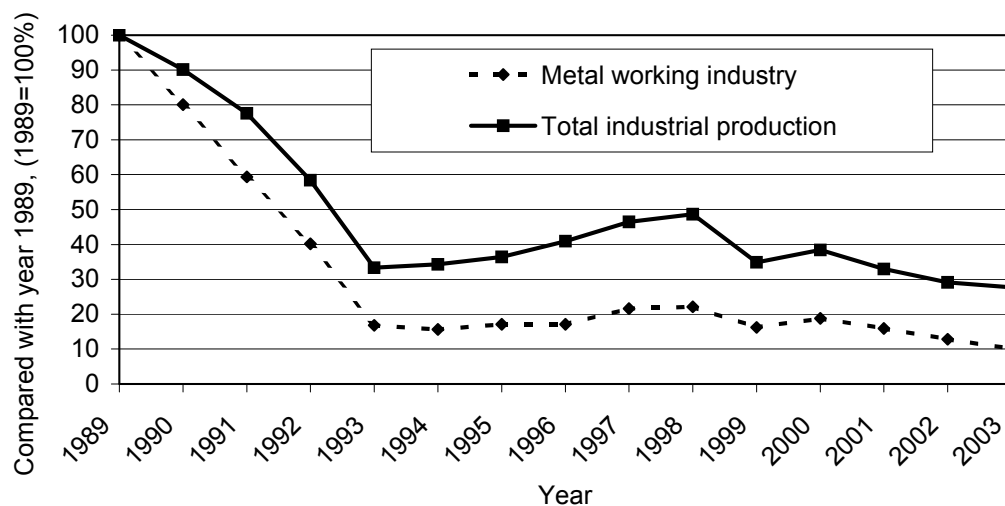


Fig. 3 Metal working industry and total industrial production in Vojvodina, in the period from 1989 to 2003, Tesic 2004.

Fig. 4 shows plum yield in last 30 years. Plum is probably the most famous Serbian product. Due to old age of trees and inadequate agro-technical treatment, yield per tree is very low. Yield of other relevant cultivars is more or less on the same level like in the nineteen sixties and seventies. Very drastic production decrease is noticed by poultry and cattle, which is more than 50% in comparison with previous years, *Statisticki godisnjak Jugoslavije, 2002*.

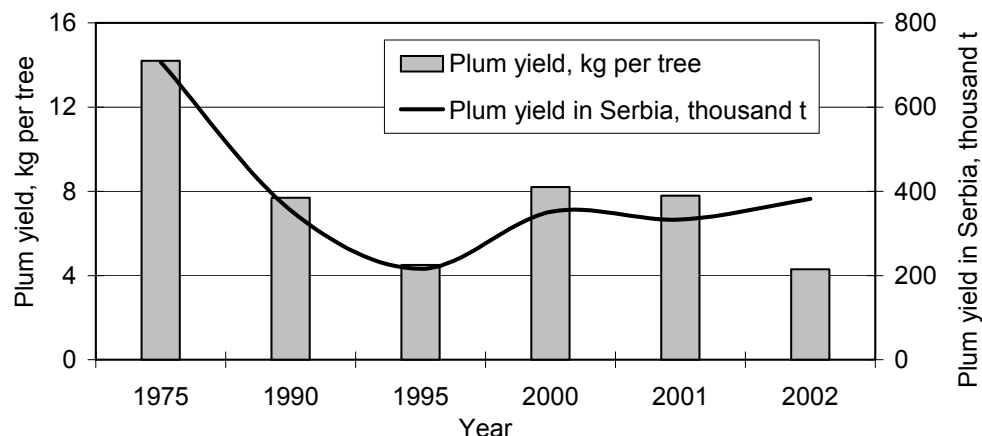


Fig. 4 Plum yield in Serbia, Tesic 2004

Plum brandy production is about 80% of total brandy production in Serbia, which makes Serbia leading producer in the world, tab. 1. Very positive example is plum brandy (sljivovica) "Zuta osa" made of plums grown in the ecologically clean region of Aleksandrovac and Brus, where about 1.300 small-scale producers cultivate plums on 1.500 ha. "Zuta osa" is internationally recognised product with protected rights. In Vojvodina there is plum brandy called "Manastirka", which is produced in Kovilj monastery. Yearly some 1.500-2.000 l are produced, but, with some investments, production increase is possible.

Tab 1: Brandy production, Popis stanovništva 2002.

	1985	1995	1997	1998	1999	2000	2001
Brandy, total	45.910	38.310	70.470	62.962	48.632	51.424	50.706
Sljivovica (plum brandy)	35.524	22.315	46.912	43.390	36.397	34.510	30.932

Maybe the most peculiar information is the one about agricultural products trade deficit in last years, e.g. 13 mil. USD in 2001, *Statisticki godisnjak Jugoslavije, 2002*, which is even more unusual if one has in mind that this production is the leading in the country!

The main problem with poultry and cattle production would be, at least according to farmers that the production costs are 15 to 35 % higher than prices on the domestic market. This problem could be partially solved by exporting part of the products. Comparison between domestic and EU prices is presented in Tab. 2.

Tab. 2 Prices of meat products in Novi Sad and surrounding area on 20th of March 2004 and comparison with prices in Germany

	Product	Price, EUR/kg	Manufacturer	Price in Germany, EUR/kg*
Ham, dried, smoked meet	Svinjska prsuta	16,50	Zlatiborac	
	Prsut	9,14	Topola	
	CARNEX prsut	10,10	Carnex	from 25 to 60
	Svinjski vrat	6,15	Topola	
	Svinjska dimlj. vesalica	5,72	Topola	
	Kulen	7,54	Average price	Similar, 30 and more
Bacon	Slanina panceta	4,88	Topola	
	Slanina panceta	5,70	Carnex	
	Dalmatinska panceta	6,18	Carnex	more than 30
	Kraska panceta	6,35	Neoplanta	
	Panceta	5,78	Yuhor	
	Ekstra mesnata slanina	3,18	Topola	
	Extra pecena slanina	3,47	Big bull	
	Tirolska slanina trajna	7,92	Cajetina	
	Domaca obicna	3,31	Carnex	from 20 to 30
	Tirolska plecka	4,26	Topola	
	Ekstra slanina	3,75	Yuhor	
	Ekstra mesnata slanina	3,54	Topola	
Sausages	Piknik kobasica	6,92	Topola	
	Kobasica izletnicka	7,57	Topola	
	Kobasica topolicka	8,23	Topola	
	Cajna	6,39	Carnex	
	Sremska	6,94	Carnex	Depending on quality and ingredients: from
	Madjarska	6,23	Carnex	15 to 50
	Cajna	6,19	Average price	
	Madjarska	6,75	Carneks	
	Sremska gala	6,67	Carneks	
	Madjarska ljuta	8,26	Big bull	
	Piknik	8,80	Big bull	
	Levicka	6,39	Yuhor	

* According to: www.vincent-becker.de/default.php/cPath/3_15_53 for Italian and German hams and <https://jamon.de/daten/check/go.htm?https://jamon.de/daten> for Spanish hams

3. FOOD PRODUCTION TRENDS AND ANALYSIS OF EU AS POTENTIAL MARKET

As it was already emphasized, food production trends in EU are toward safe and high quality food. Therefore, there are a lot of rules and regulations, e.g. *White Paper on Food Safety, 2000*, Regulative EU: *Commission Regulation (EC) No 1918/2002*, *Council Regulation (EC) No 1804/1999*, *Council Regulation (EEC) No 2092/91*, and many others. The last two are regulating import of organic food in EU.

One of last initiatives was on 17th of December 2003. The EU Agriculture Council adopted conclusions on EU Organic Action Plan. In the conclusions, the Council calls on the EU Commission to incorporate organic agriculture as part of the EU overall agriculture policy, address concerns about coexistence of organics and agricultural biotechnology and address international recognition of organic products, *Strossman, 2003*. Final version of Action Plan (*EU Action Plan for Organic Farming – E23174* and

EU Action Plan for Organic Food and Farming – E23020) was expected until May 2004.

Maybe the biggest step toward general accepting of organic food was made by Germany with investing of 7,5 mil. Euros in campaign to change old organic food sign: *Ökoprüfzeichen*. According to Germany, Regulative No 2093/91 is not strict enough and it should be revised, *Achilles, 2002*.

The Canadian Agri-food Trade Service reported in August last year information about import in EU. According to this report average family in EU is spending about 20% of income on food, *European Union, Agri-Food Regional Profile, 2003*. This consumer's pattern is changing. Consumers want food to be safe and fresh, but also unusual, diverse and sometimes exotic, beside tasty, high quality and nutrient.

The changes in EU could be called "voluntary" evolution of the human conscious as far as the food is concerned. The changes are stipulated by the wealth of the people; many people in EU have enough money and want the best the money can buy.

Germany, as the second largest exporter in the World, with largest economy in EU and third on the planet, is probably the most appropriate country for export of food from Vojvodina because it is the largest and the richest market for consumer-oriented food and beverages, *Germany, Agri-Food Country Profile, 2003*, but also for organic food, Fig. 5.

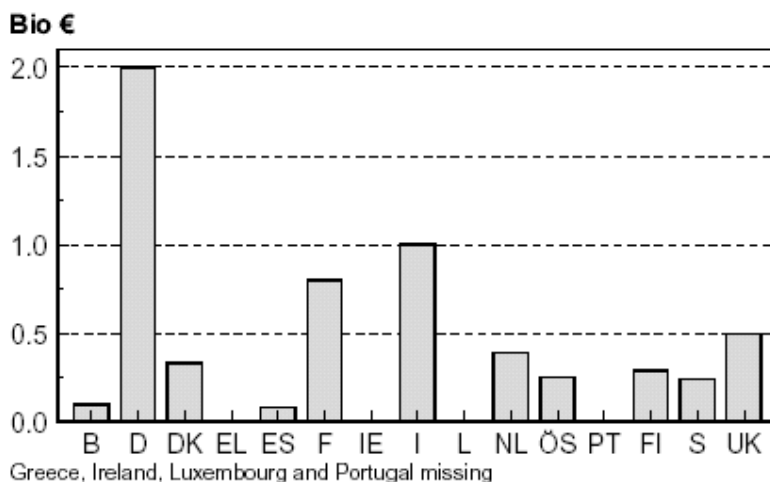


Fig. 5 Organic Farming in the EU, Facts and Figures, 1997.

For sure entering German market it is needed to manufacture products complying EU and German regulations. German Food law is a complex system of 230 parts, which prescribe everything about labelling, packing, additives, hygiene etc. Path to German consumer is hard and complicating, but with high quality, price and emphasized local specific properties, it is not impossible.

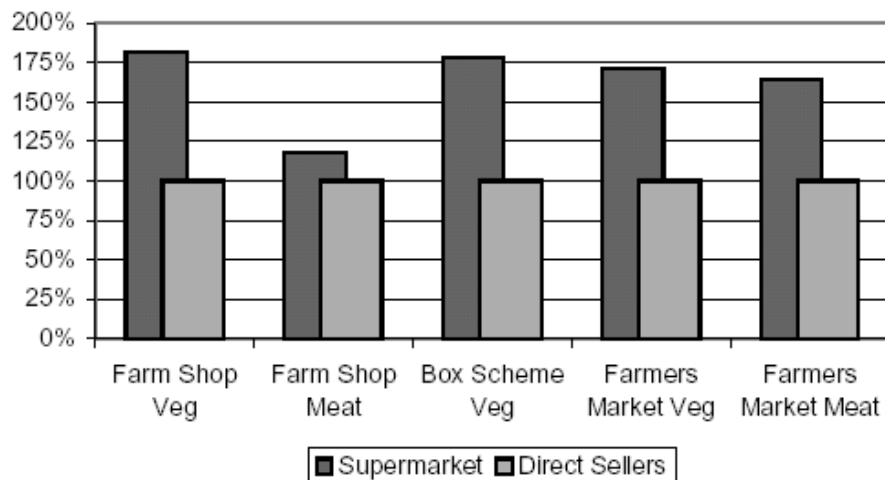


Fig. 6 Supermarket prices vs. direct sellers

Organic production is presently one of the most subsidised productions. Agenda 2006 should until stop subventions for organic production until 2006, after which it is left to compete on the open market, *Holt et al, 2002*. In these circumstances there should be some more space on EU market for food and beverages from Vojvodina.

One of the biggest problems with organic products selling are resellers and supermarkets, Fig. 6 and Fig. 7, *Ross, 2002*.

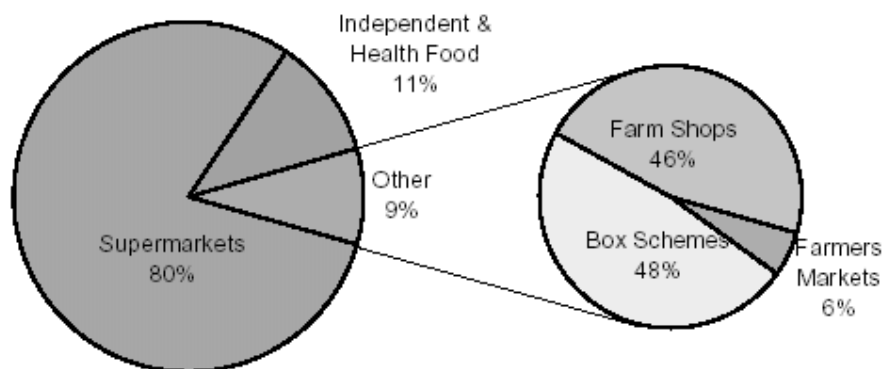


Fig. 7 Market share of different sellers

4. THE ROLE OF THE UNIVERSITY OF NOVI SAD

One of the most important roles in implementation of the documented production of safe and locally specific food will have the University of Novi Sad. University realize education (Extension Service), control of the production, control the means of production and control the quality of products.

Department for Agricultural Engineering and Department for Engineering design, transport systems and logistic from the Institute for Mechanisation and design engineering at Faculty of Technical Sciences will have a part in education and informing of manufacturers about food

production according to new requests, but also in organizing and controlling the production. Adequate institutes/departments from the Faculty of Agriculture, Technology, Sciences and Economics would successfully contribute to control of contents and quality of products and all raw material used, market analysis, production procedures development, etc.

5. CONCLUSIONS

According to very favourable position of Vojvodina, but also the whole region, appropriate climate and resources, it should be expected that the production of food and beverages take a leading role and to become the main motor of development in the near future. The Agriculture has the first place in total production in Serbia today, Fig. 2. Despite all EU privileges Vojvodina and Serbia have had no increase of export since 2000, and the most important question is: Who is responsible? The most probable answer is: nobody but we!

According to present data there are resources enabling production of safe and high quality food in Vojvodina, but the most important things for farmer in Vojvodina and his family are support, motivation and instructions. In order to achieve that, a well-organised action to change many things, from agricultural policy to the way of thinking is needed. University could initiate these changes according to the contemporary EU regulations, but all has to be supported by the governing structures.

The starting point for introduction of documented production of safe food and beverages could be a pilot project co-ordinated by the University, involving a certain number of *families* – traditional producers of some articles providing the thorough market analysis and evaluation of possibilities to expand the production throughout Vojvodina. The project would result with reliable data, which could be used as the basis for creation of Information Network of Vojvodina on safe food and beverages, as the part of global Information Network, *DANISCO, 2003*. EU supports similar projects through *Framework Programme 6* and projects in area *Food Quality and Safety*. They organize customer support, training programs, seminars, courses, constant following of technical norms and regulations changes, marketing trends and they are creating a Global Information Network as a database on quality and safe food.

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