EU FOOD MARKET- VALUE-ADDED FOOD, A NEW TREND AND OPPORTUNITY FOR NATIONAL FOOD INDUSTRY TRŽIŠTE HRANE EU – HRANA SA DODATOM VREDNOŠĆU, NOVI TREND I PRILIKA ZA DOMAĆU PREHRAMBENU INDUSTRIJU

Jasmina ŽIVKOVIĆ^{*}, Rada JEVTIĆ-MUČIBABIĆ^{*}, Zvonko NJEŽIĆ^{*}, Jovana BRKLJAČA^{*}, Nataša VUKELIĆ^{**}, Bojana FILIPČEV^{*} ^{*}University of Novi Sad, Institute of food technology, Bulevar cara Lazara 1, 21000 Novi Sad, Serbia ^{**}University of Novi Sad, Faculty of Agriculture, Novi Sad, Trg Dositeja Obradovica 8, 21000 Novi Sad, Serbia e-mail:jasmina.zivkovic@fins.uns.ac.rs

ABSTRACT

The food industry is one of the largest and most important manufacturing sectors in the EU. In the last year, the food sector represented 917 billion euros of turnover dealing with approximately 310 000 companies and around 4.8 million employers.

Novel food products are generally a consequence of progress in food technology. Developments in food industry, medicine, nutritional sciences etc. have led to increased popularity of food products with added value which may offer a wide range of specific health benefits. Increased consumption of value-added products and their promotion as vehicles to improve the pursuit of consumers' wellness can substantially contribute to the economy of villages by increasing incomes and thus helping to reverse the trend of rural depopulation.

Key words: food, added value, market.

REZIME

Učešće ukupnog agrarnog budžeta u ukupnom nacionalnom budžetu Republike Srbije u proteklih deset godina iznosilo je u proseku 4,21%, što predstavlja nizak nivo izdvajanja ako se uzme u obzir doprinos poljoprivrede stvaranju bruto domaćeg proizvoda Republike Srbije. Naime, učešće bruto dodate vrednosti u poljoprivredi u ukupnom bruto domaćem proizvodu Republike Srbije u prethodnoj dekadi iznosilo je 11,3%, dok agrobiznis u celini učestvuje u stvaranju bruto domaćeg proizvoda sa preko 20%. Pored toga, poljoprivreda sa prehrambenom industrijom predstavlja jedinu granu srpske privrede koja ostvaruje pozitivan bilans u spoljnotrgovinskoj razmeni.

Sektor industrije hrane u Evropskoj Uniji je jedan od najvećih i najznačajnijih ekonomskih sektora. Prehrambena industrija u EU je u prošloj godini ostvarila 917 milijardi evra prihoda, posluje oko 310.000 preduzeća sa oko 4,8 miliona zaposlenih. Prehrambena industrija se, u proteklih godina, snažno menjala, u skladu sa promenama životnog stila, demografskim i promenama u prehrambenim navikama. Promene se ogledaju i u očekivanjima i zahtevima potrošača, al ii trendu skraćivanja veka proizvoda što dodatno usložava problematiku održivosti proizvoda na tržištu.

Novi proizvodi prehrambene industrije u velikoj meri su posledica prehrambeno-tehnološkog napretka. Nove investicije se mogu ostvariti spojem poljoprivredne tradicije Srbije sa neophodnom ekspertizom u oblasti prerade hrane. Razvoj prehrambene industrije, medicine i drugih nauka doveo je do popularizacije namirnica sa dodatom vrednošću koje imaju pozitivan uticaj na ljudsko zdravlje. Potrošnja tih proizvoda se znatno proširila i nije vezana samo za osobe sa posebnom životnom filozofijom ili zdravstvenim problemima. Pored niza aspekata (istraživačko-razvojni, proizvodni, tehnološki...), uvođenje strategije za stimulaciju kupovine tj. potrošnje takvih proizvoda i uvođenje u životni stil je od izuzetne važnosti jer može znatno doprineti ekonomiji sela, poboljšanjem prihoda i zadržavanjem seoskog stanovništva u tim oblastima.

Ključne reči: hrana, dodata vrednost, tržište.

INTRODUCTION

Agriculture with food industry presents the only branch of the Serbian national economy which realizes positive balance of trade continuously since 2005 with a steady rising trend. Agriculture with food industry accounts for 20.9% (average over period 2005-2011) of total export of the Republic of Serbia, however, the structure of export is not favourable especially when taken into account that primary agricultural commodities with low added value dominate the structure.

The past few decades brought strong modifications to food industry sector induced by changes in life style, demography and eating habits. Consumers have been increasingly interested in health effects of food or their components (*Košutić*,2013). Raising the awareness of consumers and change its structure there was a need for better food (*Živković*,2013). On one hand, the modifications are related to product commercialization and creation of competitive advantage by product price whereas on

the other hand, food industry increasingly focuses to the development of value-added products. Changes in consumers' preferences and the tendency to shorten product shelf-life additionally complicates the problem of product viability on the market (Vuković, 2007). A decade ago, a development cycle for a novel product lasted over 2 years in average whereas today, it is abridged to only around 6 months. Novel food products are generally a consequence of progress in food technology. Food industry, similarly to many other industrial branches, follows the trends related to the development of consumers' needs and attempts to answer to ever increasing consumers' demands. Under the conditions of merciless competition, increasingly complex and precise consumers' demands, product specifics gain importance. Development in food industry, medicine, nutritional sciences etc. have led to increased popularity of food products with added value which may offer a wide range of specific health benefits (Košutić, 2012). Since numerous civilization diseases and ailments have been related to dietary

patterns and food quality, food is now being perceived as a crucial factor affecting human health (*Živković et al., 2010*).

Promotion of products characterized with some specifics could substantially contribute to economy of villages, especially those at remote distances, by increasing incomes and reducing depopulation of agrarian communities. Products with specifics are considered novel to consumers although they satisfy the basic human need –need for food. Motives of most consumers for buying these products lie in the fact that beside satisfying the basic need for food, they satisfy another human need and that is the need for better, higher quality living (*Rippin*, 1997).

Economically developed countries of western Europe, USA, Canada, Japan and Australia have more health-conscious consumers with high demands for value-added products. USA is a country with the highest demands and consumption of organic agricultural products. Sale substantially expanded in recent years (*Patermann, 2007*). In 1990, selling was around billion dollars to reach, by 2009, a figure of 24.8 billion dollars. In comparison to 2008, the sale increased by 5.1% in 2009. The US Government plans to increase this trend in the forthcoming years. The most frequent agricultural products (38%), fruits and vegetables (20%), wheat, bread and flour (15%) and meat (9%). Almost all supermarkets have their own organic or biofood trade name(s) (*Vlahović et al., 2010*).

Concerning the above mentioned, the current research work, which is basically exploratory in nature, can be divided into two parts. In the first part, consumers' attitudes are screened and results overviewed whereas in the second part, SWOT analysis of value-added products is presented with a consequent analysis of their importance in the strategic commitment to rural and overall economic development of our country.

MATERIAL AND METHOD

The method of interviewing was found to be the most appropriate method for testing. Questionnaires were presented to 500 randomly chosen subjects. This is the most widely used method in data collection from primary data sources.

For the analysis of responses, multivariate methods of analysis MANOVA and discriminant analysis were used. From univariate methods, Roy's test, Pearson's coefficient of contingency (χ), and multiple coefficient of correlation (R) were used. Data were classified depending on the frequency and to each class a real number was given. Data scaling did not exclude the application of non-parametric tests. Scaled data were further analysed by the aforementioned methods to deliver coefficients of discrimination which helped in the selection of properties defining the specificity of subsamples and those to exclude from analyses.

RESULTS AND DISCUSION

The first part of the paper presents an overview of the results gathered from a survey of 500 consumers, who were randomly recruited at the territory of Novi Sad city. The consumers were administered with anonymous self-report questionnaire. The survey participants were divided into four groups by education level: participants with primary school only, those with highschool education, college education and university degree. The questionnaire was designed to analyse the attitude of consumers regarding their willingness to buy value-added products through questions addressing their ability to identify value-added products, willingness to try the products, frequency of buying, and sources of information about value-added food. The obtained results showed that participants with low education demonstrated certain difficulties with the identification of valueadded food. Respondents with higher education level showed much better identification of the products; 41-51% of them identify value-added products on the base of a brand or a mark. The majority of consumers read food labels but with different frequency: always, frequently and occasionally. Educational level influenced the frequency of label reading; the higher the education, the higher the reading frequency. Thus, out of all respondents, those who always read labels mainly come from the group of respondents with university degree whereas the most frequent answer of high-school educated respondents was that they only occasionally read the labels.

When the respondents were asked whether they buy valueadded products, the most frequent answer with all respondents of below-academic education was "occasionally" (in 52.6-57.3% cases). At approximately similar percent, participants with university degree responded about frequent buying of such products. This identifies that higher level of education (academic) increases the willingness for buying value-added products. The result demonstrated that consumers with the lowest education level (primary school only) rarely buy these products with many of them not answering the question which imply to the lack of information about these products within this segment of consumers. It is, however, encouraging that willingness to buy value-added products gradually grows with higher education level. Forty percents of consumers with university degree buy these products at regular basis.

The value of 'conclusion risk' obtained by multivariate and discriminative analysis showed that there was significant education level difference within the tested subjects in relation to information sources about value-added products as well as in relation to information routes.

This study non-ambiguously pointed out that lack of consumer knowledge as well as producer knowledge is the key problem which impedes the development of value-added products and their success on a market.

In the second part of the article, the SWOT analysis of valueadded products at Serbian market is presented.

Table	1. SWOT	analysis	of	value-added	products	at Serbian
market						

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STRENGTHS	WEAKNESSES
Physical-climatic factors	Physical-climatic factors
Favourable climatic conditions;	Elderly population in rural
Favourable edaphic conditions	regions and quick rural
(good quality soil, higher than	depopulation;
average ratio of cultivated soil per	Unsolved proprietary/juridical
capita);	relationships in rural households.
Geographic diversity; Abundance of water supplies;	Commercial factors
Good potentials for development of	Weak connections with
high quality products (organic,	consumers;
traditional, etc.);	Poor organization of agricultural
High amounts of biomass in	producers and trading
agriculture;	associations of agricultural
Relatively low contamination of	producers (co-operative
soil and water due to low use of	societies);
mineral fertilizers and pesticides.	Insufficient resources of
Commercial factors	agricultural loans; Lack of standards in the control
Strategic geographic position;	of food safety;
Production of good quality raw	Insufficient capacities of
materials and sufficient	surveyors service and control
manufacturing capacities;	inspectors;
Traditional export of food products	Obsolete technology of
in the region (good commercial	manufacturing capacities.
conjunction with adjacent	
countries);	
High potential for export of	
agricultural commodities.	

Table 1. SWOT analysis of value-added products at Serbian market (continue)

OPPORTUNITIES	THREATS		
Production/supply	Production/supply		
Development of the production of fruits, vegetables and grapes; Development of production of beef,	Climatic changes and frequent occurrence of climatic extremes (severe draft, flood, hail, etc.)		
baby beef and pork meat especially for traditional foreign markets; Development of high-quality products (organic, etc.)	Commercial factors Monopoly position of large market chains as buyers of		
Commercial factors	agricultural products; Large oscillations in the extent of		
Increased demands after food product is expected worldwide; Improved productivity with the use of new technologies; Increased offer of continuous good and uniform quality products; Increased demand of organic products; Increased demand of products with special quality names – Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI).	production, quality and prices of agricultural products; Increasing dependence raw materials from import; Increasing competition and diversification of production in the region; Liberalization of international market for some agricultural sectors. Structural/Social attitude Lack of specialized knowledge and low productivity of primary agricultural producers; Low level of incomes which lead to rural depopulation.		
Structural/Social attitude More opportunities for employment			
outside agricultural household/farm to complement incomes;			
Development of non-agricultural	Regulatory/political factors		
activities in villages.	Delay regarding receiving EU membership status.		
Regulatory/political factors			
Stable political environment by receiving a status of potential candidate for EU membership; New initiatives and associations in rural development; Development of rural infrastructure supported from government funding and EU; Liberalization of international			
market for some agricultural			
sectors.			

CONCLUSION

Agriculture is a branch of economy which is capable of producing much more affluence than it currently does and has a remarkable capacity to contribute to economic development of country. The creation of a bond between the Serbian agricultural tradition and indispensable expertise in food processing could contribute to newer investments. Increase in competitiveness can be accomplished through divertification of economical activities by focusing on high quality and safe products with added values which are in accordance to consumers' demands. By generating added value through their products, associations may increase their incomes and build sustainable and efficient agricultural and food sectors, competitive at global market, contributing to an increase in earnings at national level. Apart from a range of aspects such as research and development, manufacturing, technological, etc., consumation of food with added value and its adoption to lifestyle is of utmost significance as this could strongly enhance the rural economy, balancing the prospects of rural regions which could contribute to increase in income, similarly to urban areas.

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