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# FACTORS INFLUENCING CONSUMERS' INTEREST IN PROTECTED DESIGNATION OF ORIGIN PRODUCTS IN SERBIA

# ABSTRACT

Typical and traditional products are becoming an important element of the agro-food panorama in Serbia. For keeping and, even, fostering this positive trend an effective strategy for the valorisation of these products is necessary. For that it is crucial to have a clear idea about the perception and attitude of consumers. The paper analyses the main factors that affect consumers' interest for purchasing Protected Designation of Origin (PDO) products in Serbia. A field survey - focusing on two PDOs namely Petrovac sausage and Futog cabbage was performed in the period July-October 2012 with 251 Serbian consumers. The analysis showed that there are perspectives for PDO products in Serbia, as a large proportion of Serbian consumers are positively oriented towards products with designation of origin and would buy them. Interest for PDO products is connected and influenced by interest in typical products, awareness of PDO/Protected Geographical Indication (PGI) scheme, daily eating habits, education and income level. The main influence of these factors is identified for all sample, as well as for three different groups of consumers obtained by cluster analysis; "consumers with strong interest in PDO products" represents 28.7% of the sample, "consumers moderately interested in PDO products" stands at 41.8% of the sample while 29.5% of the interviewees belong to the third group "consumers poorly interested in PDO products". The fact that more than two thirds of respondents are either strongly or moderately interested in PDO products show that Petrovac sausage and Futog cabbage have good perspectives in the Serbian agro-food market.

**Key words:** Protected designations of origin, typical products, consumer, Serbia

## INTRODUCTION

There is a growing interest in the agricultural sector to produce differentiated products in order to avoid strong competition, with the main objectives to assure quality of the product to consumers, to improve incomes of

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farmers and to contribute to rural development by retaining population in less-favoured areas. Because of that focus on quality issue, with emphasis on products as Protected Designation of Origin (PDO) or Protected Geographical Indication (PGI), has acquired such an important role within the Common Agricultural Policy (CAP) of today. Furthermore, the number of GI protected products in the European Union (EU) has been increasing, as well as their market.

GIs as an instrument for institutionalizing collective reputation has a very important role in protecting both the consumer (through addressing information asymmetries and quality) and the producer (by protecting reputation as an asset) (OECD, 2000). Consumers seem to be increasingly preoccupied with the quality of the food they purchase and have come to associate geographically labelled foods with high quality products and their reputation (London Economics, 2008). Because of that, consumers have increased demand for products that have such quality designations like PDO or PGI (Fotopoulos *et al.*, 2001) and are willing to pay premiums for them (Loureiro and Hine, 2001).

Reasons for which consumers consider valuable labels are that they inform consumers that the expected quality of the product is provided and they assure the degree of quality and thus reduce the risk connected to the purchase decision (Menapace *et al.*, 2009). By reaching conditions for successful differentiation, and maintaining the image among consumers and preventing imitations of the product, and also owing producers rights, expenses of production can be justified and profit can be achieved (Bramley, 2009).

Gaining fundamental insights into consumers' motives to purchase regional products and the processes underlying the purchase decision of these products, would enable marketers to develop, position and market regional products more effectively (van Ittersum, 2001). Consumer response to food labelling is that the consumer must perceive high eating quality in order for the food product to command a premium (McCluskey and Loureiro, 2003).

The agricultural production is an important sector of Serbian economy. Agriculture greatly contributes to the overall values of its society, much more than it is the case in many other European countries. In order to enter and survive on EU market, Serbia had to implement agricultural quality policy, and within it geographical indication policy. The Law on protected designations of origin in Serbia exists from 2010 ("Official Gazette of the Republic of Serbia" № 18/2010). It is written completely in accordance to EU regulation 510/2006. As it is novelty on the market, there are not many certified products, but their number has been increasing. In order to achieve and extend market it is necessary to know the main factors that attract consumers to purchase PDO products in Serbia.

The aim of this paper is to present which are the main factors that influence consumers' interest for PDO products in Serbia, in order to see which perspectives have these products in the country.

# MATERIALS AND METHODS

In order to collect information a field survey was done. The survey was conducted in Serbia, between the end of July and the end of October 2012, and 251 questionnaires were collected. Part of questionnaires was done online and a hundred of questionnaires included face-to-face interviews. One hundred people were interviewed while doing their food shopping in front of the entrance of supermarkets and green markets in Novi Sad (Serbia). Online surveys were provided to many different respondents via e-mail. The sample on which the analysis is based is not at all meant to be anyhow representative of the Serbian adult population.

The questionnaire is written in Serbian, using a simple language in order to be understood by people at different education levels and with different degree of knowledge of the topic of interest. Questionnaire was carried out in order to collect different information about attitude towards PDO/PGI products, specific PDO/PGI products, consumption habits, knowledge and trust in food labels. The questionnaire is structured and contains straightforward sentences to which the interviewee is asked to agree. A Likert scale with 5 options was used in order to allow for neutral positions as we did not want to force the respondent toward one direction or another. Possible choices were: 1) Strongly disagree, 2) Disagree, 3) Neutral, 4) Agree, and 5) Strongly Agree. Also, five categories were chosen for frequencies of actions: 1) never, 2) rarely, 3) sometimes, 4) often, and 5) very frequently. The respondents were asked to choose one of the five responses. Questionnaire also has part in which personal information about respondents such as gender, income, education level, place of living - whether respondent lives in rural or urban area - were asked, in order to have clearer idea about possible answers.

In order to collect more precise information research was based on two case studies – Petrovac sausage and Futog cabbage. These two products were chosen because both dried sausages and fresh and acid cabbage are common and present in diet habits of Serbian population, and these two products have received Protected designation of origin label in Serbia. It is supposed that for other registered Serbian PDO products perspectives on trade will be similar, and the same factors would influence consumers' interests.

Data obtained were analysed statistically by calculating average means and frequencies. The analysis was done with SPSS, version 17.0. In order to have clearer idea about which factors influenced the most the decision for buying and paying premium price for these products first correlation analysis between variables was done, and secondly, in order to check whether these factors influence different consumers interests cluster analysis was done. Both the hierarchical (agglomerative) and the non-hierarchical (k-means) techniques were used at different stages, as well as two step clustering method. The aggregation algorithm used is Ward's method and the similarity measure applied is the simple Squared Euclidean Distance. Demographical and socio-economic variables were

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not used for the clustering as they would have had a major role in the segmentation. They were used for descriptive explanation of the groups.

#### RESULTS AND DISCUSSION

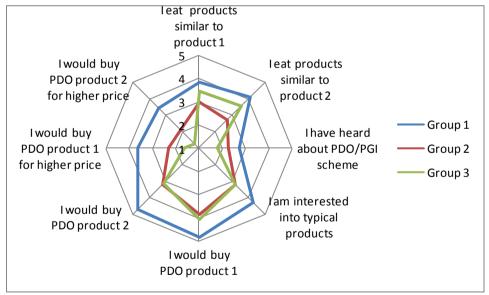
First, it would be important to provide some demographical characteristics of the sample. About two thirds of respondents were women and one third were men. Majority of respondents are persons under 50 years old, as 27% of the sample are young people between 20 and 34 years old and 47% are people between 35 and 49 years old. It could be said that 67% of the sample is highly educated, with graduate, master or PhD degree. Majority of surveyed population lives in cities. Monthly net income of 39% of surveyed population is between 40,000 and 59,999 Serbian dinars (RSD), and 30.2% of respondents have income between 20,000 and 39,999 RSD, which is around or under the average income in Serbia.

According to the research, factors that influence the most on interest for purchasing PDO products and even to pay price premium for them are: daily eating habits, awareness of PDO/PGI scheme, interest in typical and traditional products and monthly income. These factors have highest correlation coefficients, and even the same results were gained by doing cluster analysis and describing different groups.

Doing cluster analysis, in order to have clearer idea which factors influence consumers' interest for PDO products and whether differences in interest are in accordance with differences in same factors, three different groups of persons, with different interests for purchasing PDO products, were found. These groups are with homogeneous characteristics within themselves, and different among each other. These three different consumers' groups can be identified as "consumers with strong interest in PDO products", which represents 28.7% of the sample; "consumers moderately interested in PDO products", that represents the largest part of the sample, 41.8%; and the third group "consumers poorly interested in PDO products", with 29.5% of the sample. According to these results it can be said that perspectives for PDO products in Serbia exist, but it is necessary to identify which are factors that influence interest for them and decision for purchase.

Looking at all three identified groups for all persons there are several factors that influence interest for purchase PDO products and willingness to pay price premium for them. Two products that were used as case studies are present in traditional Serbian diet, and majority of respondents would buy them and even pay price premium for them, as 90% of the surveyed population would buy for the same price as for some other similar products Futog Cabbage, and 80% for Petrovac sausage, and more than a half of surveyed persons would pay higher price for both PDO products. According to these results, it can be supposed that it would be similar with other PDO products in Serbia. Considering other prices and expenses that people have, monthly income for sure can be one limiting factor for PDO/PGI products purchase and consumption in Serbia.

To explain better, some base differences between different cluster groups connected with these factors will be highlighted. In the group "consumers with strong interest in PDO products" are persons with high level of monthly income, so they can afford additional expenses for food. They express high level of interest for typical products, and are also aware of PDO/PGI scheme. They consume similar products as these that were used as case studies very frequently. In the second group "consumers moderately interested in PDO products", persons eat this type of food less frequently than in the first one, and their interest, and especially willingness to pay extra price is lower. In contrast with these two groups, the third group, called "consumers poorly interested in PDO products", has low income level. They eat this type of food, but they cannot afford to pay higher price for PDO products. Beside, also their awareness of PDO/PGI scheme is lower than in other two clusters. They do not show high interest in typical products as persons from the first cluster do. So, beside low income level, these factors influence their decision for not purchasing PDO products. Differences between groups depending on factors that influence interest in purchasing PDO products in Serbia are shown in table 1. Results are explained by calculated average means from 1 to 5, where 1 is total disagreement and 5 total agreements with the statement.



\*Petrovac sausage; \*\*Futog cabbage

Figure 1: Factors that influence on interest for PDO products shown within different groups of interest.

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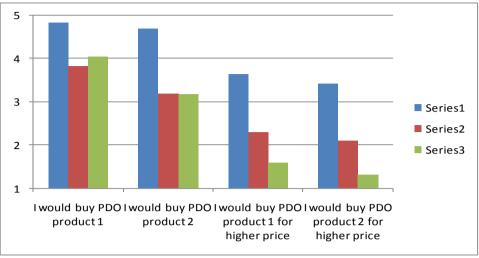


Figure 2: Difference between interests for purchasing PDO products depending on the price

This research, in the case of the first two groups, showed similar results as literature *i.e.* persons with higher education show higher interest for PDO products. Namely, many aspects of the behavior of the individual are seen to be closely associated with level of schooling. Income, choice of occupation, residential location, geographical mobility, consumption expenditures, would appear to be relatively strong correlates of education (Michael, 1975). Besides that, due to educational level, consumers in principle could have a propensity to new and complex quality attributes about food (Carbone *et al.*, 2009).

## **CONCLUSION**

Protected designation of origin food products has a perspective in Serbia. They have potential to contribute to Serbian agriculture and rural development. According to the research, factors that influence the most on interest in purchasing PDO products are: daily eating habits, awareness of PDO/PGI scheme, interest in typical and traditional products and monthly income. Considering other prices and expenses that people have, monthly income for sure can be one limiting factor for PDO/PGI products purchase and consumption in Serbia. Promotion of these products should be mostly oriented to persons that have higher level of interest in typical and traditional products. Good place for that would be on local fairs and manifestations, where many people go in order to try typical food products. According to recognition and awareness of the scheme, governmental bodies can play a very important role by providing support for producers, as well as spreading information about these quality schemes.

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