Journal of Central European Agriculture, 2017, 18(1), p.1-14 DOI: 10.5513/JCEA01/18.1.1859

# The impact of geographical indications on the competitiveness of traditional agri-food products

# Utjecaj zemljopisnih oznaka na konkurentnost tradicijskih poljoprivredno-prehrambenih proizvoda

Željka MESIĆ[1]*, Miroslav BOŽIĆ[2], and Marija CERJAK[1]

[1] University of Zagreb, Faculty of Agriculture, Department of Agricultural Marketing, Svetošimunska 25, 10000 Zagreb, Croatia, *correspondence: zmesic@agr.hr

[2] DG Agriculture European Commission, 130, Rue de la Loi, B – 1049 Brussels, Belgium

## Abstract

The main objective of this paper was to determine whether producers of traditional agri - food products in Croatia are familiar with geographical indications and to examine their expectations about the impact of geographical indications on the competitiveness of their products. A telephone survey was conducted with 120 producers of four traditional agri - food product (Pag Cheese, meat of Zagorje Turkey, Slavonian kulen sausage and Virovitica Pepper). At the time of the research from April to June 2008 all four products were in the PDO/PGO registration procedure. Data collected by the survey were analyzed by use of the SPSS v.17.0 software. The results show that only a small numbers of respondents are fully familiar with geographical indications and their benefits. Majority of respondents have positive expectations about geographical indications; most of them expected that protection will increase consumer confidence in safety of their product, will increase familiarity with the protected product and reduce abuse of the product. Most positive expectations have been noted by highly educated producers as well as the younger ones. The results of this study show/indicate there is a need to better inform and educate producers about the benefits and advantages of protecting geographical indications. This protection schemes could improve market and tourist offer and hence income of farmers - producers of protected products, all of which contribute to the economic development of Croatian rural areas.

**Keywords:** competitiveness, Croatia, geographical indication, producers' expectations, survey

## Sažetak

Cilj ovog rada je bio utvrditi koliko su proizvođači tradicijskih poljoprivredno - prehrambenih proizvoda u Hrvatskoj upoznati sa zemljopisnim oznakama, te utvrditi njihova očekivanja o utjecaju zemljopisnih oznaka na povećanje konkurentnosti njihovih proizvoda. Telefonsko anketno ispitivanje je provedeno s 120 proizvođača četiri tradicijsko poljoprivredno - prehrambena proizvoda (paški sir, zagorski puran, slavonski kulen ili kulin i virovitička paprika). U vrijeme provedbe istraživanja od travnja do lipnja 2008. godine sva četiri proizvoda su bila u postupku registracije zemljopisnim oznakama (PDO/PGI). Prikupljeni podaci su unijeti i obrađeni u statističkom programskom paketu SPSS17. Rezultati istraživanja su pokazali da je samo manji udio proizvođača u potpunosti upoznat sa pojmom zemljopisnih oznaka i koristima koje bi imali od zaštite zemljopisnim oznakama. Najviše proizvođača očekuje da će zaštita povećati povjerenje potrošača u zdravstvenu sigurnost njihovog proizvoda, povećati poznatost na tržištu te spriječiti zlouporabu imena proizvoda. Pozitivnija očekivanja glede utjecaja zemljopisnih oznaka na povećanje konkurentnosti tradicijskih proizvoda imaju obrazovaniji i mlađi proizvođači s višim znanjem o zemljopisnim oznakama. Rezultati istraživanja ukazuju na potrebu boljeg informiranja i educiranja proizvođača o koristima i prednostima zaštite zemljopisnim oznakama. Kroz spomenute sustave zaštite poboljšala bi se tržišna i turistička ponuda, a time i prihodi poljoprivrednika - proizvođača zaštićenih proizvoda, što bi sve pridonijelo gospodarskom razvoju ruralnih područja Hrvatske.

**Ključne riječi:** anketa, Hrvatska, konkurentnost, očekivanja proizvođača, zemljopisne oznake

## Prošireni sažetak

Cilj ovog rada je bio utvrditi koliko su proizvođači tradicijskih poljoprivredno - prehrambenih proizvoda u Hrvatskoj upoznati sa zemljopisnim oznakama, te utvrditi njihova očekivanja o utjecaju zemljopisnih oznaka na povećanje konkurentnosti njihovih proizvoda. Istraživanje je provedeno s proizvođačima 4 poljoprivredno prehrambena proizvoda koji su izabrani na osnovu ekspertne procjene kao proizvodi s visokim potencijalom za dobivanje oznake izvornosti ili oznake zemljopisnog podrijetla i to: Paški sir, Zagorski puran, Slavonski kulin i Virovitička paprika. Navedeno istraživanje je provedeno u dva koraka. U prvom koraku su provedeni dubinski razgovori s proizvođačima odabranih proizvoda. Rezultati dubinskih razgovora poslužili su kao osnova za kreiranje anketnog upitnika za glavno istraživanje. Glavno istraživanje je provedeno od travnja do lipnja 2008. godine na uzorku od 120 ispitanika. Za svaki odabrani proizvod ispitano je 30 proizvođača. U istraživanju je rabljena metoda telefonskog ispitivanja, a kao instrument strukturirani anketni upitnik. Ispitanici u uzorku su izabrani slučajnim odabirom iz dostupnih baza prerađivača/udruga/zadruga gore navedenih proizvoda. Očekivanja poljoprivrednika o utjecaju zemljopisnih oznaka na povećanje konkurentnosti su mjerena na osnovu slijedećih indikatora konkurentnosti: povećanje prodaje, povećanje prodajne cijene, povećanje poznatosti, smanjenje crnog tržišta i sprječavanje zlouporabe imena. Navedeni indikatori konkurentnosti su odabrani na osnovu rezultata predistraživanja iz razgovora s proizvođačima. Ukupno očekivanje proizvođača je izračunato kao

zbroj očekivanja pojedinačnih indikatora konkurentnosti pri čemu su težine pojedinih očekivanja izračunate pomoću metode jednostavnog višeatributnog rangiranja (SMART - The Simple Multi-Attribute Rating Technique). Rezultati istraživanja su pokazali da je samo manji udio ispitanika u potpunosti upoznat s zemljopisnim oznakama. Ispitanici uglavnom imaju pozitivna očekivanja o zemljopisnim oznakama, tako najviše njih očekuje da će zaštita zemljopisnim oznakama povećati povjerenje potrošača u zdravstvenu sigurnost njihovog proizvoda, povećati poznatost i zaštititi ime njihovih proizvoda od zlouporabe i imitacije. Neznatno manji udio ispitanika očekuje da će zaštita povećati prodaju i prodajnu cijenu te smanjiti crno tržište. Pozitivnija očekivanja glede utjecaja zemljopisnih oznaka na povećanje konkurentnosti tradicijskih proizvoda imaju obrazovaniji i mlađi proizvođači s višim znanjem o zemljopisnim oznakama. Rezultati istraživanja ukazuju na potrebu većeg informiranja i educiranja proizvođača o zemljopisnim oznakama i koristima koje te oznake nose što bi doprinijelo većem uključivanju proizvođača u postupak zaštite odnosno u proizvodnju zaštićenih proizvoda. To bi u konačnici trebalo značajno doprinijeti ruralnom razvitku Hrvatske kroz povećanje prihoda poljoprivrednika koji se bave proizvodnjom zaštićenih proizvoda, te zadržavanjem stanovništva u ruralnim područjima.

## Introduction

The reasons for increasing demands for origin food products come from consumers' fears, triggered by a series of high profile food safety incidents in the last decades (BSE, foot and mouth disease, classical swine fever, avian influenza, dioxine contamination etc.), and technological developments such as GMOs (Bromley, 2001; Dimara et al., 2004; Radman et. al., 2006). Consequently, consumers started to rethink their attitudes to and behavior towards food consumption (Gellynck and Kühne, 2007), where their food is coming from and how it is produced (Fotopoulos and Krystallis, 2001), not only for health and safety reasons, but also in terms of satisfying a current nostalgia which harks back to a perceived time of real and wholesome foods (Libery and Kneafsey, 1998; Bromley, 2001; Dimara et al., 2004; Belletti et al., 2007). The growing demand for high quality products and desire for cultural identification have created a growing market for traditional agri - food products that have a strong identification with a particular geographic area (Jordana, 2000). Use of Geographical Indication (GIs) is a well-established mean of differentiation in the agri-food sector (Treager and Gorton, 2005), mostly used by farmers and small and medium entrepreneurs (SMEs) in order to survive in increasingly competitive and saturated agri-food markets (Van Ittersum et. al., 2007). Traditional agri - food products (TAFP) potentially eligible to be protected under the GI schemes, are assuming an increasingly important role in the European Union (EU) agricultural and food policies. The protections of this product are based on the legal framework provided by the EU Regulation No 1151/2012 of the European Parliament and of the Council of 21 November 2012 on quality schemes for agricultural products and foodstuffs.

According to Soeiro (2005), objectives of the EU GI legal framework could be summarized in the following: to protect product names from misuse and imitation, to help consumers, by giving them information concerning the specific character and

the origin of the products, and to encourage diverse agricultural production and rural sustainability. It is generally agreed that GIs promote sustainable rural development because they help producers obtain premium prices for their products (Libery and Kneafsey, 2000), improve redistribution of the added value to the actors (producers, processors etc.) throughout the production chain, bring added value to the region of origin, increase production, create local jobs and prevent rural exodus (Barham 2002; Babcock and Clemens, 2004; Rangnekar 2004). Several studies showed that GIs have a significant role in revitalization of rural areas because they guarantee production in a way that preserves landscapes and supports rural diversity and social cohesion, and promotes new employment opportunities in production, processing and other related services activities (Girardeau, 1999; Niekerk, 1999; Stern, 1999; Vital, 1999; ORIGIN, 2006). Platania and Privitera (2006) point out that the increased interest in the protection and promotion of origin food products on the national and international levels stems from the fact that GIs represent a key element for improving the competitiveness of the agricultural companies/producers, thus ensuring socio-economic development of rural areas, protection of the territory and the environment. According to the data published by the European Commission, since the establishment of the aforementioned quality schemes in 1992 to December 2016, 1379 traditional agricultural products and foodstuffs have been registered (619 as products with protected designation of origin (PDO) and 706 as protected geographical indications (PGI). Additional 54 products are protected as traditional specialities guaranteed (TSG). However, research on the producers reactions to these schemes and on the effects of these schemes on competitiveness of TAFPs has been limited (Dimara et. al., 2004; Teuber, 2011).

Empirical evidence with respect to the use of GIs in Croatia is limited due to the low number of registered products (Mesic and Cerjak, 2011; Mesic et al., 2012). Croatia has many TAFPs which possess specific characteristics/reputation due to the region of origin and/or traditional method of production (Radman et al., 2006). Almost every Croatian region is known for production of one or more TAFP and each of them is in many ways a "story" about the rich tradition, experience, exceptional climate and the life and customs of many generations of Croatian families in rural area. In December 2016 Croatia had 15 PDO/PGI products registered under the EU Regulation No 1151/2012. Considering these number of protected products it can be concluded that possibilities for protection of GIs in Croatia are still not sufficiently utilized. Therefore, it is unquestionable that such economic and marketing potential should be exploited further, which would enrich the market as well as touristic offer and thus respond to increasing demand for these products. Besides, stimulation of production of PDO/PGI products and their promotion can significantly contribute to rural development by increasing income of farmers who are engaged in the production of these products, and by retaining population in rural area. In order to take advantages of GI protection, it is necessary that producers understand importance of geographical indications as a marketing tool that can increase competitiveness of their products.

Therefore, the main objective of this paper is to determine whether producers of TAFP in Croatia are familiar with GIs and to examine their expectations about the impact of GIs on competitiveness of their products. The secondary aim of this research was to identify which factors have influence on producer’s expectations.

## Materials and methods

### Research concept and hypotheses

Based on the literature and results of in-depth interviews with producers, hypotheses are formulated:

H1. Producers' sociodemographic characteristics (H1a) and farm characteristics (H1b) have impact on producers' level of knowledge about GIs.

H2. Producer' sociodemographic characteristics (H2a), level of producers knowledge about GIs (H2b) and farm characteristics (H2c) have influence on producer's expectations about the impact of geographical indications on the competitiveness of TAFPs (Figure 1).

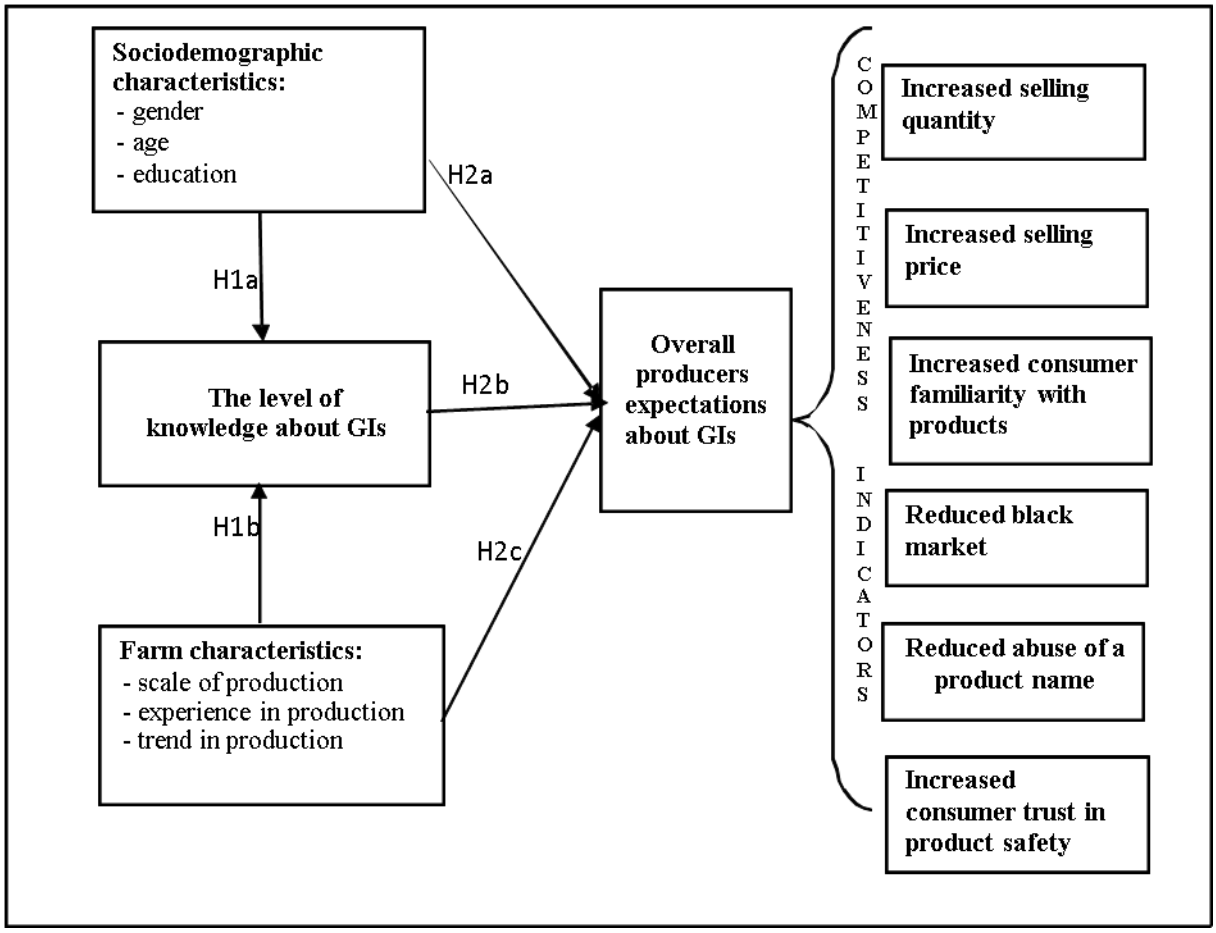


Figure1 Producers' expectations about the impact of GIs on competitiveness of TAFPs: *a conceptual framework of the research*

Slika 1. Očekivanje proizvođača o utjecaju zemljopisnih oznaka na konkurentnost tradicijskih poljoprivredno - prehrambenih proizvoda: *konceptualni okvir istraživanja*

### Procedure of the research

The research was conducted in two steps. In the first phase in-depth interviews with 20 producers of four different category of traditional agri - food product (Pag Cheese (PDO), meat of Zagorje Turkey (PGI), Slavonian kulen sausage (PGI) and Virovitica Pepper (PGI)) were conducted. Interviews were used to identify main motivations for initiating the procedure of protection, producer's expectations about the impact of GIs on competitiveness of the agri-food sector as well as their vision regarding development of this sector. The results of the in-depth interviews were used as the basis for creating the questionnaire for the main survey. In addition, a questionnaire was developed taking into consideration the literature with similar thematic (Libery and Kneafsey, 2000; Babcock and Clemens, 2004; Dimara et. al., 2004; Tregear et. al., 2007). In the second phase of the research, the telephone survey was conducted on convenience sample with 120 producers (heads of households) of chosen traditional agri - food products (Pag Cheese (PDO) (n=30), meat of Zagorje Turkey (PGI) (n=30), Slavonian kulen sausage (PGI) (n=30) and Virovitica Pepper (PGI) (n=30). Producers are selected from the available database of associations and cooperatives of those products. At the time of the research from April to June 2008 all four products were in the PDO/PGO registration procedure. Questionnaires was pre-tested on a sample of 15 producers and corrected according to their inquiries and suggestions. Pre-testing data is not taken into consideration for evaluation of final results. The survey consisted of 18 questions, grouped in the following areas: farm characteristics (production experience and size of production), level of knowledge about GIs and main source of information about GI, expectations about GIs and socio-demographic variables (gender, age, and education).

### Statistical analysis

Data collected by the survey were analyzed by use of the SPSS v.17.0 software. Univariate analysis was conducted to determine frequencies of producers' answers. Producers' knowledge about GIs was measured on a scale with three possible answers; fully familiar, partially familiar and unfamiliar with GIs. Producers' expectations about potential impact of GIs on competitiveness of TAFPs are measured by six competitiveness indicators which are selected based on results of in-depth interviews and existing literature. In order to give weights to the indicators, the importance of each chosen indicator was evaluated by 10 experts on a scale from 1 to 10 (1 – lowest, 10 – highest grade). A weight of criteria (indicators) (Table 1) was calculated by Simple Multiattribute Rating Technique (SMART) (Brady et.al., 1997).

Producers' overall expectation was calculated as follows. First, producers rated six indicators with three possible answers: "*positive expectation*", "*negative expectation*" and "*no expectation*". All "positive expectations" were assigned a value of 1, "negative expectations" were assigned -1 and "no expectations" was assigned zero. In the next step, the assigned values were multiplied with the calculated weights of indicators and then summed (Table 1). The obtained value represented overall producers' expectations and it was used to divide producers into three groups: those with positive expectations (the value of sum between 0.3 and 1) producers with

neutral expectations (the sum between -0.3 and 0.3) and producers with negative expectations (the sum between -0.3 and -1).

Research hypothesizes were tested using analysis of variance (ANOVA) and Chi-square test. The level of statistical significance was set at $P<0.05$.

Table 1. Total weights for competitiveness indicators

Tablica 1. Ukupna težina indikatora konkurentnosti

| Competitiveness indicators | Weights of criteria |
|---|---|
| Increased consumers' trust in food safety | 0.173 |
| Increased consumers' familiarity with products | 0.171 |
| Reduced abuse of the product name | 0.181 |
| Increased sale | 0.150 |
| Increased selling price | 0.146 |
| Reduced black market | 0.179 |

## Results and discussion

The gender structure of the sample was 49% women and 51% men. The age structure of the sample is slightly shifted to the older respondents; the most prevalent age groups in the sample are above 40 years. Considering the production experience, the largest proportion of respondents (48%) are engaged in the production of selected food products up to 10 years, and more than a fifth of examined farms are operating between 11 to 20 years. Based on data about their annual production producers are divided into three groups: small, medium and large scale with small producers as a major participant in the study (Table 2).

By analyzing trends of production of traditional agri - food products result showed that most producers (49%) in the last three years have increased volume of their production. In the next three years, majority of respondents (48%) intend to keep production at the level of previous years.

The most used information channels by producers to learn about the GI concept are cooperatives and associations (n=74), followed by media (n=54) and communication with other producers (n=66). The least important information channels were Agricultural Extension Service (n=11) and Internet (n=9).

Table 2. Socio-demographic characteristics of the sample and farms characteristics

Tablica 2. Sociodemografska obilježja uzorka i obilježja gospodarstva

| (Total) | | N =100 | % |
|---|---|---|---|
| Gender | Male | 61 | 50.8 |
| | Female | 59 | 49.2 |
| Age | Up to 30 | 6 | 5.0 |
| | 30 – 40 | 18 | 15.0 |
| | 41 – 50 | 40 | 33.3 |
| | More than 50 | 56 | 46.7 |
| Education | Basic school | 40 | 33.3 |
| | Secondary school | 69 | 57.5 |
| | High school or university degree | 11 | 9.2 |
| Production experience (years) | Up to 10 | 58 | 48.3 |
| | 11 – 21 | 34 | 28.3 |
| | 22 – 31 | 10 | 8.3 |
| | More than 31 | 18 | 15.0 |
| Production size | Small scale | 48 | 40.3 |
| | Middle scale | 39 | 32.8 |
| | Large scale | 32 | 26.9 |

**Producers 'knowledge about geographical indications**

The protection procedure takes time and financial resources, so it is crucial that farmers recognize the importance of protection and benefits arising from it. However, the results of this study showed that only a small percentage of producers (19%) are fully familiar with GIs, 58% of them are partially familiar and approximately one fifth of respondent are unfamiliar with the GIs and their benefits. The results showed that respondents with higher education have greater knowledge about GIs ($P<0.05$) which is in line with previous findings (Dimara et al., 2004; Mesic and Cerjak, 2011; Mesic et al., 2012). According to Dimara et al. (2004) more educated farmers have a

sharper perception, receive information from a wider range of sources, and have a higher ability to treat and process acquired information. Gender and age does not have influence on level of knowledge about GIs ($P>0.05$). It was also find that large scale producers with longer experience in production are more familiar with the GIs compared to small and medium scale producers with shorter experience in production ($P<0.05$). These findings have partially confirmed hypotheses (H1a, b). According to the literature it is believed that the scale of production is one of the main factors influencing the adoption of new technologies, quality schemes (PDO/PGI) and production methods (Stenkamp, 1990).

**Producers' expectation about the impact of GIs on the competitiveness of traditional food products**

There is a large body of literature on positive impact of GIs on competitiveness of agricultural producers (Libery and Kneafsey 1998; Barham, 2002; Bertozzi, 2004; Tregear et.al., 2007). The results of this study showed that the majority of producers (85%) expected that protection will increase consumer confidence in the safety of their product, increase product familiarity (78%) and protect product name from misuse and imitation (76%). One of the important benefits of GIs protection is a premium price.

According to results of this study, 60% of respondents expect that protection will increase sale and selling price and reduce black market (Table 3). These results are consistent with previous findings in the literature that GIs increase consumer familiarity with products (Van Ittersum et. al., 2007), reduce black market and protect product names from misuse and imitation and increase consumer trust in product safety (Soeiro, 2005; Suh and Macpherson, 2007; Teuber, 2011). Suh and MacPherson (2007) conducted a case study on Boseong green tea in South Korea. The results show that within only six years since the geographical indication was introduced in 1999, GIs has enhanced the image of the product, resulting in doubled production, increase of the green tea price by more than 90 percent and a triple increase in the number of tourists in the Boseong region. O'Connor and Company (2005) found that in the EU the price difference between PDO and PGI products and similar products without such designations was on average 10 – 15%. Larson (2007) points out that although the production costs of Swabian Hall Pork Meat,'s (Germany, PGI) are 12% higher than those for standard pork, this cost is compensated by a 20 - 30% price premium in the German market. The olive oil "Riviera Ligure" (Italy, PDO) is sold for 30% more than the anonymous olive oil (Vital, 1999), while the price of "Roccaverano" cheese (Alto Monferrato, Italy, PDO) has increased by 100% since the GI was introduced (Pinna, 2002). Marescotti (2003) states that local leaders use GIs as a tool for increasing competitiveness of the entire local economy because small producers cannot compete with major players on a cost base, but on the basis of the quality of their products, which is based on the origin and local identity. Results from Bowen (2008) show that profitability of a dairy farm producing Comte cheese (France, PDO) is 32% more profitable compared to similar farms that are outside the GI region.

Table 3. Producers' expectations about potential impact of GIs on competitiveness of traditional agri - food products

Tablica 3. Očekivanje proizvođača o utjecaju zemljopisnih oznaka na konkurentnost tradicijskih prehrambenih proizvoda

| What will be the effect of implemented PDO/PGI? | Yes | No | I don´t know |
|---|---|---|---|
| | | % | |
| Increased consumers' trust in product safety | 85.0 | 2.5 | 12.5 |
| Increased consumers' familiarity with a product | 78.3 | 15.8 | 5.8 |
| Reduced abuse of a product name | 75.8 | 15.0 | 9.0 |
| Increased sale | 65.8 | 19.2 | 15.0 |
| Increased selling price | 62.5 | 25.8 | 11.7 |
| Reduced black market | 62.0 | 20.0 | 18.0 |

Using procedure described in methodology, we calculated overall expectation of respondents and identified that most of the respondents (76%) have very positive overall expectation about the impact of GIs on competitiveness of TAFPs (Table 4).

Table 4. Overall producers' expectation about the impact of GIs on competitiveness of TAFPs

Tablica 4. Ukupno očekivanje proizvođača o utjecaju zemljopisnih oznaka na konkurentnost tradicijskih prehrambenih proizvoda

| Overall producers' expectation | N=120 | % |
|---|---|---|
| Positive expectation | 95 | 76.7 |
| Neutral expectation | 15 | 12.5 |
| Negative expectation | 13 | 10.8 |

The results of the research confirmed the second hypothesis (H2a) about the impact of socio-demographic characteristics on expectations of producers. It was found that more educated producers are more optimistic expectations regarding influence of GI protection on increased product familiarity, reduced misuse of product name and reduced black market ($P<0.05$). Also, it was identified that younger producers have

more positive expectations regarding influence of GI protection on increasing product familiarity, sale and selling price ($P<0.05$). Gender does not influence on producers' expectation toward GIs ($P>0.05$). The second hypothesis (H2b) about the impact of producers' knowledge on their expectation was also confirmed. We identified that producers who are fully or partially familiar with GIs have more positive expectation about the impact of GI protection on competitiveness of traditional food products. Even 96% of fully familiar and 81% of partially familiar with GI concept have positive expectations compared to 48% of unfamiliar producers with positive expectations ($P<0.05$). Additionally, respondents with greater knowledge about the GIs are more willing to start the process of GI protection and to produce according to the code of practice. The second hypothesis (H2c) was only partially confirmed. We found that experience in production and production sizes do not influence on producers' expectations ($P>0.05$). However, results confirmed that producers who have increased production in the last three years and those who intend to increase their production in the following three years have more positive expectation about competitiveness of the GI products ($P<0.05$).

## Conclusions

The study showed that only a small percentage of farmers are fully familiar with GIs. However, respondents generally have positive expectations about GIs; most of them expect that protected GI would increase consumers' confidence in product safety, increase familiarity with a product and protect product name from misuse and imitation. A slightly smaller proportion of respondents expect that GI protection would increase sale and selling price and reduce black market. Research results have revealed that there are producers of TAFP's with positive, neutral and those with overall negative expectations about the impact of GI on product competitiveness. It was found that younger producer with higher education and those producers who have positive trend in production of TAFP's have more positive expectations about GIs. Expectations are also influenced by producers' knowledge about GIs; producers partially or fully familiar with this s have more positive expectations compared to those unfamiliar with the GI concept. Therefore, raising awareness and informing producers about geographical indications could have a positive effect with respect to the number of GI applications in Croatia. Local authorities in particular are suited play an important role in promotion of the GI scheme by informing and educating producers about the potential positive impacts of the GI. This should be complemented by provision of professional and financial support that would encourage producers to apply for this certification scheme and consequently increase the number of protected GI products. For the future research it is recommended to base the respondent selection on probability sampling method, broaden geographic area and achieving a representative producers sample in order to validate results related to producer expectations towards GIs. On the other side, it would be interesting to see what the expectations of consumers related to quality labels are. Furthermore, how business customers (e.g. retailers, wholesalers) perceive GIs and how they are incorporated into their strategies would be valuable for the further research.

## References

Babcock, Bruce A., Clemens, R. (2004) Geographical Indications and Property Rights: Protecting Value-Added Agricultural Products, MATRIC. Briefing Paper 04-MBP 7, Iowa State University. Available at: http://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1006&context=matric_briefingpapersf [Accessed 4 September 2015].

Barham, E. (2002) Towards a theory of values-based labeling. Agriculture and human values, 19 (4), 349-360. DOI: 10.1023/A:1021152403919

Belletti, G., Burgassi, T., Marescotti, A., Scaramuzzi, S. (2007) The effects of certification costs on the success of a PDO/PGI. Quality management in food chains, Wageningen, 107-121. DOI: 10.3920/978-90-8686-605-2

Bertozzi, L. (2004) The Geographical Indications and their impact on the rural economy: the case of Parmigiano Reggiano; Consorzio del formaggio Parmigiano-Reggiano, Reggio Emilia, Italy.

Bowen, S. (2008) Geographical indications: promoting local products in a global market. ProQuest.

Brady, E., Kelly, N., Stefanazzi, O. (1997) The SMART technique, online classroom courses.

Bromley, D. W. (2001) Mad Cows, Drugged Cows, and Juggled Genes: Purpose and Necessity in Science Policy and Public Opinion. Choices, 16 (2), 6.

Dimara, E., Petrou, A., Skuras, D. (2004) Agricultural policy for quality and producers' evaluations of quality marketing indicators: a Greek case study. Food Policy, 29 (5), 485-506. DOI: 10.1016/j.foodpol.2004.06.001

Fotopoulos, C., Krystallis, A. (2003) Quality labels as a marketing advantage: The case of the "PDO Zagora" apples in the Greek market. European Journal of Marketing, 37 (10), 1350-1374. DOI: 10.1108/03090560310487149

Gellynck, X., Kühne, B. (2007) Bottlenecks and success factors for the introduction of quality assurance schemes in the agri-food sector. In 104th (joint) EAAE-IAAE Seminar Agricultural Economics and Transition: what was expected, what we observed, the lessons learned. Budapest, Hungary, September 6-8, 2007. Available at: http://ageconsearch.umn.edu/bitstream/92319/2/sr_vol44.pdf [Accessed 11 May 2015].

Girardeau, J. M. (1999) The use of geographical indications in a collective marketing strategy: The example of Cognac. In World Intellectual Property Organization, Symposium on the International Protection of Geographical Indications. Somerset West, Cape Province,South Africa, September 1-2, 1999.

Libery, B., Kneafsey, M. (1998) Product and place promoting quality products and services in the lagging rural regions of the European Union. European Urban and Regional Studies, 5 (4), 329-341. DOI: 10.1177/096977649800500404

Libery, B., Kneafsey, M. (2000) Producer constructions of quality in regional speciality food production: a case study from south west England. Journal of Rural Studies, 16 (2), 217-230. DOI : 10.1016/S0743-0167(99)00041-8

Jordana, J. (2000) Traditional foods: challenges facing the European food industry. Food Research International, 33 (3), 147-152. DOI: 10.1016/S0963-9969(00)00028-4

Larson, J. (2007) Relevance of geographical indications and designations of origin for the sustainable use of genetic resources. A study prepared for the global facilitation unit for underutilized species. FAO, Rome, Italy. Available at: http://www.underutilized-species.org/Documents/PUBLICATIONS/gi_larson_lr.pdf [Accessed 6 November 2015].

Marescotti, A. (2003) Typical products and rural development: who benefits from PDO/PGI recognition. In Proceedings of the 83rd EAAE Seminar Food quality products in the advent of the 21st century: production, demand and public policy. Chania, Greece, September 4 - 7, 2003. Available at: http://www.fao.org/fileadmin/templates/olq/documents/documents/cherry%20of%Lari%20marescotti.pdf [Accessed 6 November 2015].

Mesić, Ž., Cerjak, M. (2011) Producers' expectations about the impact of GIs on the competitiveness of Pag cheese. Mljekarstvo, 61(3), 252-259.

Mesić, Ž., Cerjak, M., Tojčić, T. (2012) Protection of Geographical Indications of Origin in Croatia-Case study of Slavonian kulen. Agronomski glasnik, 73 (6), 283-294.

Niekerk, J. V. (1999) The use of geographical indications in a collective marketing strategy: the example of the South African wine industry. WIPO, Symposium on the International Protection of Geographical Indications. Somerset West, Cape Province, September 1-2.

O'Connor and Company (2005) Geographical indications and the challenges for ACP countries. [online] Wageningen: Technical Centre for Agricultural and Rural Cooperation. Available at: http://agritrade.cta.int/en/content/view/full/1794

[Accessed 21 May 2015].

ORIGIN (Organization for an International Geographical Indications Network) 2006 The modification of EC Regulation 2081/92 Position paper of the European Chapter of Origin. Available at: http://www.origin-gi.com/images/stories/PDFs/English/OriGIn_publications/Position_papers/Position_paper_OriGIn_Europe_on_the_future_of_geographical_indication.EN.pdf [Accessed 11 April 2015].

Pinna, G. (2002) Che cosa bolle davvero in pentola. Panorama, Year XL, (32), 45.

Platania, M., Privitera, D. (2006) Typical products and consumer preferences: the "soppressata" case. British Food Journal, 108 (5), 385-395.

Radman, M., Mesić, Ž., Kovačić, D. (2006) Geographical indications in Croatia: a case study of Virovitica pepper. In Local Agro-Food Systems Network's, Third International Congress Food and Territories "ALTER. Baeza, Spain, October 18 – 21, 2006.

Rangnekar, D. (2004) The socio-economics of geographical indications. UNCTAD-ICTSD Project on IPRs and Sustainable Development, Issue Paper, 8.

Soeiro, A. (2005) GI-promoting the know-how and quality. In Seminar and Exhibition "Geographical Indications, A Land of Opportunities. Bangkok, Thailand, 28 April 2005.

Steenkamp, J. B. E. (1990) Conceptual model of the quality perception process. Journal of Business research, 21 (4), 309-333.

Stern, A. (1999) The protection of geographical indications in South Africa. WIPO, Symposium on the International Protection of Geographical Indications. Somerset West, Cape Province, September 1-2.

Suh, J., MacPherson, A. (2007) The impact of geographical indication on the revitalisation of a regional economy: a case study of 'Boseong'green tea. Area, 39 (4), 518-527. DOI: 10.1111/j.1475-4762.2007.00765.x

Teuber, R. (2011) Consumers' and producers' expectations towards geographical indications: Empirical evidence for a German case study. British Food Journal, 113 (7), 900-918. DOI: 10.1108/00070701111148423

Tregear, A., Arfini, F., Belletti, G., Marescotti, A. (2007) Regional foods and rural development: the role of product qualification. Journal of Rural studies, 23 (1), 12-22.

Van Ittersum, K., Meulenberg, M. T., Van Trijp, H., Candel, M. J. (2007) Consumers' Appreciation of Regional Certification Labels: A Pan-European Study. Journal of Agricultural Economics, 58 (1), 1-23. DOI: 10.1111/j.1477-9552.2007.00080.x

Vital, F. (1999) Protection of geographical indications: The approach of the European Union. WIPO, Symposium on the International Protection of Geographical Indications. Somerset West, Cape Province, September 1-2.