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CASE STUDY ON THE REGISTRATION OF NAGYKUN RICE PGI

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ABSTRACT
With various producer subsidies and giving more information for the consumers, at least a part of the European rice market can be independent of the Asian market. The consumer encounters more and more information on the packaging of food products, among others, the GI label. Geographical Indications contain information on both the origin of the food and the quality associated with the origin. The Nagykun Rice Consortium in Hungary aimed at the European Union geographical indication to highlight the values of Nagykun rice. There were several reasons for the demand for PGI designation. The 2013 Land Act stipulates that those who are engaged in the production of GI product are entitled to pre-emption, so one of the reasons was to keep the lands what they use already or be the one who can buy a new one first. Another reason was that they had been using organic label for several years, so based on their experience, they were also aware of the marketing opportunities of the new label. Important features of Nagykun rice for consumers are the extremely low level of arsenic and the fact that the product is 100% gluten free. The introduction of the organic label was a good example of increasing the price and, as a result, producers can hope that the PGI label can also increase the price among conscious consumers in long-term. The PGI registration process itself is relatively long, but government bodies have proven to be supportive and helpful. The PGI label can be a long-term profitable investment in the Hungarian rice sector. The case of the Nagykun rice consortium can be a good example not only for other rice producers, but also for producers of other agricultural products.
Keywords: PGI, PDO, GI, rice cultivation, rice production

INTRODUCTION

Although rice cultivation is not as strategically important agricultural sector in Europe as it is in some Asian countries, it is not a negligible crop as rice consumption is constantly increasing in Europe as well. The European Union and each Member State use various incentives to decouple at least a portion of domestic consumption from Asian imports. In addition to the various producer subsidies, it is important to inform consumers about the benefits of rice grown in Europe. Consumers around the world can find more and more labels on food product packaging. One such category is geographical indications, which are becoming increasingly important with the emergence of conscious consumers for whom the social and ethical characteristics of products are important (BRIGGEMAN AND LUSK, 2010). The European Union distinguishes between two types of designation: a protected designation of origin (PDO) and a protected geographical indication (PGI). The main difference between the two indications is that the PDO product is entirely linked to a specific geographical area, while the reputation of PGI products is from the fact that at least a significant part of their production tied to a particular location. Several previous studies have shown that geographical information carried with food can influence consumers' food choices, for example in the GI cheese market (CERNEA, 2011) or in the GI apple market (FOTOPOULOS AND KRYSTALLIS, 2003). Some studies have also made analysis of the geographical indication rice market. For example, LEE ET AL. (2020) examined the willingness to pay a premium for GI jasmine rice in Thailand. Jasmine rice (also known as Hom Mali rice) is preferred on the international market for its unique

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aromatic soft and sticky texture (SUWANNAPORN AND LINNEMANN, 2008). Jasmine rice from the Thung Kula Rong-Hai region is said to have an even more outstanding aroma due to the special weather and salinity of the area and the traditional processing method. In the EU, it gained the PGI label in 2013 as Khao Hom Mali Thung Kula Rong-Hai. The availability of rice products with this certification label in the Thai market was limited in retail because only a few producers were able to comply with the standards and practical rules required by the certification scheme for PGI. In January 2017, the authors found only two brands with a Thai geographical indication and an EU PGI certificate on the Thai market. In processing the systematic literature on geographical indications, TÖRÖK AND MARÓ (2020) found four articles on rice. These studies were also conducted in Asian countries. JENA AND GROTE (2012) concluded in India that Basmati rice production is more profitable compared to other rice varieties and that the acceptance of Basmati rice as a PGI has increased household welfare. NGOKKUEN AND GROTE (2012) found that in Thailand, producers of PDO jasmine rice have a better bargaining position than producers of non-GI products. JENA ET AL. (2015) examined the situation of geographical indications and rice producers in India and Thailand. The research concluded that certification has a major role to play in reducing rural poverty. The European Union's E-Ambrosia database of GI products contains 14 GI rice products. These products belong to the food category "1.6. Fruit, vegetables and cereals, fresh or processed". Two non-EU countries (India and Thailand) have also registered a protected geographical indication for their local rice. The list also includes Spanish, Portuguese, Italian and French rice varieties with both PDO and PGI designations. The oldest GI rice was registered in 1996, while the last is Nagykun rice, which is expected to reach the end of the registration process in 2021. There is only a limited literature on both European and Hungarian rice cultivation but using these and mostly the interview with the largest Hungarian rice producer, who are producing also the Nagykun rice, the study analyzes the possible effects of geographical indications on the Hungarian rice producers.

MATERIALS AND METHODS

Just a few companies in Hungary are engaged in rice production, and only the largest rice producer in the country is interested in the possible benefits of geographical indications. Therefore, the case study approach was chosen as the methodology of the research, which according to GERRING (2004) definition is an intensive study of a single unit in order to understand and generalize to a larger group of (similar) units. Based on this, with the examination of the largest domestic rice producer, the expectations of the producers of GI products will be presented. Producers of other agricultural GI products can also draw conclusions from this case. As a first step, the previous literature was used, then the information received from the Hungarian Rice Growers' Association was analyzed. The Association of Hungarian Rice Growers was questioned by e-mail about the issues that concern them. The next step was an in-depth interview with the largest rice producer in Hungary and the only company producing the future Nagykun rice PGI product. An employee of Nagykun 2000 Mezőgazdasági Zrt. was interviewed, who is responsible for production, in two parts by phone on 3rd and 4th February in 2021. The questions focused on the processes of introducing a geographical indication and the expectations associated with the label.

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RESULTS

The largest domestic rice producer

In order to give a complete picture of the surveyed company, first their publicly available company data was analyzed. Then the further questions were clarified during an interview with a company expert. From the publicly available company data, Nagykun 2000 Mezőgazdasági Zrt. was registered on 31st March 2000, as the legal successor of the "NAGYKUN" Agricultural Cooperative. The headquarter of the company is in Kisújszállás. From the company's statement, we can see that it has operated successfully with about 120 employees in the recent years. It was able to increase its net sales year by year, even though the value of export sales halved in 2018 compared to the previous year. The value of the company's profit before tax also shows a successful operation. The interview revealed that the company (and its many legal predecessors) have been farming in their current areas since the 60's-70's. Already in these early years, they were engaged in rice cultivation, but since then new rice plantations have been continuously established. The company cultivates about 4,400 hectares, of which about 1,660 hectares are built-up rice area (about 1,000 hectares of rice each year, 660 fallow). The lands typically have a value between 40 and 10 AK (AK: Hungarian special land classification value number), they are located in the vicinity of Kisújszállás from Ecsekfalva to Kendres. The two farthest areas are 30 km apart. In addition to rice, other crops are also grown, such as wheat, barley corn, sunflower, canola, mustard, soybeans, etc. In addition, the company operates a dairy farm with 350-400 animals. In terms of processing, they only deal with rice, the rest of the grain is sold, except for the smaller quantities that are used as forage in dairy farming. The company has an equipped fleet of machines. In terms of sales, in most cases the rice is purchased from them in packs of one or a half kilogram, but for further processors, packs of 20 kg are also available. In all cases, the rice is direct sold whether it is restaurants or chain stores. Among others, their products are sold in Spar stores, both in commercial and private label packaging. They are not sold directly to retailers abroad, but organic rice is also sold to Germany, mainly to produce infant food.

Nagykun rice PGI

The applications for PDOs and PGIs are not made by a single company, but by a producer group or a consortium. In the case of Nagykun rice, this is the Nagykun rice Consortium, which, if not by such a name, already existed before the PGI application. 3-4 local companies are involved to the Consortium, but Nagykun 2000 Mezőgazdasági Zrt do the agricultural work and sales, the other companies only play an ownership role. Thus, in the case study, the Nagykun Rice Consortium and Nagykun 2000 Mezőgazdasági Zrt. were not separated, as we can essentially talk about one entity in terms of work processes. At the end of June 2017, the Nagykun Rice Consortium has applied to the Hungarian authorities for the designation of the Nagykun rice product as a protected geographical indication. The application was accepted by the Hungarian authority in 2018, so currently the Nagykun rice PGI is an agricultural product under temporary national protection, EU recognition is ongoing by the European Commission. The full registration process can be found in detail in Regulation (EU) No 1151/2012 of the European Parliament and the Council. There were several reasons for the demand for PGI designation. In the past, the land used by the Nagykun Rice Consortium has been purchased many times, but the 2013 Land Act defined that those involved in the production of a product with a geographical indication have a pre-emption right. Another reason was that the company had been using the organic labeling for several years, so based on these experiences, they were also aware of the marketing opportunities of these type of labels. The product description of the application

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for registration of Nagykun rice PGI contains a detailed description of the characteristics of Nagykun rice. It has been determined which plant varieties can be used as raw materials for "Nagykun rice" PGI: M-225, M-488, Fruzsina M, Sandora, Dáma, Risabell, Janka, Ábel, Bioryza. The interview revealed that only Hungarian varieties were considered. Based on many years of experience, these are the varieties which can be best utilized in this growing area. The most important expectation in choosing a variety is the highest possible yield, combined with the lowest possible risk factor. Unfortunately, the Hungarian varieties have dropped behind in genetic innovation in recent years compared to foreign varieties. An important feature in the selection of varieties was that the technological line was built on these types of rice not for e.g., on round-grained rice. The Nagykun Rice Consortium uses 60% Hungarian varieties and 40% Italian rice varieties. The description of the application for PGI registration places the production area in the northern part of Nagykunság in Jász-Nagykun-Szolnok county. Of course, the exact method of production is also described in the document, from tillage to packaging, as well as labeling requirements. Other very important characteristics of 'Nagykun rice' for consumers are that the arsenic content has been set at an extremely low level, up to 0.1 mg / kg, which is much below the EU limit. The product must also be 100% gluten-free. The soil of the production area is well supplied with the mineral elements necessary for growing rice, but the biologically harmful heavy metals are present at extremely low levels. Rice contains, on average, ten times more inorganic arsenic than most foods. There are only a few suitable arsenic-free rice-growing areas in Europe. The low arsenic content measured in the case of 'Nagykun rice' is mainly due to the defined geographical environment, which has a clear impact on the quality of the rice. All this is proved by the long-term and continuous export of "Nagykun rice", mainly to Germany, to world-famous infant food companies. In the case of rice used in the manufacture of food for infants and young children, the maximum level for inorganic arsenic is 0.1 mg/kg. (NAGYKUN RIZS KONZORCIUM, 2017).

Expectations of the Geographical Indication

Regarding the registration process itself, it was revealed during the interview that the staff from the Ministry was supportive and helpful with the preparation of the PGI designation documentation and the whole process. This greatly facilitated the early stage of the processes. The Consortium has not changed its initial expectations regarding the GI label. they cannot know in advance how consumers will receive the PGI label, but they do not expect the price of rice to rise in the short term if the label is introduced. In their experience, other external economic factors affect consumer prices much sooner, such as the presence of COVID-19, which greatly increases the number of rice buyers as it is a durable product, so producers could have raised their prices. In long term they hope that the number of conscious consumers will be massive in Hungary as well, and then the demand for such and similar PGI products may increase greatly. The Nagykun Rice Consortium does not plan to use the PGI designation for cooperation with any other sector (for e.g., tourism). Future plans for the PGI label can build on their previous good experience with the organic label. In rice areas that have been organically grown (certified by the Biokontroll Hungária Nonprofit Kft.), it is already doubling or tripling the price of the raw material (rice immediately after harvest). The Consortium sells their organic rice products in retail chains in half-kilos or as bulk product to abroad. It is important to emphasize that only Hungarian varieties are used in organic cultivation. Thus, they can rightly trust that Hungarian breeds can achieve success in the long term with this new GI label as well.

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DISCUSSION

There are several previous studies, which shown that there is a willingness to pay a price premium for GI labeled products in different categories, such as in the cheese market (CERNEA, 2011) or apple market (FOTOPOULOS AND KRYSTALLIS, 2003). The most recent studies in this topic also find that consumers accepting these GI logos as a marketing tool. For example, DI VITA ET AL. (2021) determining what characteristics consumers would expect for extra virgin olive oil with a PDO label in Italy. TÖRÖK (2019) also examined the expectation of the GI label in case of an agricultural product. The results shows that the possible success of these products is depend on the close cooperation among the producers and the high level of domestic reputation. In short term, a more stable market share would be necessary while on long term increasing prices and export possibilities are expected. The study pointed out that the benefits of GI recognition can only be expected if further improvements will be implemented in the field of infrastructure and marketing. Such studies may give cause for confidence in the introduction of new GI products in the future. Previous research on the rice market has shown that for e.g., in India that Basmati rice production is more profitable compared to other rice varieties and that the acceptance of Basmati rice as a PGI has increased household welfare (JENA AND GROTE, 2012). According to the data, Hungarian rice farmers should focus on the domestic consumers. By highlighting the benefits of the Hungarian rice, they can bargain for a better price for their products, the GI label can be an excellent option for this. The interview and the data show that only a small part of the domestic demand can be satisfied by domestic rice growers, so there is still plenty of potential for growth. The introduction of the organic label was a good example of increasing the price and, as a result, producers can be confident that the PGI label can also increase the price among conscious consumers in the long term. The PGI registration process itself is relatively long, the Nagykun Rice Consortium submitted the application in June 2017 and the process has not been fully completed yet. Government agencies have proven to be supportive of these types of initiatives. Overall, the PGI label can be a profitable investment in the Hungarian rice sector in a long-term. From this case study, we can draw conclusions for other agricultural products that may be worth considering the introduction of a geographical indication.

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