

# GLOBAL AGRICULTURAL ENVIRONMENT AND CROATIAN AGRICULTURAL CHALLENGES – CAN BRANDING HELP?

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## **Abstract**

*The primary function of agriculture, the oldest economic activity, consists of food production, i.e., nutrition of the population, but for most farmers agriculture presents a lot more, it is their way of life. The role of agriculture is great and multidimensional, both for a small country like the Republic of Croatia and for the community of states - the European Union. With the accession of the Republic of Croatia to the European Union, the issues of production, sales and marketing of agricultural products in the European Union are directed to the EU's common agricultural policy, whose advantages are reflected in unique and common conditions and appearances in world markets, but at the same*

*time pose a major challenge for producers. Negative trends in employment in the agricultural sector and decreasing value-added agriculture as a percentage of the total GDP, in the Republic of Croatia, in the European Union and in the world, could be challenged by branding agricultural products, as well as branding agriculture. Even though agriculture, as an important sector of the economy, is not very popular, marketing activities are popular. Those activities, such as branding, for example, should popularize agriculture and indirectly involve youth labour force in the agricultural sector.*

**Key words:** agriculture, employment, GDP, branding

JEL Classification: Q00, J43

## 1. INTRODUCTION

Agriculture, as the oldest economic branch, has been integrated into all spheres of today's society and has its economic, ecological and social role to a large extent contributing to the sustainable development of the world. According to Družić (2003: 292), modern agriculture no longer implies exclusively the inputs of agricultural origin, but it uses the inputs of non-agricultural origin, such as different machines and equipment and advanced chemical resources, to a greater extent (if not completely). Likewise, fewer people are working directly in agriculture, and instead of working more and more in the processing, transportation, and trade of agricultural products, as well as in the development of agricultural infrastructure. Družić (2003: 293) also states that agriculture, more or less successfully, has to fulfill its primary function, namely, the nutrition of the (domestic) population, i.e., it must meet the nutritional needs of the population (quantity, structure, quality) with lower production costs. As the number of inhabitants increases each day, there is an increasing number of people who are supposed to feed agricultural products, according to Praća et al. (2017: 37-38). Apart from natural factors, the development of agriculture, which is absolutely modern, is conditioned by both economic and political factors. Agriculture, as well as the world, faces various problems, such as the global financial crisis, already mentioned the increase in population, terrorism, poverty, ecological problems, climate change, etc. Praća et al. (2017: 38) further emphasize that all global problems, especially ecological ones, have been created precisely because of the growth and development of world economies since more advanced economic activities change the overall climate and biodiversity

of the world. The aforementioned activities are causing great disruption to the various systems on Earth, which directly affect the development of agriculture and the quality of food that the world is feeding.

Encouraged by the desire to improve the human environment and the environment, in 1962 the European Union launched the Common Agricultural Policy (hereinafter referred to as the CAP) linking agriculture and the European Union and its farmers (European Commission, 2017:3), which is funded from the annual budget of the European Union and managed at European level. At the time as the launch of the CAP, the main objectives were to improve agricultural productivity in order to provide consumers with a constant supply of food at affordable prices and to ensure sufficient income for farmers in the European Union. However, in the contemporary conditions of globalization and overall modernization, in a world where agriculture contributes with 4,626% of global GDP according to World bank database, additional challenges for the CAP are emerging, such as food safety, climate change, sustainable management of natural resources, landscape care, rural economy maintenance.

This policy, apart from fulfilling the stated goals and addressing the contemporary challenges of the world, ensures the best use of budget funds targeted at agriculture, as opposed to the existence of 28 separate national agricultural policies. The CAP plays a key role in the use of natural resources and the economic development of rural areas. The European Commission (2017:6) states “A policy set at the European level ensures common rules in a single market, addresses market volatility where needed, safeguards the progress made in recent reforms towards increased competitiveness of European agriculture and provides for a common trade policy allowing the EU to negotiate as one, vis-à-vis our global trading partners.”

As Kesner-Škreb (2008) points out, the CAP is one of the most important policies implemented by the European Union and allocates almost half of the EU budget to it. 2008 was marked by the world financial and economic crisis, which also affected the development of agriculture by the price crisis. The global agricultural system according to Braun and Birner (2017) is not ready to face the challenges of the 21st century due to lack of food, and the reform processes in this area that is relatively long.

As a response to all the above-mentioned global problems, this paper will try to show the importance and role of marketing, namely branding, in improving the fulfillment of the world's agricultural goals in the 21st century.

## 2. THE POSITION OF AGRICULTURE IN THE REPUBLIC OF CROATIA

The European Union conducts once every 10 years an agricultural census, with intermediate sample surveys (farm structure surveys) carried out two or three times between two censuses. These censuses and intermediate surveys collect a range of information about agricultural holdings (farms), covering land use, farm management, the farm labor force and livestock numbers, as well as issues related to rural development. Ahead of its accession to the EU, Croatia conducted both a 2007 farm structure survey (FSS) and a 2010 survey. Unlike the EU-27 Member States, for whom the farm structure survey in 2010 was carried out as a census.

According to conducted surveys the Republic of Croatia had 233 280 agricultural holdings (or farms) in 2010, working 1.3 million hectares of land (the utilized agricultural area) in comparison with 12.0 million agricultural holdings across the EU-27 working 172.8 million hectares in 2010. More than half (54.4%) of farmland in the Republic of Croatia was worked on by the owner in 2010 and the remaining farmland (45.6 %) was worked on by tenant farmers. Eurostat states that farms in Croatia can be characterized as being relatively small: the average size of 5.6 hectares per holding in 2010 was considerably less than the average of 14.4 hectares per holding across the whole of the EU-27. Indeed, about one half (52.5 %) of all holdings in Croatia were less than 2 hectares in size, with the vast majority (89.4 %) being less than 10 hectares in size (Eurostat, 2013).

The overall segmentation of the agricultural sector as far as farm types were additionally to some degree distinctive in Croatia when contrasted and the EU-27. Somewhat more than one in each five (22.6 %) possessions in Croatia was entitled as being a mixed crop and livestock farm in 2010, contrasting to around one in each eight (12.6 %) possessions in the EU-27. There was likewise a higher relative segment of agricultural property delegated as mixed cropping farms in Croatia (10.3 % contrasted to 4.2 % for the EU-27). By contrast, the extent of property classified as specialist field crops farms (with cereals, oilseeds

and/or protein crops) and specialist permanent crop farms (with vineyards, orchards and olive groves) in Croatia was lower than over the EU-27 (18.2 % and 14.6 % contrasted to 25.0 % and 20.2 % separately). Despite the fact that properties classified as being specialist grazing livestock farms (with dairy cows, cattle, sheep or other ruminants) represented by 16.1 % of property in Croatia in 2010, they were evaluated to have produced a little bit more than one third (33.4 %) of the standard output (an average monetary value used to provide an economic dimension). This was a considerably higher offer of standard output than the average from specialist grazing livestock farms over the entire of the EU-27 (26.5 %). In like manner, the share of economic output produced by mixed crop and livestock farms in Croatia (14.9 %) was significantly higher than the average over the EU-27 (8.3 %), to a limited extent representing the substantially higher extent of properties classified as mixed crop-livestock farms. By contrast, the extent of economic output produced by expert granivore ranches (with pigs or poultry), specialist permanent crop farms and specialist horticulture farms in Croatia was much lower (10.5 %, 8.4 % and 2.0 % separately) than by and large (17.9 %, 13.5 % and 9.6 % separately) over the EU-27 of every 2010. A little more than two thirds (67.0 %) of the agricultural output of Croatia in 2010 originated from specialist grazing farms, specialist field crop farms and mixed-crop livestock properties, which was a considerably higher extent than the average of the EU-27 (52.6 %), where specialist granivore farms (with pigs or poultry) and specialist permanent crop farms represented a higher portion of economic output (Eurostat, 2013).

Somewhat more than four in every five ranches (83.2 %) in Croatia had some livestock in 2010, a considerably higher extent than that recorded for the EU-27 (56.0 %). Keeping in mind the end goal to look at livestock of different species and ages, numbers of animals are given a weighting and changed into a reference livestock unit (an LSU). On this premise, the 'national herd' of 1.0 million LSU in Croatia was overwhelmed by pigs (37.4 %), cattle (36.6 %) and poultry (14.8 %). Not only can farms in Croatia be described as being 'little' as far as land zone is concerned, but in addition as far as their livestock; on average, each property that had livestock in Croatia had only 5.3 LSU (the equivalent to little more than five grown-up adult dairy cows), contrasted to 20.0 LSU in each property that had livestock in the EU-27 in 2010. To be sure, by far (81.1 %) most of the property in Croatia that had livestock had under 5 LSU. Around one quarter (24.6 %) of the 'national herd' in Croatia was found on the smallest

property (of between 0 and 5 LSU) in 2010. A further one fifth of the ‘herd’ was found on the biggest property (with more than 500 LSU), despite the fact that such properties represented 0.05 % of the aggregate number of property in Croatia with livestock (Eurostat, 2013).

### 3. THE OVERVIEW OF AGRICULTURE IN THE REPUBLIC OF CROATIA

This section examines data collected from World Bank and from the Republic of Croatia, world and member states of the European Union. Data was given from all member states independently and for the world in global, while authors have calculated a weighted average of 12, 25 and 28 member states of the European Union. Examined data have different timeframes regarding the availability of data. The overview of three indicators (agricultural land as a percentage of total land area, value-added agriculture as a percentage of GDP and employment in agriculture as a percentage of total employment) will be shown in the text below. Data for agricultural land as a percentage of total land area in each country is available until 2015. Data for value-added agriculture as a percentage of GDP is available until 2016, while data for employment in agriculture as a percentage of total employment is available until 2017. The timeframe for all three indicators starts with the year 2013 because that was the year when the Republic of Croatia joined the European Union.

Agricultural land covers more than one third of the world’s land area, with the arable land making less than one third of agricultural land (around 10 percent of the world’s surface). Agricultural land constitutes only part of the total area of each country, which may include areas that are not suitable for agriculture such as forests, mountains, and indoor water facilities. In many industrial countries, agricultural land is subject to regulations on spatial planning. In the context of spatial planning, agricultural land refers to land that can be used for agricultural activities, regardless of physical type or quality of land. FAO data on agricultural land contain a wide range of information on variables that are relevant to: understanding the structure of the agricultural sector of the country; making economic plans and food safety policies; including those related to investment in agriculture and data on the gross surface area and the crop area that are useful for policy formulation and monitoring (World Bank).

Somewhat less than one quarter (23.3 %) of the aggregate land zone of Croatia was farmland in 2010. This was a generally low share; it was just higher than the shares recorded in four other EU Member States (Sweden, Finland, Cyprus, and Estonia) and denoted to around three fifths of the average of the EU-27 (40.0 %). A little more than two thirds (68.0 %) of the land utilized for farming (the utilized agricultural area) in Croatia was classed as arable land. Of the 895 220 hectares of arable land in 2010 around two thirds (65.0 %) was offered over to cereals, of which a dominant part (310 450 hectares) was agricultural land under grain maize production. These relative shares were higher than the average of the EU-27. By contrast, the extent of farmland utilized as perpetual grassland and meadow in Croatia (25.8 %) was much lower than the average of the EU-27 normal (34.0 %) in 2010 (Eurostat, 2013).

Table 1 shows the percentage of the area occupied by agricultural land in relation to the total land area of the observed country or region. The above-mentioned table shows that the Republic of Croatia has a lower percentage of agricultural land compared to the world average as well as to the average of the member states of the European Union. As it was defined, it is not possible to influence this percentage of the area occupied by agricultural land in relation to the total land area because each country and region has defined boundaries which cannot be expanded.

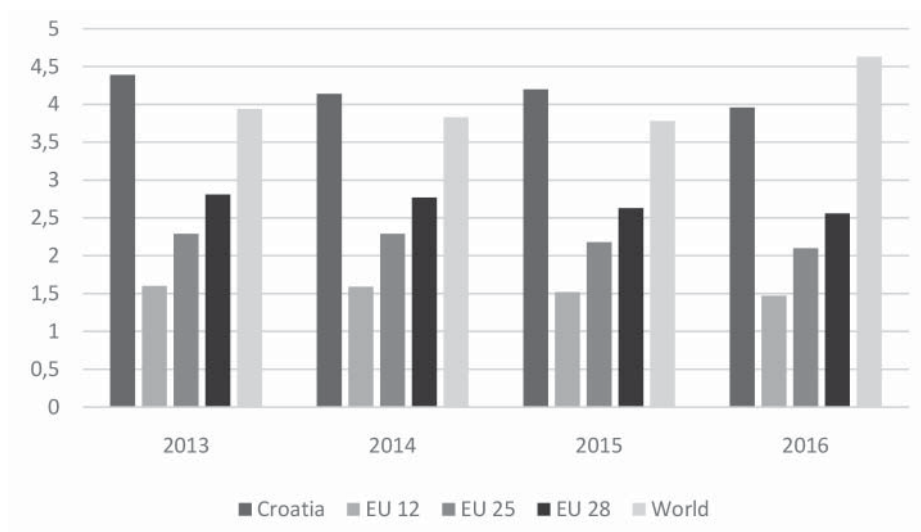
**Table 1:** Agricultural land as a percentage of total land area

	Year		
	2013	2014	2015
Croatia	28,01	26,96	27,48
EU 12	54,29	53,91	53,68
EU 25	43,55	43,41	43,45
EU 28	46,03	45,86	45,90
World	37,38	37,49	37,27

Source: World Bank (a)

Figure 1 shows value-added agriculture as a percentage of GDP. Based on the graphic view, it is evident that the value-added agriculture of the Republic of Croatia is reduced from 2013 to 2016 as well as the value-added agriculture of the European Union countries. Unlike the value-added agriculture of the member states of the European Union, the value-added agriculture on the world level over the observed period is increasing.



**Figure 1:** Value-added agriculture as a percentage of GDP

**Source:** World Bank (b)

According to Eurostat and the EU's labour force survey, agriculture, forestry, and fishing employed 229 200 persons aged over 15 in Croatia in 2010, the equivalent of 14.9 % of the total workforce over 15 years old. This was one of the highest rates among the EU Member States — as the EU-27 average was 5.2 % — only being surpassed by the rate in Romania (30.1 %). The farm structure survey carried out in 2010 suggests that a much higher number of people worked regularly in the Croatian agricultural industry (513 680 people). Many of these people were family helping out on the farm but having their main employment elsewhere. After taking into account the amount of time actually worked, the regular agricultural labour force in Croatia was estimated to be the equivalent of 179 290 people working full-time (in annual work units). With the equivalent of an additional 5 500 full-time workers coming from non-regular agricultural labour and persons not directly employed by the holding, the total workforce in Croatian agriculture was equivalent to 184 480 full-time workers (see Table 3). This represented 1.9 % of the full-time equivalent agricultural workforce in the EU-27 in 2010. Farming in Croatia is very much a family affair; on average 90.7 % of the labour input for agriculture (measured in annual work units) was carried out by the farmer and/or a member of his/her family in 2010. This was a much higher proportion than the average for the EU-27 (76.4 %). Two in every five (40.2 %) regular agricultural workers in



Croatia was female, a slightly higher proportion than the corresponding EU-27 average (37.5 %). However, the proportion of female sole holders (in whose name the holding was operated) was lower in Croatia than across the EU-27 (20.9 % compared with 23.2 %). A relatively small proportion (6.0 %) of holdings in Croatia had another gainful activity in addition to farming. Of the holdings with another gainful activity, about one half (49.7 %) were involved in the processing of farm products with a further quarter (25.7 %) involved in tourism (Eurostat, 2013).

Table 2 presents the employment in agriculture as a percentage of total employment. The percentage of employed persons in the Republic of Croatia in agriculture decreased in the period from 2013 to 2017. The decrease in the number of employed persons in agriculture shows the global trend in the mentioned period among the member states of the European Union, even at the global level.

**Table 2:** Employment in agriculture as percentage of total employment

	Year				
	2013	2014	2015	2016	2017
Croatia	10,79	9,52	9,23	7,60	7,54
EU 12	4,22	4,06	3,85	3,78	3,73
EU 25	4,73	4,73	4,53	4,26	4,20
EU 28	7,08	6,99	6,66	6,25	6,16
World	28,59	27,91	27,26	26,76	26,48

**Source:** World Bank (c)

The next section will define branding and discuss how branding can improve the agricultural position in the percentage of employment and value-added in GDP.

## 4. BRANDING

According to Giddens et al. (2002), a brand can be defined as the combination of a name, words, symbol, or design that identifies the product and a company and differentiates it from the competition. There are four ways in which businesses can use branding: to market a new product, to protect market position, to broaden product offerings and to enter new product categories. Branding actually serves as a way for consumers to quickly and easily identify one

product from another and to associate them with quality attributes related to the brand name state Cowee and Curtis.

Given the impressive vulnerability customers show in framing quality desires for agricultural products, branding may show up as an understandable manner by which a dealer can flag a predominant quality and along these lines lessen customer vulnerability and urge customers to pay a premium for better quality. Brands present products with significant quality that enables customers to gain from their experience: if customers like the quality they encountered, they can repurchase the brand and, in this manner, compensate the maker of the better quality (and in the event that they don't care for it, they can rebuff the maker by maintaining a strategic distance from the brand). Erdem and Swait (1998) state that if a branded product develops a history of constant and reliable quality, the brand will become a symbol for a certain quality positioning in the mind of the consumer, consumers may develop a preference for the brand, and brand equity can develop. In addition, Grunert et al. (2004: 267) states that depending on the current organization of production, branding may require considerable changes in the organization of the value chain. If the branded product is based on quality improvements based already in primary production, the branded product has to be kept segregated throughout the value chain, and branding will therefore usually imply closer forms of cooperation in the value chain.

As in the modern world, there are some challenges involved in the marketing of agricultural produce. Raj (2018:810) writes about different challenges such as limited access to market information, low literacy levels among farmers, and multiple channels of distribution that eats away the pockets of both farmers and consumers. Not only are these challenges recognized, but there are many more which present difficulty in branding agricultural products. The government funding of agriculture is not as developed as the funding of other industries because governments usually fund big companies, whilst in agriculture, there are a lot of small farmers with minimal amounts of government funding. Moreover, smaller farmers can lend money from banks for their business, but as they do not have collateral to secure their payment, banks usually charge a higher interest rate.

There are numerous things that can influence and destroy the advantages that farmers should receive. In spite of the fact that innovation has enhanced, this innovation has not reached the provincial levels as it is bound to urban

zones alone. There is no arranged and directed advertising framework for promoting the agricultural products. Farmers need to confront a large number of challenges and defeat obstacles to get reasonable and simple prices for their business. Globalization has acquired extreme changes to the global business environment in agriculture. It has brought a few difficulties and dangers like vulnerability, turbulence, aggressiveness, aside from convincing all the subjects in agriculture to adjust to changes emerging out of technologies.

If one wants to improve business in agriculture it can use branding as the answer to all the above-mentioned challenges. Cowee and Curtis state that customers who are loyal to specific brands spend three to four times as much on food items than do customers who purchase items based on the lowest price. Cowee and Curtis also say that it is very important that consumers have a positive experience with the product so that they will associate the name or brand with a high-quality, satisfying product. On the other hand, if the product is associated with the low quality it can lead to the need for discounted prices. Discounted prices then lead to lower profit and the product quality would not be recognized as it is. That is why the branded product should create a positive experience for buyers and the products would be noticeable on the market. If the product has created a positive experience for the customer, then the customer will repeat the purchase and there is enough space for mouth-to-mouth marketing of the product. Not only can branded product retain current customers, but it also attracts new ones.

The majority of small agribusiness owners make their branding debut by repackaging their existing products under the name of their farm, ranch, organization, or business to promote brand recognition (Giddens et al., 2002). Marketing branded agribusiness products are important for several reasons. As stated previously, branded items are generally able to earn a higher price for the producer and can lead to brand loyalty, which leads to a strong customer base and the ability of the producer to better serve the needs of the market. Branding a product adds value by differentiating the product, making it stand out from the other items on the market, and by conveying additional information about the attributes of the product beyond appearance. Branding also adds value to products simply because consumers generally believe that known branded products have better quality or more attributes than unbranded products. Another merit of branding is the sense of pride or community that can be experienced by the producer from successfully creating a brand identity (Giddens et al., 2002).

## 5. CONCLUSION

This paper presents the importance and role of marketing, namely branding, in improving the fulfillment of the world's agricultural goals in the 21st century. It has been shown that negative trends in employment in agriculture and value-added agriculture as a percentage of the total GDP in the world as well as in the European Union are present in the last few years. As the answer to those negative trends, companies, and small farmers could use marketing, especially branding in order to change negative into positive trends. To brand agricultural products, businesses have to overcome many obstacles such as reach the wanted market, meet the international standards, create a positive experience and satisfy the expectations of buyers. Governments should set up new policies that help small farmers in funding and that attract private investments in branding while ensuring that each participant of the business benefits. Each of those problems could be solved using a chosen strategic approach. Finally, whilst there are always reasons not to brand agricultural products and agriculture, there are many more reasons to do so. The popularization of agricultural products by branding can attract a greater number of young people to engage in agriculture (for example employment in the agricultural sector), perhaps not directly in farming activities, but certainly in the marketing of agricultural products. It is also important to mention the major obstacle in branding agricultural products individually. The authors recommend commonly branding agricultural products via various collectives established by small agribusinesses, which will be observed in future research.

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