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# MULTIFUNCTIONAL AGRICULTURAL AND ITS IMPACT ON RURAL DEVELOPMENT IN NORTH EASTERN BULGARIA

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#### ABSTRACT

The multifunctional agriculture is a joint production of commodities and non-commodities by the agricultural sector. In the European Union, the multifunctional land use and its impact of the rural development is a central principle to legitimate further support of agriculture. In Bulgaria, this concept is indirectly included in the Programme for Rural Development (2007-2013) and next program for supporting Bulgarian agricultural producers (2013-2020). The aim of the paper is to show the role of the multifunctional land use in different farms' practices and their impact on the role of the rural development in North Eastern Bulgaria. To reach this aim, first, the legal status of the term of multifunctionality will be discussed, then different multifunctional activities will be shortly analyzed, and finally, the results of the field study (2010) will be presented. The paper concludes that role of implementing multifunctional activities in Bulgarian agriculture contributes to sustainable development of the rural areas. It creates opportunity for more stable rural development by reducing poverty and providing nutrition for population. In addition, multifunctionality of agriculture can stabilize the social life and protects the environment in the study region.

Key words: multifunctional agriculture, land use, rural development, North Eastern Bulgaria, farmers

#### **INTRODUCTION**

Rural development is a reaction on the modernization that has dominated in European agricultural sector during the last years. The farmers were already engaged in rural development through different multifunctional activities. These activities can have two outputs such as marketable and nonmarketable. However, agricultural activities and outputs in the agricultural sector need to be defined and explained by the concept of "multifunctionality".

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## Theoretical and methodological approach

The development of the multifunctional agriculture is a new conception, which enters in the Bulgarian agriculture. The opportunity of the agriculture producers to develop such

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farming is a good basis for better using of the recourses, for development of the different economic activities in the rural regions and for sustainable development of agricultural sector.

multifunctional development The in agriculture, also, is a new issue for Bulgarian farmers. There are not so many studies on multifunctionality and its application in Bulgaria. Consequently, the multifunction agriculture and its social-economic and environmental impact on the rural development is an important reason for deeper study of this type of agriculture as analyzing the good practices of multifunctionality around world the and the possibility for implementation in Bulgarian farming. In 2005, multifunctional agricultural producers in Bulgaria are almost 24% of the farmers with size greater than one economic unit and 2% of registered farmers. These data is a result from different studies in the country, related to agricultural sector and rural development.

The concept of multifunctional agriculture emerged in the last decade of XX century in developed countries, where the problems regarding agricultural consumption are solved and the society became increasingly concerned about the quality of consumed agricultural productions and the environment. In this concept, which was developed in a period changes, the main idea was to support agricultural sector in term of liberalizing world trade. In practice, implementation of this concept of multifunctionality has positive effects and impacts on agricultural production. Multifunctionality, therefore, might be a new paradigm to bring modern agriculture to the new social and environmental demands. It is stressed that in addition to production of commodity goods, agriculture produces a range of non-commodity goods and services, effect social and culture systems and contribute to economic growth (Huylenbroeck, et. al. 2007).

The debate for introduction of multifunctional agriculture as a process for changing the agricultural policy has started in mid 80s. The term "multifunctionality" emerged in 1992 at the Rio and Portugal Earth Summits as a response to a wide range of concerns about worldwide changes in agriculture and rural areas. The OECD Declaration of Agricultural Ministers Committee (2001) defines multifunctionality of agriculture as follows: "Beyond its primary function of producing food and fibre, agricultural activities also shape the landscape, provide environmental benefits such as land conservation, the sustainable management of renewable natural resources and the preservation of biodiversity, and contribute to socio-economic viability of rural areas. Agricultural many is multifunctional when it has one or several functions in addition to its primary role of producing food and fibre".

As analytical concept, multifunctionality differs from diversification and pluri-activity. Multifunctionality refers to the fact that one activity can have many functions and different outputs. It is related to a single economic activity (i.e. single wheat production or a group of activities like food production), while diversification means that different economic activities (i.e. food production and tourism) are combined in one farm unit. Pluri-activity refers to the fact that one farmer(s) are involved in different activities (i.e. farming and nonfarming). Although, these terms differ from each other, they bring together different activities with mono-functions which benefit rural society and support economic growth.

Multifunctional agriculture, also, is defined by the several functions – production, food security, social function, employment areas and environmental. The last of these functions have broader aspects of the impact on the environment. Some authors (Potter, 2005) concept of multifunctionality associated with social care and the need for diversification of agriculture with additional features such as biodiversity, landscape preservation, heritage and others. For other researchers (Tilzey, 2003) multifunctional agriculture is an idea that covers a lot of benefits and services in agricultural systems that have similar effects on humans and the environment.

Multifunctional farm is defined as an organization in which the "multifunctionality is a structural principle, a network of rules that generate short and long term solutions" (Balletti, et al., 2002). It is argued that multifunctional agricultural production is included in the entrepreneurial values and knowledge. At farm level, such farmers have to work in different ways, combining resources, knowledge and skills, to produce

multifunctional effects that have impact on production processes.

The model of multifunctional farms creates various effects. These effects occur not only for the farms and household members of the farmers, but also for the market, environment, social and cultural environment. For instance, conventional farms motivation is caused solely by the market value of the results, while the multifunctional farms look for a combination or "joint action" of both performance and nonmarket results (Doychinova, 2008).

The key elements of multifunctionality are two. The first element is multiple commodity (food and fibre) and non-commodity outputs (food security and safety, rural landscape, biodiversity, soil conservation, etc) that are jointly produced by agriculture. Second element is those non-commodity outputs that have characteristics of externalities or public goods, with results that markets for these goods do not exist (OECD, 2001). Therefore, multifunctionality has direct and indirect impact on agriculture and rural development.

The role of multifunctionality on rural development will be examined by using multiple source of information. Documentary and statistical data will be used to explain present situation of multifunctionality of agriculture and its impact on rural development in the country. Quantitative study will be collected primary data by interviewing farmers. Qualitative data will be gathered by interviewing local experts and farmers for describing and analyzing the effects of introducing multifunctionality on rural area, and implementing multifunctional agriculture.

#### **RESULTS AND DISCUSSIONS**

The study region is in North Eastern Bulgaria. The region has 975 620 hectares farmland and 118 335 farms. The region is well known for its massive grain production. The soil is fertile but not irrigated. Farmland is divided into large tracts. Forest belts are the natural boundaries of these land tracks. In the North-east region, 58% of the production in the farms is grain. The average farmland size in the region is around 2-3 hectares with average as farmland size in the country is 0.44 hectares. There are several reasons to choose North Eastern region of Bulgaria for this study: in the region, there are many large-scale farms with one and many production outputs, there are farms with diversified activities - crop and animal

production, bio-products and agrotourism; many young farmers who has already started doing multifunctional agriculture and others who are ready for implementation of "multifunctionality"; the rural areas in North Eastern of Bulgaria have low population density especially in the rural areas, lack of off-farm activities, etc.

The results of the study are separated in two stages. In the first stage, 40 farmers in North Eastern Bulgaria were asked about five groups of questions: farm information, their understanding of the term "multifunctionality", economic effects of "multifunctionality" on the development, rural social effects of "multifunctionality" on the rural development and ecological effects of "multifunctionality" on the rural development. In the second stage, local experts and farmers with grain production were selected to describe understanding of the term of "multifunctionality" and their farm implementing practice of the "multifunctionality" in their farms.

During the first stage, first of all, the interviewed farmers were asked about understanding the term and definition of "multifunctionality". The result showed that only 12,5% of farmers understand the term "multifunctionality" as а function of production and its impact on social life and ecological environment in the community; 37,5% of farmers understand the term "multifunctionality" as diversification of agriculture and its impact on biodiversity, landscape and culture heritage preservation; 42,5% of farmers defined "multifunctionality" as different economical activities; and only 7,5% define "multifunctionality" as production of commodity outputs (food and fibre) and non-commodity outputs (food security and safety, rural landscape, biodiversity, soil conservation, etc.). Second, the farmers were economic asked about impact of "multifunctionality" on rural development. Three components as income, market and trade were evaluated by farmers. Almost 85% of the farmers defined only the income as an important economical component for implementing "multifunctionality", while 55% defined all three components. Third, the farmers were, also, asked about ecological impact on rural development. 95% of famers said that soil conservation, water use and biodiversity are important for ecological environment, but nobody mentioned climate changes and  $CO_2$  emissions as significant factors for agriculture and rural development. Fourth, interviewed farmers defined the employment of local people as a major social component for rural development. However, nobody of interviewees pointed out social heritage and education as important social components.

The typical for implementing case "multifunctionality" in North Eastern Bulgaria is presented by grain production farms. These farms include animal and plant production and often such farms provide machinery services to other farms. The farmer also earns income from offfarm activities such as tourism and bioproduction. So the question is whether this farm fulfils the characteristics type of multifunctionality. In fact, the farms example have diversified its income sources. This kind of economic diversification, however, is not specific to conventional agriculture. Instead, it is a characteristic of various on- and off-farm activities. The economic analysis of the diversified activities should be complemented with a "normative" approach. The question remains, what makes a diversified economic activity a multifunctional activity? Referring to the aforementioned example, there is a potential "risk" that every farm would be classified as multifunctional. This might even be true, because farmers undertake diversified activities because they need to support, to some extent, their livelihood.

## CONCLUSIONS

Multifunctionality and qualitative characteristics of the agricultural sector, contributing to combine environmental, social and economic principles of production and development of rural areas. As a result of the study of the biological component of agriculture will be possible to conclude that the potential use of land and nature in each region are dominant factors for multi-functional characteristics of the industry.

The analysis of field study shows that the notion of multifunctional agriculture is rarely used in Bulgaria. Expectations for the development of multifunction model are greater in areas with intensive agriculture in developed near cities than in typical rural areas. The higher the degree of knowledge and information, the greater the degree multifunction model to be adopted by farmers and should be a prerequisite for successful adaptation to the conditions of the CAP. Environmental and social concerns, which are important aspects within the concept of multifunctional agriculture, are rather implemented separately in the country.

The study results showed that small number of farmers know the concept of "multifunctionality" and, also, farm size play an important role for the implementation of different multifunctional activities. In study region, large commercial farms are involved in several diversified activities such as growing traditional crops and/or livestock production and providing machinery services. This multifunctional model of agriculture is accepted by a large number of commercial farmers and supported by government. Small farms often show a higher amount of off-farm activities.

Bulgarian Multifunctional activities in agriculture have great potential for sustainable rural development. It will provide opportunities for more stable rural development by reducing poverty and increasing farm incomes. In addition, agricultural multifunctionality may stabilise the social and economic life in rural areas and protect the environment in Bulgaria.

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