

RECORDING OF ACCOUNTANCY DATA AT THE FAMILY FARMS IN SERBIA

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Abstract

There was no systematic and continuous monitoring of accounting data on agricultural family holdings in Serbia by 2011. At the end of 2011 it was started with the *Project of establishing a network of accounting data on family farms in Serbia*. The system of recording accounting data on family farms in Serbia is based on the so-called the FADN (Farm Accountancy Data Network) methodology, which applies in EU countries.

Given the importance that agriculture plays for Serbia, and within that, particularly family farms, as well as involvement in the process of international integration, the establishment of recording and monitoring of a number of accounting data in selected commercial family farms is of great importance for Serbian agriculture.

The paper presents the basic characteristics of establishing a network of accounting data on family farms in the Republic of Serbia, the results and problems that arise in the realization of such action, and the significance of the obtained data and records for business analysis of commercial family farms, agriculture and rural areas of Serbia.

Key words: *family farms, agriculture, accountancy data network, FADN methodology*

Introduction

Sector of family farms is of great importance for the agriculture of Serbia due to the number of these farms as well as in terms of resources in their possession and share in the total production of certain agricultural products. According to the 2002 Census, there are 778,891 holdings in Serbia. The estimates show that today, after ten years, the number of farms decreased significantly and that it now dropped to about 650,000.¹

However, data on the ownership structure of Serbian family farms show that the small farms are dominant ones. Data from the 2002 Census indicate that 77.4% of all family farms in Serbia have a property of up to 5ha. The analysis of ownership structure of the registered family farms (RFF) in Serbia done in 2008, points out to similar results: 62.9% RFF has a property of up to 5ha, there are 25.5% of medium-sized holdings (5-10 ha), while large holdings according to our conditions (over 10 ha) participate by only 11.6% of the total RFF number (Vasiljević *et al.*, 2008). Based on these data, it is estimated that 250,000 – 300,000 family farms are economically active, i.e. they could be regarded as so-called commercial farms.

Since they have no legal status, family farms have no obligation to have recording of accountancy data. For this reason, in the past period there was no systematic and continuous monitoring of accounting data on the Serbian family farms. There were certain attempts in this domain, but they have mostly been done on a smaller scale and discontinuously. In late 2011,

¹ A new Census of Serbian agriculture, which should be carried out in the period of October-December 2012, will provide the latest information on the number of family farms, agricultural resources at their disposal, and their share in production of agricultural products.

it has been started in Serbia with establishing a network for the collection of accountancy data from the selected representative sample of family farms, thanks to which the most important production and economic data generated by commercial family farms will be systematically and continuously monitored in the future.

Establishing a network of accounting data on the family farms based on FADN methodology is a condition for Serbia's accession to the European Union, which gives a high priority to this activity in the Republic of Serbia. In October 2011, the project *Establishment of the Serbian Farm Accountancy Data Network - FADN* was officially launched within the IPA 2010 program cycle.² The objectives of the project are the following:

- Preparation of the National Plan for introduction of FADN system in the Republic of Serbia;
- Implementation of the pilot project aiming at testing of FADN methodology and establishing the structure of the system;
- Synchronizing the domestic legislative with the EU ones;
- Institutional capacity building in the context of education and training of the appropriate national officers and farmers in order to enable the application of appropriate sampling methodology, collection, processing and analyzing of obtained data;
- Establishment of the appropriate information system for data processing, storing and analyzing.

Material and Method

The EU member states have established a system of data recording on the farms so-called **FADN** (*Farm Accountancy Data Network*). This system was established in order to allow both microeconomic analyses and determination of the financial status of the farms at the macroeconomic level, and it was supported by EUROSTAT. The concept of FADN was established in 1965. It is based on the annual (accounting) collection of production, economic and financial data out of the farm sample, classified into groups according to 3 criteria: the economic size of holdings, the type of agricultural production and the regional status. Conducting of the annual research about the farm income level using the FADN methodology is the obligation of all EU member states and it represents an instrument of European Commission (EC) for evaluating the farmers' income, as well as for determining the impact of the EU Common Agricultural Policy (CAP) on their operation.

In accordance with the EU legislation and methodology, the Liaison Agencies are responsible for data collection through annual FADN research in the member countries, for the purpose of determining the income status of the farms and the efficiency of agricultural production.

The representativeness of the data is ensured by the choice of farms' sample within FADN system which covers 90% of the total utilized agricultural area (UAA), 90% of the total livestock units and more than 90% of the agricultural production value of the EU member states.

² It is planned that the Project of establishing FADN network in Serbia lasts for two years, with a budget of € 2 million grant, fully funded by the EU. The project is being implemented by the consortium led by NIRAS Group within which are, among others, the consulting institutions from Denmark, France, Hungary, Poland and Estonia.

The FADN network is consisted of annual surveys conducted by the EU member states. Every year, the departments of the EU responsible for the FADN activities collect the accountancy data from the farms selected for the sample, which has been derived from the national farm samples. In this way FADN represents unique, harmonized source of microeconomic data, i.e. a source of data collected according to the accounting principles which are unique for all countries in this network. FADN is basically engaged in agriculture. However, this survey also serves for collecting the data on non-agricultural activities on the farm, e.g. tourism, forestry etc.

The collected information, for each farm in the sample, includes some 1,000 variables and they are being delivered by the national Liaison Agencies in charge. These variables refer to the following two sets of data:

- Physical and structural data, such as location, area under crops, number of livestock, labor, etc. and
- Economic and financial data, such as the value of production of various crops and production lines, stocks, sales and purchasing, operating costs, fixed assets and financial resources, production quotas and subsidies including those related to the application of the CAP measures.

Based on the data collected, three FADN reports are being made for the different categories of users, namely: The Report for the farms, The National report, (so-called Standard Report) and The Report for EC (*Farm Returns*) for the purposes of creating the EU CAP agrarian policy.

All data related to the particular family farms, which have been submitted to the EC, have to be treated with the utmost confidentiality. Consequently, it is not allowed that the data for particular farms go outside the boundaries of the *General Directorate for Agriculture* which is located within the EC. Only the aggregated data for the groups of farms within a region or the member states are being published at appropriate level of aggregation whereby all the data for the particular farms can not be recognized.

In order to be ensured that the sample for the recording of accounting data according to the FADN methodology reflects the heterogeneity of agriculture in a country, before sampling of the farms, the Liaison Agency stratifies the focus field according to the three main criteria (region, economic size and type of agricultural production). The farms are being selected in the sample in accordance with the selection plan that guarantees the representativeness.

Given the fact that participation in FADN network causes the expenses of each national Liaison Agency (sampling, surveys, etc.), the EC approves the payment for each successfully completed farm questionnaire that is being submitted.

Since the time period for the accounting is a calendar year, the procedure of collecting farm data has been adapted to that. At the beginning of the year, the farm owners together with extension assistants are filling out the inventory lists on farm potentials. Inventory lists are the forms with the directions for filling out the appropriate data.

The data are being collected on a selected number of farms, having appropriate economic size. An economic size is not expressed in hectares or livestock numbers, but in the money amount (in €). The farms that keep records using this system are registered in the Farm Register. The boundaries of economic size are determined by each country itself and according to the general standard and the state of agriculture. In the Register, there are usually the farms that have market relevance (the commercial ones) and those ones where more emphasis is put onto the basic agricultural production, but not to the supplementary activities, e.g. forestry or rural tourism. At the end of the calendar year, the changes that have occurred compared to the beginning of the accounting period are being introduced into the inventory lists. The final inventory is at the same time the initial inventory for the next calendar year.

Results and Discussion

FADN network for collecting the farm accountancy data in the Republic of Serbia is being managed and coordinated by the Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia (MAFW). Several institutions are involved in the implementation of the operations concerning collecting and processing of the accountancy data on the family farms. The Institute for Science Application in Agriculture (ISAA) with its regional extension offices (34) is engaged in activities of data collecting and verifying. The Directorate for Agrarian Payments performs the role of Liaison Agency and it maintains the database network on the farm accountancy. The Statistical Office of the Republic of Serbia coordinates the activities on Agricultural Census (October 2012), as well as on the Structural Farm Survey considering the future FADN activities, particularly in the domain of the stratified sampling plan development which should be based on a statistical farm register (with a particular focus on the calculation of economic size and typology). The Steering Committee, which is supposed to supervise the work of the national Liaison Agency and, in a certain way, to control the implementation of the whole project, in addition to the representatives of the above mentioned institutions, also includes the representatives of the two agricultural universities (Belgrade and Novi Sad), which will also represent an expert support in the case of various data analysis according to the FADN methodology. After completion of the project of establishing the network and starting with its regular functioning, the Steering Committee should evolve into the Governing Board.

By the project for establishing FADN network it has been planned that definitive sample for monitoring and recording the accountancy data on the family farms in Serbia amounts between 1,500 and 2,000 farms. However, it takes time for establishment of a network based on this size sample. It is estimated that the full scaled FADN network will be established and "will come to life" in the next 5-9 years. Predictions for Serbia are that it is going to happen until 2018. Until then, it is planned for the sample to be successively increased. In the first stage, starting from February 2012, the sample for data recording includes the first 40 pilot farms. Along with the formation of sample, it is carrying out the training of the staff which will be engaged in the activities of the FADN network establishment in Serbia as well as in the surveying of the selected farms. For the initial number of farms in the sample, 20 extension advisors have been trained and they all belong to the Serbian agricultural extension services that are organized at The Institute for Science Application in Agriculture (ISAA). The first group of interviewers consists of advisors employed in 16 regional agricultural extension services and their selection was made by MAFW.

Participation of farmers in the sample is voluntary, as it is the case in all EU countries. The benefits of participation in the selected sample the commercial farms should recognize in an improvement of production and economic results on their own farm, i.e. in achievement of higher profitability in agricultural production as well as in the linked complementary activities, due to the fact that the voluntary participation in the sample is not being paid.

In the second stage (early 2013) it is planned that the number of farms on which the accountancy data will be recorded will be increased onto 190 (while the number of trained interviewers will be increased onto 48). At the end of the two-year lasting project of FADN network establishment (October 2013), the number of surveyed farms should be increased onto 270 (and number of the trained interviewers onto 68). It is planned that the sample increases by about 40% each year until it reaches the projected size of about 1,500-2,000 farms. Each interviewer will have the task to visit four times each farm in the sample that he is

responsible for and where he/she records the accountancy data. During the period of full development of the FADN network, each trained interviewer will record the accountancy data at 15-35 farms, depending on the needs and availability of certain interviewers due to the other advisory activities, given the fact that the survey work will be carried out by the employees in the national agricultural extension services (ISAA).³

During the two-year lasting project, the Department in MAFW responsible for FADN network, ISAA and the new established Liaison Agency should fully overmaster all the activities concerning establishment, expansion and utilization of the FADN network, as well as the collection and processing of the obtained from the farms, which will be comparable with the data collected in all EU member states, but also in the candidate countries (e.g. Croatia). For those needs, it is provided and it is being established the appropriate IT support.

Certainly, there are a number of problems facing an implementation of the FADN project in our country. One of them is that the accounting data recording considers only registered family farms (RFF) and only the commercial ones. In addition, it should be noted that legislation that enables the smooth functioning of FADN network is not yet completed, while the elaboration of the five-year National plan for introduction of FADN system in the Republic of Serbia has been still under construction. Finally, Serbian farmers are proverbially distrustful for new initiatives, especially when it is an introduction of the regular recording of what they produce, then of the costs and revenues generated from production, because they are being afraid that it will have an impact on an increase of the taxes that they have to pay to the state. Due to this fact, the institutions that are responsible for establishing of the FADN network, first of all the interviewers who collect the accounting data at the farms, should particularly take into account the manner in which they present the project of introducing the farm accountancy data recording to the farmers, in order to find collaborators in the farm owners, as the whole action will produce results equally useful for both, for the farms and for the state.

Conclusion

Taking in an account the importance of agriculture in the economy of Serbia and within that particularly an importance of the family farms, as well as the process of accession into the international integrations, there is a need of establishing a system of a permanent monitoring and recording the actual production and economic results on the family farms. In 2011, with a help of the EU funding, Serbia initiated the process of establishing the network for the collection of accountancy data on selected family farms using the FADN methodology which is being applied by the EU member States and the candidate countries as well, taking into account that it is one of the preconditions for the EU accession in domain of agriculture.

In October 2011, it started the realization of the project under title "*Establishment of the Serbian Farm Accountancy Data Network - FADN*" within the IPA 2010 program. The project will last for 2 years and the establishment of a complete network for 5-8 years.

The definite sample for permanent data collection will be between 1,500 and 2,000 farms, which represents a representative size that will be able to provide the adequate data about the physical, structural, economic and financial information for commercial family farms' sector in Serbia. Those data will be comparable to data which are being collected in

³ Based on past experiences with the FADN network in the EU countries, it is estimated that the annual costs of recording the accounting data within the FADN network will amount to 400 and 500 € per each farm, which means that for the total number of maximum 2,000 farms, the costs will amount to 800,000-1,000,000 €.

other European countries applying FADN methodology and they will serve both to increase the production efficiency and profitability of the family farms in Serbia, but also for more successful agrarian policy and designing the supporting measures for family farms.

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