

PROBLEMS IN RECORD KEEPING OF PRODUCTION AND ECONOMIC RESULTS OF FAMILY FARMS IN THE REPUBLIC OF SERBIA

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Abstract

In order that agriculture, one of the most important branches of the Serbian economy, can function satisfactorily, appropriate agrarian policies need to be implemented. When setting up agrarian policy measures, it is necessary to have a good information base not only for agricultural economic analysis as a basis for creating appropriate measures, but also for monitoring and evaluation of the implemented measures. Systematic record keeping on family farms is a basis for creating an appropriate agricultural policy in the domain of family farming, as well as for conducting further analysis that can contribute to the successful implementation of the agricultural policy. Looking at the previous developmental period, it can be concluded that most of the problems occurred due to the lack of adequate economic data and indicators of the business of some family farms that have a large share in Serbian agricultural resources and contribute significantly to production of many agricultural products. In line with the reforms undertaken in all industries, and in order to harmonize laws and regulations with those of the EU in the process of EU accession, changes have also been occurred in Serbian agriculture, starting from introduction of systematic record keeping of production and economic performances on selected family farms, which will help in monitoring of basic indicators necessary for proper adoption of agrarian policy measures.

This paper describes the system of record keeping of production and economic business indicators on family farms that has been applied in the EU countries, and has now being introduced in the Republic of Serbia. The paper also gives a review of the dynamics of its introduction together with the analysis of the recently achieved results.

Key words: business records, information base, family farms, agricultural policy, Republic of Serbia.

Introduction

Family farms represent the smallest agricultural units of a country. This, however, does not diminish their importance. An appropriate agrarian policy aimed at this smallest unit results in strengthening the whole system. In the Republic of Serbia, family farms are particularly important units of the agricultural system, since they have a large share in Serbian agricultural resources and contribute significantly to production of agricultural products.

Besides playing a role in feeding population, agriculture also provides inputs for many industries. It also uses a large number of inputs from other industries, therefore representing a significant market for a series of industrial products (Vasiljevic & Zakic, 2008).

Agriculture is characterized by many specificities, the most important of which originated from its three basic characteristics:

1. Agriculture represents the production of organic matter which, apart from human labor, mainly depends on environmental conditions (climate, landscape, geographical position and soil fertility);
2. Special resources are used in agricultural production, such as land, animals and perennial plantations;
3. Agricultural production includes many different subjects, such as family farms, large agricultural corporations and cooperatives – special organizations that combine an association with a business company. (Vasiljevic, 2012)

Transitional period and the process of EU accession have brought a lot of changes in Serbian agriculture, making its subjects accept those changes and the process of adapting to standards that are applied in the EU and developed countries. Beside introducing new technologies and putting more emphasis on innovations, these processes imply the necessity of establishing record keeping on family farms in order to monitor costs and production results systematically and to create an adequate basis for implementation of agrarian policies.

In the long run, it is necessary to manage the development of family farms on a strategic level. To accomplish that, some quality and valid information on the scope and structure of agricultural production is needed, as well as information on economic effects. In that respect, a necessary measure is the establishment of accountancy and information system to record business changes on farms and to compile them on a national level. (Pejanovic, 2007)

Material and Methods

In this paper, research methods and procedures specific to the economy and agricultural economy were used.²⁰ This paper combines different research methods. The analytic and synthetic research methods for the subject matter were used, as well as so-called “desk analysis” of references and obtained results. The comparative analysis was used for comparing the obtained results in Serbia with the ones in European countries. The paper analyses the main characteristics of the *FARM ACCOUNTANCY DATA NETWORK* (FADN) methodology used for recording and processing data collected on the family farms chosen in the sample.

Results and Discussion

Developed countries recognized the need for farm record keeping long time ago. Although it was known in the late 18th century, record keeping in Germany became mandatory in 1953, while its expansion occurred in the late 19th century. In 1925 France founded its first institution for record keeping, and one more after the World War II. In Italy, a simple accountancy system was introduced in 1926.²¹

In Serbia, the first research on accountancy dated before the World War II, in 1921. The Faculty of Agriculture and Forestry was in charge of this research, and the first funding for it was approved in 1938. Unfortunately, the data on the research conducted until 1941 on 900 farms in 44 villages were burnt down by the German army just before the liberation of the city of Belgrade.

After the World War II, in 1949 the government of the Federal National Republic of Yugoslavia (FNRY) put in charge the Institute of Agricultural Economics from Belgrade to

²¹ Krstic, B., Jevtic, S., Arsenovic, DJ. (2005): Knjigovodstvo na seljackom gazdinstvu, IPN, Beograd, pp. 4-5.

collect data on farms. Thousands of farms were surveyed in that period, and the focus was put on taxing of farmers and the analysis of costs and prices of agricultural products. Although the obtained results were there for implementing agrarian policies and writing master and PhD theses, this research was stopped in 1981 due to the lack of funding. In the next two decades there were no valid farm data until 2001 when implementing the “Monitoring selected registered farms” project, funded by the Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia and conducted by the Institute for Science Application in Agriculture (IPN) from Belgrade, resulted in the first relevant data on family farms. That year, data on 1774 individual farms were taken into the sample.

Due to political changes and other issues this research was not conducted in 2005 and 2006, and it continued in 2008²². Nowadays, the IPN monitors 3550 selected leader farms through 22 regional agricultural extension services of the Republic of Serbia (PSSS) (Table 1).

Table 1 Number of selected leader farms in Serbia monitored and given by the regions (2013)

No.	PSSS	Number of extension agents	Number of municipalities	Selected leader farms	Number of farms
1	Sabac	9	5	25	225
2	Loznica	5	4	25	125
3	Valjevo	8	6	25	200
4	Smederevo	7	4	25	175
5	Pozarevac	8	8	25	200
6	Kragujevac	8	7	25	200
7	Jagodina	7	6	25	175
8	Negotin	7	4	25	175
9	Zajecar	6	4	25	150
10	Uzice	7	8	25	175
11	Cacak	8	4	25	200
12	Kraljevo	6	4	25	150
13	Krusevac	9	6	25	225
14	Nis	6	7	25	150
15	Prokuplje	6	4	25	150
16	Pirot	5	4	25	125
17	Leskovac	8	6	25	200
18	Vranje	5	7	25	125
19	K. Mitrovica	3	7	25	75
20	P. Skela	4	4	25	100
21	Mladenovac	6	7	25	150
22	Novi Pazar	4	3	25	100
Total		142	119	3550	3550

Source: Report on extension activities conducted by the agricultural extension services in the first quarter of 2013, submitted to the Ministry of Agriculture, Forestry and Water Management by the IPN

²² Vasiljevic, Z., Sevarlic, M., Filipovic, N., Rahovic, D. (2008): Uvodjenje knjigovodstva na porodica gazdinstva u Srbiji, Zbornik „Evropska unija i zapadni Balkan – Izazovi za agrarnu privredu Srbije: sta nam je ciniti“, Regionalna privredna komora – DAES, Novi Sad – Beograd, pp. 57-61.

Extension agents are obliged to fill in the survey sheets for gross margins for dominant crops on 3550 leader farms. They collect data on their leader farms and send those data to the IPN at the end of each production year.

„According to the Annual work plan, every extension agent should calculate gross margins based on the parameters they record for each chosen farm. Every extension agent should calculate 25 gross margins for their leader farms for dominant enterprises (one gross margin per farm). By the end of the first quarter of 2013, extension agents submitted a total of 3575 gross margins collected during 2012. Most of the gross margins were for crop and vegetable production (1499), then for fruit production and viticulture (1067) and for animal husbandry (997). As for agricultural processing, 11 gross margins were collected, and one gross margin was made for services“²³

Considering that for a long time there was no record keeping of costs, this relatively small sample can give certain indicators on costs and economic results on farms (that are otherwise not obliged to do the record keeping), which is surely important both for choosing more appropriate measures and determining the direction of the agrarian policy.

Simultaneously with the record keeping on gross margins for dominant enterprises of selected leader farms done by the IPN, in October 2011 the long-awaited FADN project (*Farm Accountancy Data Network*) was officially launched to establish a network for collecting data according to the FADN methodology. Due to this methodology, the physical and economic data from the sample of selected leader farms in Serbia would be systematically collected in the same way this is done in the EU countries.

The FADN system or “Farm Accountancy Data Network” has proved its efficiency in the European Union. The system was established to enable microeconomic analyses and determine financial position of a farm on a macroeconomic level, and it is fully supported by the EUROSTAT. The FADN concept was established in 1965, when a regulation known as *the Council Regulation 76/65* determined a legal basis for this network organization. This concept is based on annual collection of production, economic and financial data from a sample of farms divided into groups according to the following three criteria: economic size of farms, type of production, and regional position. Conducting annual research is an obligation for all EU member countries, and it represents a tool the European Commission uses for assessing farm income and identifying the effects the *Common Agricultural Policy – CAP* has on farm business²⁴.

The established and operating FADN system is one of the perquisites Serbia has to fulfill in the process of EU accession.

Like all other projects on record keeping, this project is also facing big problems. One of the basic problems is how to include an adequate number of farmers, considering that it is based on voluntarily participation in the network and having in mind well-known farmers’ lack of trust. Moreover, one of the problems is also that farm owners do not believe strongly enough that this is beneficial to their farms.

Rural depopulation, a great problem of the whole agro-industry, also implies the lacking of the person who will inherit the farm, which is the problem the implementers of the project on establishing the system for monitoring and record keeping of farm data are facing. In a broader sense, this problem also tackles the farm ownership structure. It is questionable how efficient record keeping can be for small farms, since the average farm size in Serbia is about 3 ha.

²³ Report on extension activities conducted by the agricultural extension services in the first quarter of 2013, submitted to the Ministry of Agriculture, Forestry and Water Management by the IPN, pp. 12.

²⁴ Vasiljevic, Z. (2012): Uspostavljanje mreze racunovodstvenih podataka na porodicnim poljoprivrednim gazdinstvima u Srbiji, *Casopis za pravo i ekonomiju evropskih integracija – Izazovi evropskih integracija*, Beograd, pp. 34.

The problem of the farm ownership structure also affects farms that have an heir but do not own the land – they lease it. Moreover, farmers do not often report on the whole land they farm, since they do not have a lease agreement. The land owners often give their land for leasing without making a lease agreement, yet being subsidized for their crop production by the government. This increases the costs “real farmers” have and diminishes their competitiveness.

In order to improve the competitiveness of their production, a number of advanced farmers have identified a need for improving the knowledge, so they voluntarily decided to participate in such projects, like the one on the establishment of the FADN. These projects help them monitor their own farm business, measure and diminish the costs through applying and recording adequate cropping practices in order to have better insight in farm cash flow, therefore improving the business of farms that joined the project.

Adopting a law on mandatory farm record keeping would ease this process significantly. Therefore, data for projects like the FADN would be more relevant, enabling the government to have more relevant information for improving measures of agrarian policies.

Making farm record keeping mandatory will not necessarily solve the problems of rural depopulation; improve the farm ownership structure, solve the problem of farmers’ lack of trust, etc. This measure, however, would certainly help in diminishing production costs, making more appropriate decisions on investments in more profitable and sustainable production, and making agricultural production more specialized.

Conclusion

Observing the genesis of the practice of recording and monitoring the economic and financial indicators of family farm business in Serbia, as well as periods when no records were kept, it can be concluded that the existence of a permanent and systematic record keeping of costs and business results is an important factor for the creation of appropriate measures of agrarian policy, and improving competitiveness through reducing production costs. By improving agricultural production and harmonizing national legislation with the EU legislation through the creation of an appropriate information system for data collecting, processing, analyzing and storing, some requirements set out in the IPA 2010 programming cycle are also fulfilled. Agrarian policy cannot be adequately managed without having relevant data and records, while incentives (subsidies) allocated for specific purposes also cannot be allocated to certain production enterprises and measures, if not based on adequate data and analyses.

One of the outcomes of the systematic monitoring of farm economic results is reflected in an adequate insight into farm cash flows, which can help in establishing cooperatives and associations. These cooperatives and associations through machinery rings could reduce production costs, increase profits and ensure the competitiveness of products from family farms in Serbia.

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