

# FINANCING OF AGRICULTURE: EXPERIENCES OF THE REPUBLIC OF SERBIA

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## Abstract

*Financing is the biggest and most complex problem of agriculture in the Republic of Serbia, which is constantly current. The essence of this problem lies in the inadequate relationship between investment in agriculture, viewed through allocations from the state budget, and the contribution of agriculture to the creation of gross added value. The aim of the paper is to analyze the problem of financing agriculture and ways of solving it in the previous and current period in the Republic of Serbia. The paper uses historical, descriptive, desk research, as well as methods of analysis and synthesis. The authors conclude that it is necessary to define a development program package of agrarian policy measures for a longer period of time. The sources of agricultural financing should include securities, financial derivatives, as well as a specialized agricultural bank. To that end, it is necessary to define an adequate normative framework.*

*Key words: Financing of agriculture, Primary issue of the National Bank, agricultural budget, IPARD Program, Republic of Serbia.*

## Introduction

In accordance with the Organization for Economic Cooperation and Development (OECD) categorization, 85% of the territory of the Republic of Serbia is considered a rural area. According to the results of the last Census, which was carried out in 2022, 38% of the total population lives in rural areas (Census 2022), and at the beginning of the 21st century, 55% of the total population of the Republic of Serbia lived in rural areas (Radović, 2009).

According to the results of the Agricultural Census, which was carried out in 2023, there are 508,325 agricultural farms in Serbia. Their structure is dominated by family farms, of which there are 506,323. Therefore, family farms make up 99.6% of the total number of farms in the Republic of Serbia. The total area of available agricultural land is 3,947,257 hectares, of which 90% are used by family farms. The average size of agricultural holdings is 6.4 ha. Only 8.3% of the total agricultural land used is irrigated, that is, only 27% of the total number of agricultural farms have irrigation systems. Only 13% of the total number of agricultural holdings are engaged in other profitable non-agricultural activities. In the age structure of the owners of agricultural holdings, residents of rural areas who are over 65 years old prevail. They make up 44.72% of the total number of owners of agricultural holdings (Census of Agriculture 2023).

According to the results of the Agricultural Census in 2012, there were a total of 631,552 agricultural farms in the Republic of Serbia, which cultivated a total of 3,437,423 hectares of agricultural land. In the structure of agricultural farms, family agricultural farms prevailed, which accounted for 99.5%, and the average age of the owners of these farms was 59 years. The average size of used agricultural land per farm was only 5.4 hectares. Apart from primary agricultural production, 13% of the total number of agricultural holdings engaged in other profitable activities, and about 3% of the total used agricultural land was irrigated (Census of Agriculture 2012; Labor Force Survey 2011).

Based on the above data, it can be concluded that the number of inhabitants in the Republic of Serbia is engaged in agriculture, that the number of agricultural farms is decreasing, while their owners are getting older. The percentage of agricultural holdings engaged in other profitable non-agricultural activities increased slightly between the two censuses, as did the implementation of the irrigation system, which is necessary in the conditions of increasingly frequent dry years. We believe that all the above indicators are to a significant extent caused by the problem of financing agriculture, which was present both in the pre-transition period and in the transition period, and is also represented in the current period in the Republic of Serbia. This problem is primarily present in family farms, which were, and still are, dominant in the structure of agricultural entities in the Republic of Serbia.

### **Methodology**

The aim of the paper is to analyze the problem of financing agriculture and ways of solving it in the previous and current period in the Republic of Serbia. The paper uses historical, descriptive, desk research, as well as methods of analysis and synthesis.

### **The problem of financing agriculture**

Due to its biological and socio-economic specificities, agriculture requires adequate financial support (Vasiljević, 1998). Whether it is viewed in a narrower sense, as primary agricultural production, or in a broader sense, as multifunctional agriculture, agriculture is "privileged", that is, it has financial support even in market-developed economies (Radović, 2014).

Multifunctional agriculture, in addition to primary agricultural production, also includes all activities that rely on it (processing of agricultural products, trade, crafts, tourism, etc.). It is about the concept of integral rural development, which implies an integral, rounded rural economy, which consists of a set of interconnected economic activities, which should enable alternative sources of employment and income in rural areas (Pejanović and Njegovan, 2011). By solving the problem of financing multifunctional agriculture, development opportunities would be created, employment would increase, and migration from rural to urban areas would be stopped.

The goal of domestic agricultural policy should be, as well as the goal of the Common Agricultural Policy of the European Union, defining the development concept of multifunctional agriculture. In accordance with the set goal, it is necessary to provide quantitatively and qualitatively adequate sources of financing that are conditioned by

the specifics of agriculture. Due to the specificity of the production cycle, low turnover of capital, low profitability of production, as well as the absence of its own sources of financing, agriculture needs constant financial and credit support.

Financing is the biggest and most complex problem of agriculture in the Republic of Serbia, which is constantly current. The essence of this problem lies in the inadequate relationship between investment in agriculture, viewed through allocations from the state budget, and the contribution of agriculture to the creation of gross added value (Radović, 2009).

### **Pre-transition period**

The economic position of agriculture, analyzed through the primary distribution on the market, was very unfavorable in the entire pre-transition period. The reason for this was the policy of depressed prices of agricultural products. The existence of a disparity in the prices of agricultural, food and industrial products, i.e. "price scissors", is justified by the necessity of ensuring the country's food security. It is estimated that in the 90s of the 20<sup>th</sup> century, about five billion US dollars were "drained" from agriculture in this way, which permanently damaged the economic position of this activity in the domestic economic system (Radović, 2009).

Until 1994, that is, until the adoption of the Monetary System Reconstruction Program on January 24, 1994, the financing of agriculture was completely dependent on the state. The state had a decisive influence on the creation of support aimed at financing agricultural production. The support mainly related to lending under favorable credit conditions, and the source of credit was the primary issue of the National Bank. Credit placements of commercial banks in agriculture, which were financed from the commercial bank's own sources of funds, were also under considerable influence of the state. For this period, it can be said that both short-term and long-term crediting of agriculture was under the influence of state control, that is, funds for agriculture were administratively directed (Radović, 2014).

The financing of agriculture from the primary issue of the National Bank took place by the fact that the National Bank formed a selective credit potential every year on the basis of which it granted short-term loans to commercial banks from the primary issue. Loans were granted at an interest rate equal to the discount rate. This means that these loans were significantly cheaper compared to loans that were approved at the interest rate that was then current on the money market. More precisely, the discount rate was two times and even five times lower in relation to the interest rates on the money market, that is, the interest rates at which loans were granted by commercial banks in the first half of the 90s of the last century. According to the claims of some authors (Bjelica, 2001), the placement of selective loans in domestic agriculture in the 80s and 90s of the 20<sup>th</sup> century had a basis, because in this way the unfavorable economic position of agricultural subjects was partially improved. Specifically, in this way, the economic damage caused to agriculture through price disparities was "compensated".

The financing of agriculture from the primary issue of the National Bank was a way of financing that took into account the specifics of agricultural production (seasonal nature of production, the need to place funds in the short term, as well as to remain tied

up for a long time). The price of this source of financing was adapted to the low payment capacity of agricultural subjects. The disadvantages of this method of financing were the insufficiency of sources of financing, seen from the aspect of the needs of the agriculture (Radović, 2014).

The authors (Čurović and Vučković, 2001) believe that the benefited credit placements in agriculture were reduced in value due to the inadequate application of the rediscount rate to protective, instead of market, prices of agricultural products. According to the same source, "on this basis, the funds that were placed in agriculture from the primary issue were reduced by 15% to 30%, i.e. in proportion to the difference in the level of protected and market prices of agricultural products" (Čurović and Vučković, 2001). Based on the above, it can be concluded that price disparities, which "ruled" in the domestic economy, "punished" agriculture doubly. Firstly, by inadequate redistribution on the goods market, and secondly by reducing the source of financing based on the funds of the primary issue of the National Bank (Radović, 2014).

With the adoption of the Monetary System Reconstruction Program on January 24, 1994, the privileged position of agriculture in terms of its financing from the primary issue of the National Bank was abolished. However, the abolition of privileged loans did not ensure another source of financing for agriculture, which would be an adequate replacement. Therefore, agricultural entities were forced to take credit under very unfavorable conditions. Due to the restrictive money supply, interest rates in the banking market were extremely high. Individual agricultural producers were in an even more difficult situation, because they could not respond to the demands of banks for the provision of appropriate loan security, and were forced to borrow "on the green" from processors of agricultural products.

The financing of agriculture from the primary issue of the National Bank has been "accused" of being the cause of hyperinflation, given that the loans placed in agriculture had real coverage in realized agricultural production. Financing of agriculture from the primary issue of the National Bank left negative consequences on the domestic financial, monetary and economic system, due to the inadequate control system of this method of financing, which was entrusted to commercial banks (Radović, 2014).

### **Transition period**

The basic method of financing agriculture in the Republic of Serbia in the transition period was the agrarian budget. The agrarian budget is a key instrument of agrarian and rural policy, that is, "the agrarian budget is a common and consolidated form of state support to agriculture, which is implemented through subsidizing agricultural production" (Pejanović et al., 2010). As a safe and permanent source of agricultural financing, it was established by the Decision on the formation of the agricultural budget, which was adopted at the end of 1995, and it became an integral part of the state budget in 1996. This type of support for agriculture exists in all agriculturally developed countries, but also within the unified budget of the European Union.

The quantitative aspect of the agricultural budget represents its participation in the total budget of the Republic of Serbia by individual years. The agricultural budget, in

addition to the quantitative one, also has a very important qualitative dimension, as it represents a key instrument for the implementation of agricultural policy measures. It is necessary to point out that the agricultural policy in the Republic of Serbia has been going through sudden and inconsistent changes in the entire period so far, which were also reflected in the structural (qualitative) changes of the agricultural budget (Radović, 2015).

The Republic of Slovenia can serve as a model for our country regarding the continuous growth of the share of agriculture in the total state budget in the transition period. According to (Radović, 2011) "continuous growth of funds allocated from the budget of the Republic of Slovenia for agriculture, in the transition period 1996-2003., as well as after the accession of this country to the European Union in 2004-2010., testifies to the need to modernize agricultural production through more significant investments, to achieve higher yields, as well as to realize this production in compliance with all European Union standards, so that Slovenian agricultural and food products are competitive on the European market".

The average share of agriculture in the total budget of the Republic of Serbia in the transition period, ending in 2013, was almost three times less than the share of agriculture, forestry and fishing in the gross added value (expressed in current prices). The above data represent the essence of the domestic problem of financing agriculture. It is about an inadequate relationship between allocations from the state budget for the purpose of investing in agriculture and the contribution of agriculture to the creation of gross added value at the state level (Radović, 2014).

### **Current period**

Financing of agriculture in the Republic of Serbia is currently based on financing from the state budget (republican, provincial and local self-government budgets), on financing from the IPARD pre-accession fund of the European Union, as well as lending with subsidized interest, which is available to agricultural entities (agricultural farms), which are located on the territory of the Autonomous Province of Vojvodina. These loans are approved by specialized state financial institutions: the Provincial Fund for Agricultural Development and the Development Fund of Vojvodina. However, considering that the mentioned sources of financing are insufficient, or unavailable in the period of intensive investments in agricultural production (in the sowing period), the sources of agricultural financing are also classic bank loans. They are usually unfavorable, first of all, for family farms. Also, as a source of funding for domestic agriculture in recent years, financial leasing plays an increasingly important role, which is present, above all, in the procurement of agricultural machinery.

In the structure of the agricultural budget, there are incentives for: direct payments, rural development measures, credit support for agriculture, special incentives and IPARD incentives.

Incentives for credit support to agriculture have been included in the structure of the agricultural budget since 2004, and their primary goal was to enable family farms to borrow. Until then, these farms were not able to use bank loans as a source of financing, because they were extremely expensive. With the introduction of subsidies, interest rates became lower, and thus loans became more accessible to these agricultural entities. According to the author's research (Radović et al., 2024, p. 72), incentives for

credit support had a very small share (less than 2%) in the total planned as well as realized incentives that were paid from the agricultural budget in the period 2014-2022. However, when analyzing the average implementation of these incentives, it was relatively high and amounted to 73% in the analyzed period. The mentioned information indicates the great need of agricultural entities in the Republic of Serbia for credit, as an additional source of financing agricultural production.

**Table 1.** Participation of the agricultural budget in the state budget of the RS 2020-2023.

Year	Agricultural budget (in RSD)	State budget (in RSD)	Participation of the agricultural budget in the state budget (in %)
2020	56,067,890,000	1,291,354,655,400	4.34
2021	60,271,291,000	1,488,452,656,000	4.05
2022	78,571,509,000	1,709,543,207,000	4.60
2023	114,376,688,000	1,903,965,063,000	6.01

*Source: Laws on the budget of the Republic of Serbia 2020-2023.*

Participation of the agricultural budget in the total state budget of the Republic of Serbia in the period 2020-2023 is shown in **Table 1**. In order to clarify the target values, it is necessary to state the fact that in the initial version of the Law on Agriculture in Rural Development, it was prescribed that the participation of the agricultural budget in the total state budget should amount to a minimum of 5%, while certain agro-economic analysts believe that this minimum should be 10%.

In order to develop agriculture in the Republic of Serbia, it is necessary to increase the quantitative share of the agricultural budget in the total state budget in the coming period. Also, with regard to the qualitative aspect of the agrarian budget, it is necessary that incentives, that is, support for rural development, play a greater role. This would enable the "harmonization of the domicile agrarian policy with the CAP of the European Union" (Pejanović & Radović, 2013). Bearing in mind that family farms dominate the structure of agricultural entities in the Republic of Serbia, increasing their economic and financial sustainability is crucial for the development of domestic agriculture (Vasiljević et al., 2024).

An important source of financing for agriculture in the Republic of Serbia in the current period is the IPARD program, as a pre-accession fund of the European Union. The implementation of the IPARD II Program was completed, and in 2024, the implementation of the IPARD III Program began. **Table 2** shows the implementation of the IPARD II Program as of June 28, 2024.

**Table 2.** Implementation of the IPARD II Program by June 28, 2024.

Measures	Contracted implementation (in % 2014-2020)	Realization paid (in % 2014-2020)
Measure 1	81.93	64.39
Measure 3	76.93	45.59
Measure 7	75.24	12.84

*Source: <https://ipard.gov.rs/wp-content/uploads/2024/07/28.06.2024.pdf>*

Based on the data presented in **Table 2**, it can be stated that the percentage of contracted realization is high for all three measures that were accredited in the IPARD II Program. These are: Measure 1, Measure 3 and Measure 7.

Measure 1 includes investments in the physical assets of agricultural holdings, namely investments in the sectors: milk, meat, fruit and vegetables, eggs, grapes, as well as in the sector of other crops – cereals, oilseeds, sugar beet (IPARD Regulation, a). Measure 3 includes investments in physical assets, which concern the processing and marketing of agricultural and fishery products. These are investments in the following sectors: milk, meat, fruit and vegetables, eggs and grapes (IPARD Regulations, b). It can be noted that the vegetable sector is present in both measures. According to the author's research (Subić et al., 2023) "the production of vegetables in the Republic of Serbia is of great importance for the entire agricultural production". Measure 7 includes investments in the diversification of the activities of agricultural holdings and business development. The aim of this measure is to improve the quality of life in rural areas, which should have an impact on the reduction of migration from rural areas to urban areas (IPARD IIc Regulation).

The high percentage of contracted implementation for all three accredited measures of the IPARD II Program testifies to the great interest of agricultural entities in this source of financing. When analyzing the percentage of disbursed funds, it can be stated that it is quite low, as of June 28, 2024, especially for Measure 7 (**Table 2**).

### **Conclusion and Recommendations**

The problem of financing agriculture was present in the entire period so far in the Republic of Serbia. If the aforementioned problem is added to the lack of adequate agricultural credit, adapted to the seasonal nature of agricultural production and the financial capabilities of agricultural entities, it is clear that solving the financing problem is essential for the development of agriculture in the Republic of Serbia.

In order to achieve greater efficiency of agricultural policy measures, it is necessary to ensure the coordination and promptness of the payment of subsidies in the coming period, so that they are paid out at the national, provincial, and local self-government levels before sowing, when the biggest investments are in agricultural production. Also, the Strategy for Agriculture and Rural Development of the Republic of Serbia should define the development framework, as well as the program package of agricultural policy measures. These measures should be applied continuously, that is, in a defined development period, according to the example of the Common Agricultural Policy of the European Union. In this way, the predictability of the agricultural policy in the Republic of Serbia would be ensured, which was not the case in the previous period.

The sources of agricultural financing in the Republic of Serbia should include securities as well as financial derivatives (futures and options) in the coming period. In order to apply the aforementioned financial instruments, the development of the primary and secondary financial markets is necessary. In order to ensure a stable, safe and favorable source of financing for agriculture in the Republic of Serbia, the possibilities for establishing a specialized banking institution - a "specialized agricultural bank" should be considered.

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