

Opportunities for Financing in Agriculture - The Example of the Republic of North Macedonia

Besnik Xhezairi MSc student, Faculty of Biotechnical Sciences, Bitola, Republic of N. Macedonia Email:besnik.xhezairi@unite.edu.mk

> Risto Stefanovski Clinical hospital – Bitola, Bitola, Republic of N. Macedonia Email:stefanovskiristo@gmail.com

Nikolche Jankulovski*
Faculty of Biotechnical Sciences, University St. Kliment Ohridski-Bitola
Partizanska bb, Bitola, Republic of N. Macedonia
E-mail: nikolce.jankulovski@uklo.edu.mk

Abstract

To achieve sustained economic development of RNM should include agricultural development while reducing the differences in development of certain sectors of the economy. Since a long time pursued the search for a universal model of agriculture financing it is concluded that the creation of such a model is impossible. So, it takes a combination of several different models of funding that do not involve only funds from the agricultural budget, but also from foreign sources. Since there is no universal model provides an overview of agriculture financing from several sources such as loans from commercial banks, National and Regional funds, leasing, securities, concessions, public-private partnerships, joint ventures, donations and international funds. The above-mentioned ways of financing can be similar to each other but also different because each of them has its own characteristics, advantages and disadvantages. It is necessary to harmonize all potential sources and make them available to farmers because each of them knows that the financing model suits them and whether they can borrow. Although RNM has its own policy for the development of agriculture, it obviously varies by periods of observation. Thus, the aim of the work is to show the importance of combining and harmonizing the different models of financing of agriculture of RNM as well as their implementation.

Keywords: Agriculture, Financing, Agriculture budget, Funds, IPARD

DOI: 10.7176/EJBM/16-1-04 **Publication date:** January 31st 2024

1. Introduction

Agriculture as an economic sector plays a significant role in the overall economy of the Republic of North Macedonia. The primary role of agriculture, which is irreplaceable, is feeding the population, ie achieving food self-sufficiency in the country. On the other hand, agriculture has its own replaceable role, which is participation in the creation of GDP, employment of the population, a platform for the development of industry and technology. From an economic point of view, agriculture can be studied in terms of exports and imports, production of agricultural products, specific production of different crops and processing.

Since the beginning of the global financial crisis, the agricultural sector has started to decline significantly. The number of agricultural products marketed for foreign trade has decreased, which has resulted in reduced exports. The number of agricultural producers has significantly decreased in all branches of agricultural production. A large amount of agricultural land remains uncultivated, which is extremely disastrous for a country with enormous potential. Today, the agricultural sector contributes a very small percentage of GDP, but is still a significant factor in rural areas.

Understanding the content of agriculture is of crucial importance, and it follows that agriculture is an activity related to the cultivation of useful plants and animals and to the processing, transportation and trade of plant and animal products produced by one's own activity.

In order for agricultural production to be sustainable and profitable, certain investments and financing are needed in the production itself. There are different forms of financing agricultural production, such as: grants and incentives, loans and microloans, European funds. Each form of financing has its own advantages and disadvantages. It remains for agricultural producers to educate themselves and inform themselves which sources are most suitable for their production.

The entry of the Republic of North Macedonia into the European Union is one of the key factors for the recovery and strengthening of the agricultural sector. With the entry into the union, agricultural producers can more easily market their products and services on the foreign market. The European Union, through its policy and



funds, such as: the Cohesion Fund, the European Fund for Regional Development, the European Agricultural Fund for Rural Development, offers a number of financial incentives and measures that farmers can use to finance their own production.

Various supports and incentives at the state and county level, loans, income from suppliers and customers, microcredits, franchises and the already mentioned funds of the European Union play an extremely important role in financing entrepreneurs. Although in ideal conditions the rule would apply that it is easiest to finance any production with own funds, which is an extremely difficult task in today's situation in which the entire economy is.

1.1 Research problem

It is known that agriculture is one of the carriers of the economic development of the national economy, but in order for it to remain so, greater financial support is needed from the budget for agriculture, the establishment of a strong agricultural bank, attracting foreign donations, foreign direct investments, as well as the use of funds from foreign funds.

This paper deals with one of the most current topics affecting the agricultural sector, which is the possibility of financing. Specifically, the structure of the capital that is placed in the agricultural sector for the purpose of achieving development goals is important. For the purposes of financing agriculture, the sources can be domestic and foreign, traditional and newer, short-term and long-term, own and borrowed, etc. If all the mentioned individual sources of financing are placed in the most critical parts of agriculture, the foundations will be laid for the development of agriculture in the future, which would contribute to the development of the overall economy. Therefore, the focus of the research is the financing of agriculture in the Republic of North Macedonia, starting from traditional to newer models.

Before determining the acceptable sources of agricultural financing, one should first familiarize oneself with the terminology of agriculture in the narrower and broader sense, the specifics of agriculture and the problems of financing agriculture arising from these specifics. Of course, in order to be able to make the right decisions today about the potential model of agricultural financing, it is necessary to familiarize ourselves with the historical development so as not to repeat the same or similar mistakes. In order to determine the importance of financing, three indicators are particularly important: the participation of the rural population in the total number, the participation of employees in agriculture as an activity in the total number of employees and the contribution of agriculture to the establishment. of the gross domestic product. Equally important for the country is the structure of the export of the agricultural and food industry and the share in the total export of the country. Accordingly, indicators of the specificity of agricultural production and the importance of financing for the state can be qualitative and quantitative. Since the agricultural sector is very important for the development of the country, before delving into the issue of financing in more detail, it is necessary to get acquainted with the traditional, newer and non-specific sources of financing of agriculture, since each of them has certain specificities.

As everywhere in the world and in Europe, the financing of agriculture is regulated at the state level, and legal foundations have been laid in RSM. There are a number of laws, ordinances, regulations and by-laws that define the conditions for applying for incentive beneficiaries. It is important to mention the following legal documents: Law on Agriculture and Rural Development and the National Strategy for Agriculture and Rural Development of the RSM for the period 2021-2027, years.

The issue of financing agriculture is not only attractive to domestic but also to foreign economists and agroeconomists. In order to revive Macedonian agriculture, it should turn to cooperation with the EU, adapt its production to the Common Agricultural Policy and take all necessary steps to ensure access to EU funds. The accession of RSM to the EU is a main and strategic goal, the realization of which requires support from the National Bank of RSM, as well as cooperation with foreign funds in order to accelerate reforms in the agricultural sector.

The subject of this paper is an analysis of the specifics of the different models for financing agriculture in the Republic of North Macedonia. Accordingly, an overview of the legal regulations, state funds and specific models of financing the agriculture of the Republic of North Macedonia using domestic and foreign sources of financing is provided. The following models of agricultural financing have been analyzed: subsidizing agricultural credits with the support of the Ministry of Agriculture, loans from commercial banks, leasing, agricultural financing through securities, joint ventures and donations.

After the analysis of these sources, an overview of the key foreign sources of financing is given, with an emphasis on:

- EU funds (European Agricultural Guarantee Fund EAGF and European Agricultural Fund for Rural Development EAFRD),
- means of The Macedonian Bank for Support and Development,
- cooperation with the International Monetary Fund (IMF),
- connection with the European Central Bank (ECB),
- business cooperation with the European Investment Bank (EIB),



- investments of the European Bank for Reconstruction and Development (EBRD),
- foreign direct and portfolio investments.

1.2 Purpose of the research

The goals and tasks of the research are multiple and include the determination of:

- the connection between agriculture and the financial sector,
- the specificity, importance and problems of financing agriculture in the country,
- the impact of legal regulations on the financing of agriculture,
- available funds to improve agricultural production,
- the existing model of financing agriculture in the territory of RSM, by defining recommendations for future financing plans.

1.3 Research methods

In order to conduct research on the possibilities of financing agriculture in RSM, starting from traditional to newer, numerous methods have been used. The purpose of the methods used is to get an adequate picture of the readiness of agricultural producers to apply new ways of financing agriculture, namely: statistical, comparative, survey research, analysis of documents and case studies. The statistical method was used to collect, arrange, process and present the results of the research. The comparative method was used to compare the collected data with the data relevant to the comparison with appropriate comments. The method of document analysis was also used, which includes the analysis of documents received from city and municipal authorities at the RSM level. A case study method was also applied, the purpose of which is to explore and analyze the possibilities of financing agriculture in RSM, including domestic and foreign sources of financing.

2. Analysis of the possibilities for financing agriculture in RSM

Financial instruments represent forms of financing whose purpose is to stimulate and support the growth and development of the agricultural sector. They solve the problem of difficult access to financing and effectively solve the issue of time processing of requests.

SWOT analysis is an economic tool that is extremely important and recommended when making all strategic decisions. It can be applied in any area and is therefore very often found in use. SWOT analysis identifies and describes four aspects, namely: strengths, weaknesses, opportunities, threats. By studying and analyzing our own strengths and weaknesses, combined with opportunities and threats, we arrive at knowledge that leads us to the correct and successful management of certain business activities. Internal factors, strengths and weaknesses, are factors that we have a direct influence on and are responsible for the adaptation, development and functioning of the organization. External factors, opportunities and threats, are factors over which we have no influence and control and we can only adapt to them.

Table 1. SWOT analysis of sources of financing in agricultural production

STRONG	WEAKNESSES
Membership in the EU and the possibility of using its	A large percentage of risk in production
funds	Insufficient initial capital
A large selection of banks and credit lines	High interest rates of certain banks
State incentives for the development of small and	Insufficient education of producers about possible
medium farmers	sources of financing
Availability of capital	
OPPORTUNITIES	THREATS
Opportunity for education about the funding sources	Dependence on banks
offered	Unstable economic situation in the country
Increased demand for funding sources	Inability to market own products
More intensive use of European funds	Inflation
Cooperation and development of new credit lines	

The support given during the period 2014 - 2020 has a significant impact on the development of the structure of farms, that is, on the consolidation of farms. Thus, the average size of the supported holdings in relation to the land used is 25%, while their economic size is 5% larger compared to those holdings that are not beneficiaries of the subsidies. The average size of holdings still remains much lower than the EU14 average, which calls for further policy interventions of a different type. The total production of the supported farms is 13% higher than the production of the rest. Looking at sub-sectors, the support encourages positive development in all sub-sectors with different intensity, but is generally more effective in the livestock sector in relation to the support of crop production. The efficiency of direct payments in crop production is estimated at 1.2 (that is, one denar of support creates 1.2 denars of output), the same in the livestock sector is 2.16, and the highest is in cattle breeding, where the increase in the value of production caused by 1 denar support is 3.25 units. The main reason behind these



results is the greater specialization of farms in the livestock sector than in crop production where farms are mostly mixed. The higher production value of the supported holdings by sub-sector ranges from 37% for milk to 71% for pork. In terms of net income, estimates show that agricultural holdings with subsidies have 28% more income than those without. As with other indicators, the entrepreneurial income of farms lags far behind the EU average of 14,129 euros per farm against 713 euros in the country. Most of the total funds for financial support according to the Programs for financial support in agriculture are allocated and paid for the policies of direct payments to support the income of farmers. In the period 2014-2019, 38,377 million euros were paid for direct payments, that is, 84% on average of the total amount of all measures of state support for agriculture and rural development. The average annual amount paid is about 6,396.2 million euros in the period 2014-2019. Direct payments intended for crop production have the largest share in the total amount, which in the period 2014-2019 amounted to 60.2% of the total amount paid for these policies. Livestock production accounts for 33.5%, followed by measures for additional direct payments (state aid) with 6.3% (AFPZRR, 2021).

According to data from the Agency for Financial Support in Agriculture and Rural Development, according to the gender structure of the holders of agricultural holdings who have exercised the right to financial support, women are represented by 21%, and men by 79%.

Structure of registered agricultural holdings that have exercised the right to financial support according to the Program for Financial Support in Agriculture for 2020.

In 2020, a total of 94,747 agricultural holdings reported a total arable area of about 135,250 ha. Of these, 55,035 agricultural holdings reported the production of annual crops on an area of about 91,801 hectares, and 39,712 agricultural holdings reported perennial crops on an area of 43,449 ha (Source: AFPZRR, 2021).

2.1 Loans with state support

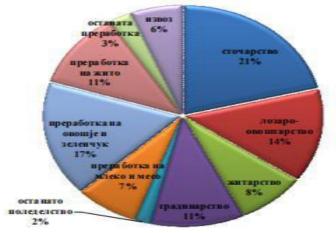
Agricultural Credit Discount Fund (ZKDF)

The ZKDF credit line is a specialized credit line aimed at ensuring the continued participation of the financial sector in crediting the agro-industrial complex by creating a model for credit refinancing; provision of an offer of favorable loans intended for individual agricultural producers and the agro-industry; integrating Macedonian farmers into the financial sector and developing credit products acceptable to agricultural and rural households and lending to SMEs from agribusiness. The target group of ZKDF are: natural or legal persons - holders of agricultural holdings, legal persons who carry out primary agricultural production, processing or export of agricultural products and natural or legal persons who have signed an agreement for financial support from the IPARD program. The purchase of fixed and working capital is financed within 3 credit categories, namely:

- ³/₄ primary agricultural production with a limit of up to 100,000 euros;
- ³/₄ processing of agricultural products with a limit of up to 300,000 euros and
- 3/4 export of primary agricultural products and their processing with a limit of up to 300,000 euros.

From the establishment until 2012, through this Fund, 5,501 producers are supported in a total value of 67 million euros, of which 37.2 million euros are approved in primary agricultural production, 25.7 million euros in the processing of agricultural products and 4.1 million euros to support the export of agricultural products. The sectoral analysis of approved loans is presented in chart 1.

Chart 1: Sectoral analysis of approved loans from the ZKDF credit line



Lending to the target group is carried out through selected participating financial institutions (FIUs), that is, 10 banks and 2 savings banks, and the credit activity is co-financing of loans to end users in the ratio: 80% funds from the Fund and 20% funds from FIUs. The credit risk is entirely borne by the latter, without any fiscal



implications on the budget of the Republic of Moldova. In that way, the seriousness in crediting and the motive of FIU to insist on timely repayment of due obligations have been strengthened. The interest rates for the final borrowers are 4% per year for the first category and 5% per year for the second and third categories through commercial banks and 6% and 6.5% per year, respectively, through savings banks. Other credit conditions (repayment term, grace period, security, fee for processing credit request) are determined by each FIU individually, according to its own credit policy and depending on the type, purpose and amount of the credit.

Credit line for production, processing and export of agricultural products

The purpose of the credit line for the production, processing and export of agricultural products is to improve and develop the production capabilities of micro, small and medium-sized enterprises whose main activity is the production, processing of agricultural products or the export of agricultural products and their processing. This would improve the capacity of micro, small and medium-sized enterprises to enter the domestic and foreign markets and would increase investments, employment and competitiveness in the Republic of S. Macedonia. The target group is represented by all micro, small and medium-sized enterprises (according to the State Aid Control Law) that produce, process or export agricultural products and are therefore registered in the appropriate registers at the Ministry of Agriculture, Forestry and Water Management (MAWS). With this credit line, the purchase of fixed and working capital is financed within the framework of 3 credit products, namely:

- ³/₄ primary agricultural production with a limit of up to 300,000 euros;
- ³/₄ processing of agricultural products with a limit of up to 300,000 euros (for the purchase of grapes, wheat, fruits and vegetables up to 500,000 euros) and
- 3/4 export of primary agricultural products and their processing with a limit of up to 300,000 euros.

This credit line has the most favorable interest rate on the Macedonian capital market of only 3% per year, and the repayment terms are up to 60 months with a grace period of up to 12 months (for fixed assets) and up to 18 months with a grace period of up to 3 months (for working capital). Since September 2012, when this credit line actively began to function, up to now loans worth 3.6 million euros have been approved, which is almost 34% of the planned funds.

Macedonian bank for development support

The Macedonian Bank for Development Support (MBPR) is the only development bank in Macedonia established by a special Law for the establishment of MBPR in 1998. as a joint stock company in which the sole shareholder is the Republic of Macedonia. With the new Law on MBPR, in 2009 a reform was carried out in the organization and operation of the Bank with the aim of improving its position as a development bank, i.e. advancing its specific role in the banking sector and the national economy. The Bank's strategic determination is to support and encourage the development of the small and medium economy by offering a wide range of financial products (loans, guarantees, export insurance) in accordance with the strategic policies, goals and priorities of the state. MBPR carries out credit placements through commercial banks with which it has concluded cooperation agreements, and the new law enables direct lending, but with respect to the principle of non-competition of commercial banks and non-discrimination of business entities. Direct lending should be aimed at financing projects for which commercial banks have no interest due to high credit risks (agriculture, start-up businesses and projects in underdeveloped areas). The possibility of direct lending should limit the tendency of commercial banks to first offer their own credit products to business entities, which by definition are more expensive, while MBPR products are of secondary importance. With these changes, as well as with the taking over of the ZKDF credit line, the amount of credit support for the agro-industrial complex has increased. The basic capital of MBPR is 1,519 thousand MKD (24.7 million EUR), of which 1,194 thousand MKD (19.4 million EUR) is share capital, and 325 thousand MKD (5.3 million EUR) is a reserve fund. The total net credits as of 31.12.2011 amounted to about MKD 8.9 billion (EUR 144.5 million). According to the data of the NBRM, MBPR accounts for 2.8% of the total banking assets by volume of its assets and participates with 5.2% in the total banking capital in Macedonia. In 2011 MBPR achieved a positive financial result in the amount of about MKD 105 million (EUR 1.7 million), and the quality of its operations was recognized by the renowned London business magazine Finance Central Europe, which declared the bank the best small bank in Macedonia for 2010. Regarding lending to the agro-industrial complex, in addition to the ZKDF credit line specialized for that purpose, MBPR uses its own funds and administers several favorable credit lines from international donors that are placed in the food industry through 11 commercial banks (annex 17). The placement of funds is carried out on the basis of an investment program aimed at improving the competitiveness of borrowers and on the basis of a program that contains elements for environmental protection in accordance with the environmental laws of Macedonia and the EU directives for the protection of the environment and nature. The dynamics of the volume of total credit placements and credit placements in the agro-

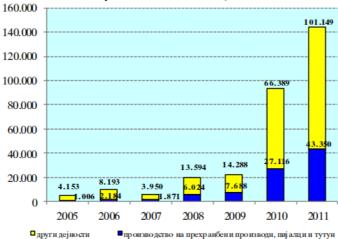
¹Official Gazette of the Republic of Moldova - number 24/1998; 6/2000; 109/05 and 130/2008

²Official Gazette of the Republic of Moldova - number 105/2009



industrial complex, which in the period 2005-2011 amounted to 29.7% of the total portfolio (not taking into account the ZKDF credit line) are presented in graph 2.

Graph 2. Dynamics of the volume of credit placements of MBPR (in thousands of EUR)



Taking into account the growing deficit in the trade of agro-industrial products, MBPR, within its capabilities and objectives, has the task of creating conditions for dynamizing the export of food products and facilitating the access of SMEs from the agro-industrial complex to specialized financial products intended to support their operation. Credit arrangements for investments in fixed assets and the purchase of permanent working capital are in function of enhancing competitiveness by improving the production process, while credit arrangements for identified export revenues and issuance of credit guarantees approved for identified export revenues are in function of support for food exporters that enter the foreign market with a final product that contains higher technology and a high degree of utilization of domestic resources, i.e. companies that are focused on future development and creation of new jobs. In addition to achieving a positive net foreign exchange inflow, these enterprises should have concluded an export contract, achieve good financial results and be in dominant private ownership. The export support credit accounts for 85% of the calculated value of the export arrangement, while 15% of the funds are provided by the exporter from his own funds. Remaining consistent with the orientation to support the agroindustrial complex, the Government of the Republic of Moldova made a decision to introduce a new credit line within the MBPR for direct financial support to SMEs that process and export agricultural products under extremely favorable conditions (interest rate of 3% per annum) which has been operational since the second half of 2012. Finally, it should be emphasized that: credit support from MBPR is in full compliance with the international principles of free trade and competition and with the trade rules of the WTO.

Formation and support of agricultural cooperatives

The formation of agricultural cooperatives represents an opportunity for the development of agricultural holdings, which through encouraging economic association in agricultural cooperatives, with joint performance in the production, sale and placement of their products, it is possible to strengthen their market role, increase competitiveness and efficiency in operations, and increasing the individual income of the farmer.

In the register of agricultural cooperatives in the period 2013-2020, 61 agricultural cooperatives are registered, of which 6 are large-scale, 55 are small-scale, with a total capacity of about 1,570 hectares of arable land, 6,300 bee families, 920 head of cattle., 600 goats and 12 200 sheep. The total number of agricultural holdings united in cooperatives is about 660 (Source: Register of agricultural cooperatives at the Ministry of Agriculture and Forestry). Activities to support the association of farmers in agricultural cooperatives are contained in the measure "Economic association of agricultural holdings for joint agricultural activity" from the Program for Financial Support of Rural Development. Thus, for the year 2020, financial resources in the amount of MKD 10,000,000 were foreseen for the measure to support investments for the following purposes:

- assistance for the establishment and operation of agricultural cooperatives;
- investments for the application of common production practices for the harmonization of standards for the quality of agricultural products or for the production of agricultural products of higher quality and
- organizing informative and promotional activities for agricultural products.

Support from the national budget is paid in two ways, 100% reimbursement of management costs and 90% co-financed amount for the purchase of machinery. Support for the association of farmers in agricultural cooperatives is included in the ongoing implementation of the project "Support for the Development of Agricultural Cooperatives". During 2020, amendments and additions to the Law on Agriculture and Rural Development were prepared, which regulate the operation and functioning of agricultural cooperatives, including



by-laws. The existing agricultural cooperatives are relatively weak to carry out their function properly. It is important to strengthen them in order to strengthen the competitiveness of agriculture. They are mainly engaged in the procurement of repromaterials, and a small part of them collect and sell the product from the members, which is usually sold directly to the buyers from each member separately, which is why they still have a small share in agricultural production, about 1% of the total agricultural production. Agricultural cooperatives represent one of the pillars for modernizing the market and preparing the country for the development of Producer Organizations according to the EU model, which will lead to the improvement of the structure of the supply chain of agricultural products. It is necessary to achieve stronger horizontal coordination between the entities involved in the food production sector by increasing the level of organization in Producer Organizations and other forms of association, while improving the cooperation of agricultural and food producers with partners in production, processing and distribution, with an emphasis on the development of quality products and modern (digital) marketing. Agricultural cooperatives in the next period should implement the concept of "green" agriculture as a logical and natural way of performing their agricultural activities. In accepting and implementing the agroecological approach in agricultural activity, agricultural cooperatives will be supported by state agricultural policies through the measures of agricultural policies.

2.2 Loans from commercial banks

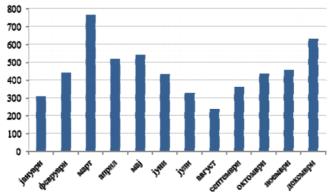
Credit as a financial instrument is one of the basic tools for the vital development of agriculture and has a crucial role in establishing profitable production units and running their business activities. Lending enables the additional accumulation of capital needed to invest in consolidating agricultural holdings, purchasing new equipment and mechanization, modernizing production and increasing productivity. It emphasizes the dependence of the development of the competitiveness of agriculture on the credit policy of banks and other financial institutions. Credit support from financial institutions as a source of financing includes short-term loans, with repayment terms of up to one year, which serve to finance working capital needs (seeds, fertilizer, oil, pesticides, animal feed, etc.) and long-term loans that are approved with repayment periods longer than one year and are intended for the financing of investment projects (production facilities, agricultural land, hydromelioration systems), the establishment of long-term plantations, the purchase of basic herds, the purchase of equipment and mechanization for the finalization of agricultural production, the introduction of new production lines with export content to improve competitiveness in the foreign market and other purchases of fixed assets. Commercial financing of agriculture in Macedonia takes place through commercial banks and savings banks that provide funds for lending within their products, but also from foreign donor credit lines that they administer. In accordance with the nature of the functioning of the banking sector, they are much more oriented towards urban areas where there is a greater concentration of potential clients and activities with a higher profit rate (services, trade, heavy industry), than towards rural areas which are predominantly oriented towards agriculture. Lending in this sector is mostly aimed at larger farms so that a certain number of smaller individual agricultural producers have limited access to loans. Difficulties in financing these persons are usually the result of not having ownership of the assets that can potentially be taken as collateral (house, land and other facilities), and where there is ownership of the assets (mechanization, basic herds) there is usually no mood for giving them as collateral because they are considered crucial to their livelihood.

Another limiting factor for lending to agriculture is that the credit histories of the borrowers are not current and do not offer adequate information, which leads to their asymmetry and makes it difficult to produce a quality credit analysis. If we add to this the difficulties of a legal nature that contribute to the slow monetization of the security in case of untimely repayment, it can be said that for the banks at this moment lending to agriculture is high-risk and low-profitability.

Investments in agricultural production are seasonal, which basically imposes the need for a seasonal approach in credit approval (chart 3). This implies the provision of a larger volume of liquid assets for lending by financial institutions in the season (March and December) and the relaxation of liquidity in the off-season (July and August).



Chart 3: Number of submitted applications for credit from the ZKDF credit line for the period 2004-2012, by month



According to NBRM data, the total credit exposure in the sector of agriculture, forestry and water management on 31.12.2011 amounted to MKD 4,475 million or 3.1% of the total credits approved to enterprises. Although this level of credit activity is still not in line with the participation of this sector in the gross added value of the economy (9.7% in the same year), the increase compared to 2002, when it was a modest 2.3%, is evident. Facilitating access to finance in agriculture is also provided through interest rate subsidization that provides financing, financial contribution and credit risk sharing in terms of reducing the interest rate on loans intended for agriculture and rural development such as primary agricultural production, processing of agricultural products and trade in agricultural products. For this purpose, in the program for financial support in agriculture and rural development, a measure "Interest rate subsidization" is foreseen, which began to be implemented in 2016. This measure is intended for loans that have an annual interest rate of up to 8% per annum, for a period of up to 10 years, for investments that are financed by the instrument for pre-accession aid in agriculture and rural development from the European Union and they are not higher than 500,000 euros. The aid is in the amount of 50% of the annual interest rate, but it can be higher if the investment is in areas with limited opportunities for agricultural production (60%), 65% of acceptable investment costs in areas with limited opportunities for agricultural production when the holder of the investment is a young farmer, 55% in other areas when the holder of the investment is a young farmer, 75% in inaccessible rural communities and 60% if the investment contributes to the protection and improvement of the environment, improvement of hygienic conditions and well-being of the animals of the agricultural economy. 15,000,000 denars were earmarked for this measure in 2020.

Lending in agriculture and rural development in the Republic of Macedonia is done through banks and savings banks. In order to obtain information about the availability of loans for agriculture and the total amount of loans placed in agriculture, data is requested from banks and savings banks. It should be taken into account that the data from reports from financial institutions do not show the real picture of lending in agriculture for several reasons, including the fact that there are applicants who use the taken loans for agriculture, even though they do not state that they are for that purpose.

The underutilization of loans intended for agriculture is, among other things, due to high interest rates, the inability to secure a mortgage, especially if the property is in a rural area, etc. The operation of banks and savings banks in 2020 related to lending to agriculture and rural development is tied to the use of financial resources from state and own funding sources (Source: Reports of banks and savings banks on credit placements in agriculture and rural development in 3 sectors (primary agricultural production, processing of agricultural products and trade in agricultural products).

2.3 Leasing as a way of financing agriculture in RSM

Leasing is a transaction related to a tangible movable object in which the lessee determines the object of leasing which is purchased by the lessor and which is given to the lessee for an agreed period of time on the basis of the lease agreement concluded between the provider and the user of leasing according to the conditions defined therein. Regarding the agro-industrial complex, leasing is an extremely important source of external medium and long-term financing, which enables the acquisition of new technologically advanced equipment or mechanization that can bring producers a greater competitive advantage and increase exports. The beginnings of leasing date back to 5,000 years ago, precisely in agriculture, when the rulers of Mesopotamia ceded work tools and irrigation systems to farmers. Three parties are involved in this commercial-financial discipline: user of leasing (agricultural producer), provider of leasing (leasing company) and supplier of equipment and machinery (diagram 12). Sometimes leasing can be done by the manufacturer of equipment and machinery, and not only by a specialized

¹Official Gazette of the Republic of Moldova - number 4/2002, 49/2003, 13/2006 and 88/2008

²Thorsten Giehler – Sources of Funds ...; p. 28



financial leasing institution. For example, the agricultural machinery manufacturing giant John Deere in 2003. provided leasing services worth US\$ 25 million to rural areas of Mexico, with a risk portfolio up to 30 days of only 3.9%. Leasing as an opportunity to finance the purchase of equipment, machinery and other goods in order to improve the export competitiveness of the participants in the agro-industrial complex offers a number of advantages over other types of financing:²

- Increased liquidity the minimum own participation, which is usually lower in relation to dedicated bank lending and the minimum initial investment of only one paid annuity instead of the entire value of the object when purchasing in cash, contributes to a greater volume of liquid assets that can be further redistributed for procurement of working capital of the leasing user, faster production turnover and increase in profit.
- No need for collateral the main advantage of leasing compared to lending is the avoidance of collateral. In leasing, the object itself is collateral because it does not pass into the possession of the lessee at all, but its legal owner is the lessor. Repossession of the item does not require legal action. This advantage is followed by the saving of financial resources on the basis of costs for registration of a security lien.
- Greater flexibility of the amortization plan the repayment plan for leasing is usually designed to correspond to the economic life of the object or the specific needs of the user, in contrast to the amortization plans for lending, which are often in discrepancy with the production flows of the agro-industrial complex. In fact, leasing is much more adaptable to the specific requirements of users than any other form of financing.
- Less documentation unlike banks, leasing companies reduce documentation to a minimum and do not delve
 into a detailed analysis of the credit history and structure of the applicants' balance sheets. Leasing approval
 decisions are based much more on the cash flow that will be generated by the asset being leased than on the
 financial statements of the user.
- Fast, short and simple procedure the procedure of approval and conclusion of a business arrangement for leasing is usually designed to be completed within one day, which contributes to immediate commissioning of the object and start of business operations.
- No amortization costs this convenience exists only in operating leasing where the object is not entered in the assets of the balance sheet. Here, the annuity is treated as a financing cost in the income statement and the non-calculation of depreciation as an expense automatically gives higher values of the profit. In contrast to operational, financial leasing, this advantage is canceled by entering the item in the balance sheet, so that the annuity is treated partly as a financing expense, and partly as depreciation.
- Keeping pace with new technologies through constant hiring of new, more advanced technology, producers from the agro-industrial complex protect themselves from technological obsolescence of their production, which allows them to constantly strengthen their competitiveness on the foreign market and increase exports. In this case, the risk of moral obsolescence is assumed by the provider, not the leasing user.
- There is no risk of misappropriation the purchase of the item is made by direct payment to the supplier, so the risk of possible misappropriation of the funds is minimized.
- The user's credit frame is not burdened leasing is an efficient substitute for bank loans that does not affect the credit limit and does not reduce the customer's credit potential. This leaves room for a more rational use of the available funds for the acquisition of working capital and the improvement of production.
- The right to choose the user chooses the object he will take on lease and at his own will and free judgment can choose whether he will buy it back in full or return it to the leasing company.

Leasing, although it is an easily accessible model for mobilizing financial resources for the purchase of the necessary equipment or machinery, has certain disadvantages compared to other financing models that can ultimately lead to non-connection or termination of the leasing arrangement. These disadvantages appear as from both on the part of the provider and on the part of the leasing user:³

- VAT on leasing the biggest drawback for users of leasing is the existence of an additional cost in the form of VAT on leasing. Our law treats leasing as a service and not as a financial arrangement and provides for the payment of VAT on the price of that service, that is, tax on the interest rate as the price of leasing. This legal solution makes leasing more expensive at least by the amount of VAT.
- Shorter repayment terms and higher annuities leasing usually has shorter repayment terms and correspondingly higher annuities compared to loans. Higher annuities usually do not favor farmers who have limited financial potential and they represent a greater financial burden. They usually have a problem with providing funds to cover their own participation, however, their own participation represents security for the lessor for proper use of the object, replacement for collateral, protection from high depreciation and from untimely coverage of obligations.

¹United Nations Department of Economic and Social Affairs – Formalizing Microcredit: Crossing the Bridge Between Non-Governmental Organizations and Commercial Banks; United Nations; New York (2004); p. 30

²Frank Hollinger – Financing Agricultural Term Investments; FAO; Rome (2004); p. 80

³Jacquiline Bass and Katrena Henderson – Leasing: A New Option for MFIs; Weidermann Associates Inc.; St. Mary"s College of Maryland (2000); p. 7



- Poor accessibility to rural areas the poor expansion of this service in rural areas by leasing companies is a serious drawback when it comes to the agro-industrial complex. In order to reduce transaction costs, they usually limit their operations to urban areas so that primary agricultural producers often have difficulty accessing leasing services. Monitoring costs in rural areas mostly increase transaction costs, which increases the price of the service. By the way, customers from rural areas are further away from equipment and machinery importers, so they are denied the opportunity to receive adequate service and maintenance.
- It only applies to fixed assets and not to working capital this is one of the biggest disadvantages of leasing because in certain cases working capital is much more necessary for producers of the agro-industrial complex than fixed assets. This defect is of a structural nature and cannot be removed.
- Limited leasing of second-hand machinery and equipment the resistance of leasing companies in terms of leasing already used equipment or machinery from highly developed countries reduces the possibility of concluding leasing arrangements. Among the producers from the Macedonian agro-industrial complex, there is a great interest in such equipment for the reason that, although it is used, it is technologically intensive in relation to the markets of Eastern and Southeastern Europe, towards which they are generally oriented.

On the other hand, leasing companies mostly face the problem of moral hazard, ie the risk of inadequate management, inadequate maintenance, damage or destruction of the object. This is especially characteristic of operational leasing, with which the object does not pass into the ownership of the user, which is why he does not have a strong motive for responsible work with it. For this reason, leasing companies have an interest in favoring financial over operational leasing, and our country is no exception. Furthermore, working with small individual farmers does not benefit the leasing companies because the transaction costs increase and with a significantly larger volume of work, they have an insignificantly greater financial effect. Finally, it must be mentioned that the imperfect legal system causes difficulties for the sale of already used assets and problems regarding the return of assets to ownership, which extremely negatively affects the development of this financial instrument.

From a financial point of view, leasing for the Macedonian agro-industrial complex is still a more expensive option than credit. For him, there is no specialized leasing line with a low interest rate as in lending. Although the leasing service is negotiated individually, at this moment there is almost no possibility of leasing with an interest rate of 4-5%, which is the interest rate for loans from the ZKDF credit line. It influenced, in 2008 the leasing business should amount to about 40 million EUR, of which only about 4 million EUR, i.e. 10%, should be allocated to equipment leasing for companies from the agro-industrial complex. Most of these funds in the amount of EUR 3.3 million were approved to only one production entity from the dairy industry.

For the promotion of leasing as a financial model suitable for the agro-industrial complex, the state should also have its share in addition to the leasing companies. It is our recommendation that the leasing companies approach the signing of business cooperation agreements with the authorized distributors of all well-known brands of agricultural machinery for the purpose of their sale, warranty and servicing. As a result of the discount that the leasing company will receive from distributors in the name of volume procurement and long-term cooperation, the choice of manufacturers will be expanded and the cost of leasing will be reduced. No less important are the efforts of these companies to increase awareness of the advantages of leasing through information campaigns. On the other hand, the activities of the state should be broader. It is necessary to create an acceptable business environment and improve the legal regulation, especially in the part of the return to possession of the equipment that was leased to a user who does not meet the obligations and the development of the secondary market for the sale of the same. Two key reforms that can indirectly contribute to the improvement of the export competitiveness of the agroindustrial complex are the relaxation of the fiscal policy in terms of VAT and the development of the real estate leasing market.

Namely, due to the small volume of leasing in the agro-industrial complex, this would mean initial fiscal implications for the budget of the Republic of Moldova in the amount of EUR 520,000, but the subsequent increase in volume as a result of this measure will certainly contribute to compensating for this difference and a greater inflow into the budget in the next period. The second measure will contribute to further rationalization of the fixed costs of producers from the agro-industrial complex related to production and accommodation facilities.

2.4 The financing of agriculture in RSM with securities

The securities market (stock exchange) where capital supply and demand meet is one of the places where agroindustrial enterprises have the opportunity to acquire additional capital needed to improve their operations and export performance. Companies from the agro-industrial complex with clearly defined development goals that prefer additional capital and a wide circle of investors must be listed on the stock exchange. The listing sends a clear message to potential investors that the company is managed transparently, with full disclosure of price-sensitive financial and non-financial information and by exposing the operations to public scrutiny. Transparency, which is a basic condition for listing, contributes to the general public and investors being familiar with the financial stability and strength of the company to the greatest extent. Listing on the stock exchange automatically means realizing a series of benefits in relation to unlisted companies, that is:



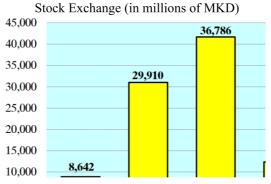
- Possibility of raising new capital through the issuance of new securities listed agro-industrial companies can attract additional funds to finance development activities through the issuance of debt securities (corporate bonds) or through the increase of the share capital by issuing equity securities. value (shares).
- Increased rating, reputation and publicity with the very commitment to full openness and transparency in operations and management, potential investors and customers have full control over the company's operations, which allows for an increase in trust, both in the company and in its products.
- Simplified access to foreign stock markets and investors the reputation and reputation of agro-industrial companies acquired on the Macedonian stock market also means facilitating the possibility of listing on a foreign stock market through the issuance of additional securities on foreign capital markets.
- Increased liquidity, market formation of the price and the possibility of daily assessment of the value listed companies can increase the value by increasing the market price of the shares, as a result of the favorable moves and events.

Unfortunately, the enterprises from the agro-industrial complex do not fully use the benefits of being listed on the Macedonian Stock Exchange as an organized capital market.

At the end of 2009, out of 115 companies listed on the Macedonian capital market, only 21 were from the agro-industrial complex. In the same year, the turnover of securities issued by companies with agro-industrial origin amounted to MKD 175 million or 2.6% of the total turnover on the stock exchange.

Cumulative turnover with shares of agro-industrial companies in the period 2005-2009. amounted to MKD 6.8 billion or 6.8% of the total turnover (chart 4).

Chart 4. Movement of turnover of shares of companies from the agro-industrial complex on the Macedonian



Source: http://www.mse.org.mk

The above-average participation in the total turnover in 2006 is due to the trading of shares in Europe, whose shares accounted for 44% of the turnover of shares from agro-industrial companies, and in 2007 on the sale of IMB to a strategic investor whose shares accounted for 52% of the turnover of shares from agro-industrial companies. Without these two transactions, the cumulative turnover of shares from agro-industrial companies in relation to the total turnover of the Macedonian stock market would amount to a minor 3.8%. Since the existence of the Macedonian Stock Exchange, only one agro-industrial company (Popova Kula winery) made a new issue of securities in the middle of 2007, i.e. made an initial public offering of shares to increase its capital by about 1.1 million EUR. The main reason for this passivity is the lack of desire on the part of the owners (who in most cases are also managers of the companies) to change the ownership structure, which inevitably occurs when the newly issued shares are purchased by outsiders.

2.5 IPARD program of the Republic of North Macedonia for the period from 2021-2027

The general goal of the IPARD program, according to Regulation 1085/2006, is to provide financial assistance for sustainable agriculture and rural development as a preparation for the candidate countries for the implementation of the CAP and management of the Union's funds.¹

According to IPA III SO², in the upcoming program period 2021-2027, the main objectives for the agricultural sector remain the following:

- to prepare the country for participation in the EU's Common Agricultural Policy, to harmonize the legislation with the acquis and with European standards in the fields of agriculture, food, veterinary medicine, animal welfare, hygiene and the environment, and to build the necessary administrative and institutional capacities;
- to increase the competitiveness of the agricultural production and the agricultural-food industry of North Macedonia on the international markets;
- to reduce the negative impact of agricultural activities on the environment;

¹http://eur-lex.europa.eu/en/index.htm - Council Decision (EC) No. 677; 25.02.2008

²Window 4 – Competitiveness and inclusive growth (Thematic priorities 3: Agriculture and rural development)



- to eliminate risks to plant, animal and public health;
- to promote territorially balanced and sustainable development in rural areas;

IPARD will continue to provide support for the restructuring and modernization of agricultural holdings and the agri-food sector. Special attention will be paid to small agricultural holdings, responsible for the largest part of the national production, in order to be more market-oriented, as well as to the sub-sectors for which the state has a comparative advantage.

Complementary to IPARD, support will also be given to key transversal issues, such as land consolidation, farmers' groups, advisory services, access to finance, ecological irrigation systems, in order to stimulate private investment and increase the competitiveness of the sector. In order to contribute to the mitigation of climate change, to encourage sustainable management of natural resources and to reduce the negative impact of agricultural activities on the environment, together with the progressive introduction of cross-compliance in direct payments, the measure "Agroecology" will be introduced., climate and organic production". The continuation of IPARD's "Technical Assistance" measure will enable the strengthening of the capacities necessary for the successful implementation of the program and the further development of monitoring and evaluation of the program. Rural infrastructure will also be supported with IPARD funds to create a favorable environment for the growth of the rural economy, to raise the quality of life in rural communities and to promote territorially balanced and sustainable development in rural areas; this will include physical assets (eg rural/agricultural roads, water management, waste management, energy supply, etc.). IPARD will facilitate business development, growth and employment in rural areas, improve the position of farmers in the value chain and attract young farmers to engage in agriculture. Also, the diversification of economic activities, including rural tourism, will continue to be promoted through a special IPARD measure. The involvement of civil society in the process of local planning and development will be encouraged through the formation of Local Action Groups. In terms of cross-sectoral issues, IPA III will promote the sustainable economic development of North Macedonia. EU funds will be directed towards the greening, recovery and modernization of the economy by establishing the "Green Businesses" Program and strengthening cooperation and the position of farmers in the supply chain. EU funds will also improve the competitiveness of the agricultural sector in line with the revised Common Agricultural Policy.

They will support the establishment of Common Market Organizations (CMOs) as a safety net for farmers in the country, while also establishing marketing standards for certain products. The action will also contribute to the implementation of the Green Agenda for the Western Balkans and to achieving the country's goals for the size of the green economy, increasing the number of green jobs and encouraging a gradual transition to a circular climateneutral economy. In addition, the IPARD Management Body and other operational structures will strive to establish fruitful cooperation with other government bodies, in order to further integrate the activities of the IPARD III Program with the related cross-border cooperation programs Interreg IPA 2021-2027 (Greece-North Macedonia, Bulgaria-North Macedonia), the Interreg IPA transnational programs (IPA Adrion, Euro - MED), as well as the Strategy of the European Union for the Adriatic-Ionian Region (EUSAIR). Within the framework of the preparation for the management of EU funds for agriculture and rural development, additional support will be provided to achieve full functionality and interoperability of the Integrated Administration and Control System (ISAK).

Finally, capacity building activities will address two important issues of agriculture and rural development. First, support will be provided to improve the quality of advisory services for agricultural holdings in the country. Second, IPARD will improve community development and social capital in rural areas and build modern public administrations for agriculture and rural development, respecting the principles of good governance. Expected results include the following:

- improved competitiveness, efficiency and sustainability of the agricultural-food sector, ensuring a better response to social demands for safe, nutritious and sustainable food,
- strengthened territorially balanced and sustainable development of rural areas and,
- reduced negative impact of agricultural activities on the environment, through climate change mitigation and sustainable management of natural resources. The free movement of safe food and the protection of human, animal and plant health has been achieved.

Conclusion

The state is making great efforts to improve agricultural production. All state efforts must be coordinated with the specifics that accompany agricultural production, because agricultural production is more complex, more demanding and more sensitive to changes compared to other activities. But the significance of agriculture for the state is also important, which can be measured by the following indicators: the participation of the rural population in the total number, the participation of employees in agriculture as an activity in the total number of employees and the contribution of agriculture in the formation of the gross domestic product. Although the traditional model of financing has long been abandoned (self-financing) in our country, it is still the most prevalent, while newer models are rarely used, and most farmers have not even heard of them. There are many reasons, and the following



are the most common:

- mainly older households are not interested in newer financing models;
- lack of information of farmers;
- farmers fear that they will not be able to return the borrowed funds, because they do not know if they will have a secure placement.

For the financing of agricultural production, it is necessary to have legal regulations that prescribe the conditions, methods and models of financing at all levels; state, regional and local governments. The RSM presents domestic and foreign models for financing agriculture. Within the domestic models, the following stand out: lending with the support of the Ministry of Finance, lending from commercial banks, leasing, financing through HV, concessions and public-private partnerships, joint investments and donations. Among the models for financing from abroad, the following stand out: European Agricultural Guarantee Fund (EAGF), European Agricultural Fund for Rural Development (EAFRD), IPARD Fund, IMF, ECB, EIB, EBRD, cooperation with European countries that encourage the development of agriculture, foreign direct investment (FDI) and portfolio investment. RSM needs funds from European funds to stay on the path to EU entry, but we should not neglect the funds of European countries that either donate or approve funds on very favorable terms. The problem with the financing of agriculture would be solvable if adopted a long-term development plan that will be implemented continuously and with the constant support of the state, which should plan larger funds from the national budget than it did in recent years. The increased financial support of agriculture in the past few years successfully worked to maintain the production trends and the survival of the production areas for certain groups of products whose competitiveness on the export markets was significantly reduced (cucumbers in 2010, vegetables in 2009, etc.). The analysis also showed that certain sub-sectors in agriculture have significantly increased their production, which can be directly linked to increased financial support, such as tobacco from 2008 onwards. Direct subsidies on a large scale represent a social measure, but at the same time they are still the most effective mechanism, a tool for improving the production and development of Macedonian agriculture. In certain segments, they successfully affect the improvement of production, but they cannot solve the problems with competitiveness in the long run, conditioned by structural limitations such as the fragmentation of the areas, lack of irrigation, non-existence of an effective advisory service in the function of small producers, appropriate mechanisms for access to adequate financial resources that meet the needs of small producers, association and provision of uniform production, etc. The support of the Government of the Republic of Macedonia through subsidies should be aimed at creating a favorable business climate and improving the competitiveness of Macedonian agricultural production that will meet the requirements of the regional, European and world markets. Support designed in this way will improve farmers' income and ensure social stability in rural areas. This support should be based on long-term policies, defined in a multi-year national program for agriculture and rural development. In this direction, it will be necessary to take into account all factors of the production potential of the Macedonian agricultural sector, as well as all external and internal influences. Absence of a long-term policy to replace old varieties with new varieties that meet the requirements of export markets, increases the risk of reducing the production and performance of some agricultural subsectors in the short and medium term. The support of certain varieties is very significant, especially in fruit growing (perennial plantations), because it encourages the development of the subsector oriented to market needs, with an assortment that is in demand on export markets and for which there is a potential for increasing production. The Government of the Republic of S. Macedonia should make more efforts and allocate adequate financial resources to improve the access of Macedonian producers to the existing traditional export markets. At the same time, the activities of Macedonian exporters to find new non-traditional markets for our strategic products should be supported. One of the best measures in this direction is support for participation and visits to the most important fairs, joint representation of Macedonian producers on potential export markets, preparation of appropriate promotional materials as well as support of dedicated analyzes made for the needs of Macedonian producers. It is necessary to support the integrated promotion of Macedonian agriculture with other sectors, especially tourism, which in the long run would help to create a brand for high-quality agricultural products. Early horticultural production in the last few years is facing a significant increase in production costs caused by an increase in the price of energy. Taking into account the importance of this sector and its participation in the total agricultural production, it is necessary to take measures that will mitigate the negative effects of increased production costs. One of the options could be subsidizing the costs of building and maintaining highly efficient systems for sustainable energy use, as well as supporting research into new thermal fields. Also, in the places where sustainable sources of energy are already used (thermal waters as energy), to stimulate their use through a subsidized price that corresponds to the market conditions. One of the big problems in crop production is the quality of planting material, which limits productivity and directly reduces competitiveness. The basis of successful and competitive fruit growing and viticulture is the quality of planting material. By planting low-quality varieties and using uncertified planting material, conditions are created to threaten the competitiveness of domestic production, which can have multi-year negative effects. Therefore, it is necessary to subsidize the purchase of only high-quality planting material when raising new perennial plantations. In horticultural production, the introduction of certified



seedlings with a high degree of procurement support can significantly increase yield and improve competitiveness and productivity. Therefore, at this moment, this is one of the most significant support measures that would improve production both in volume and quality. In that direction, the existing measures for the production and application of certified seed and planting material should be continued and upgraded. These measures should result in the initiation of domestic production of high-quality certified planting material. The government should further harmonize the subsidy programs and measures, preparing the country for the accession negotiations with the EU. In that direction, special attention should be paid to structural problems such as irrigation systems, consolidation of land to hide economically profitable farms, etc. Experiences from other countries show that this process is very significant and that in the medium term support to farmers should be taken into account by subsidizing costs in the process of: It is necessary to support the integrated promotion of Macedonian agriculture with other sectors, especially tourism, which in the long run would help to create a brand for high-quality agricultural products. Early horticultural production in the last few years is facing a significant increase in production costs caused by an increase in the price of energy. Taking into account the importance of this sector and its participation in the total agricultural production, it is necessary to take measures that will mitigate the negative effects of increased production costs. One of the options could be subsidizing the costs of building and maintaining highly efficient systems for sustainable energy use, as well as supporting research into new thermal fields. Also, in places where sustainable sources of energy are already used (thermal waters as energy), to stimulate their use through a subsidized price that corresponds to market conditions. One of the big problems in crop production is the quality of planting material, which limits productivity and directly reduces competitiveness. The basis of successful and competitive fruit growing and viticulture is the quality of planting material. By planting low-quality varieties and using uncertified planting material, conditions are created to threaten the competitiveness of domestic production, which can have multi-year negative effects. Therefore, it is necessary to subsidize the purchase of only high-quality planting material when raising new perennial plantations. In horticultural production, the introduction of certified seedlings with a high degree of procurement support can significantly increase yield and improve competitiveness and productivity. Therefore, at this moment, this is one of the most significant support measures that would improve production both in volume and quality. In that direction, the existing measures for the production and application of certified seed and planting material should be continued and upgraded. These measures should result in the initiation of domestic production of high-quality certified planting material. The government should further harmonize the subsidy programs and measures, preparing the country for the accession negotiations with the EU. In that direction, special attention should be paid to structural problems such as irrigation systems, consolidation of land to hide economically profitable farms, etc. Experiences from other countries show that this process is very significant and that in the medium term support to farmers should be taken into account by subsidizing costs in the process of: It is necessary to support the integrated promotion of Macedonian agriculture with other sectors, especially tourism, which in the long run would help to create a brand for high-quality agricultural products. Early horticultural production in the last few years is facing a significant increase in production costs caused by an increase in the price of energy. Taking into account the importance of this sector and its participation in the total agricultural production, it is necessary to take measures that will mitigate the negative effects of increased production costs. One of the options could be subsidizing the costs of building and maintaining highly efficient systems for sustainable energy use, as well as supporting research into new thermal fields. Also, in the places where sustainable sources of energy are already used (thermal waters as energy), to stimulate their use through a subsidized price that corresponds to the market conditions. One of the big problems in crop production is the quality of planting material, which limits productivity and directly reduces competitiveness. The basis of successful and competitive fruit growing and viticulture is the quality of planting material. By planting low-quality varieties and using uncertified planting material, conditions are created to threaten the competitiveness of domestic production, which can have multi-year negative effects. Therefore, it is necessary to subsidize the purchase of only high-quality planting material when raising new perennial plantations. In horticultural production, the introduction of certified seedlings with a high degree of procurement support can significantly increase yield and improve competitiveness and productivity. Therefore, at this moment, this is one of the most significant support measures that would improve production both in volume and quality. In that direction, the existing measures for the production and application of certified seed and planting material should be continued and upgraded. These measures should result in the initiation of domestic production of high-quality certified planting material. The government should further harmonize the subsidy programs and measures, preparing the country for the accession negotiations with the EU. In that direction, special attention should be paid to structural problems such as irrigation systems, consolidation of land to hide economically profitable farms, etc. Experiences from other countries show that this process is very significant and that in the medium term support to farmers should be taken into account by subsidizing costs in the process of: Early horticultural production in the last few years is facing a significant increase in production costs caused by an increase in the price of energy. Taking into account the importance of this sector and its participation in the total agricultural production, it is necessary to take measures that will mitigate the negative effects of increased production costs. One of the options could be subsidizing the costs of building



and maintaining highly efficient systems for sustainable energy use, as well as supporting research into new thermal fields. Also, in the places where sustainable sources of energy are already used (thermal waters as energy), to stimulate their use through a subsidized price that corresponds to the market conditions. One of the big problems in crop production is the quality of planting material, which limits productivity and directly reduces competitiveness. The basis of successful and competitive fruit growing and viticulture is the quality of planting material. By planting low-quality varieties and using uncertified planting material, conditions are created to threaten the competitiveness of domestic production, which can have multi-year negative effects. Therefore, it is necessary to subsidize the purchase of only high-quality planting material when raising new perennial plantations. In horticultural production, the introduction of certified seedlings with a high degree of procurement support can significantly increase yield and improve competitiveness and productivity. Therefore, at this moment, this is one of the most significant support measures that would improve production both in volume and quality. In that direction, the existing measures for the production and application of certified seed and planting material should be continued and upgraded. These measures should result in the initiation of domestic production of high-quality certified planting material. The government should further harmonize the subsidy programs and measures, preparing the country for the accession negotiations with the EU. In that direction, special attention should be paid to structural problems such as irrigation systems, consolidation of land to hide economically profitable farms, etc. Experiences from other countries show that this process is very significant and that in the medium term support to farmers should be taken into account by subsidizing costs in the process of: Early horticultural production in the last few years is facing a significant increase in production costs caused by an increase in the price of energy. Taking into account the importance of this sector and its participation in the total agricultural production, it is necessary to take measures that will mitigate the negative effects of increased production costs. One of the options could be subsidizing the costs of building and maintaining highly efficient systems for sustainable energy use, as well as supporting research into new thermal fields. Also, in the places where sustainable sources of energy are already used (thermal waters as energy), to stimulate their use through a subsidized price that corresponds to the market conditions. One of the big problems in crop production is the quality of planting material, which limits productivity and directly reduces competitiveness. The basis of successful and competitive fruit growing and viticulture is the quality of planting material. By planting low-quality varieties and using uncertified planting material, conditions are created to threaten the competitiveness of domestic production, which can have multi-year negative effects. Therefore, it is necessary to subsidize the purchase of only high-quality planting material when raising new perennial plantations. In horticultural production, the introduction of certified seedlings with a high degree of procurement support can significantly increase yield and improve competitiveness and productivity. Therefore, at this moment, this is one of the most significant support measures that would improve production both in volume and quality. In that direction, the existing measures for the production and application of certified seed and planting material should be continued and upgraded. These measures should result in the initiation of domestic production of high-quality certified planting material. The government should further harmonize the subsidy programs and measures, preparing the country for the accession negotiations with the EU. In that direction, special attention should be paid to structural problems such as irrigation systems, consolidation of land to hide economically viable farms, etc. Experiences from other countries show that this process is very significant and that in the medium term support to farmers should be taken into account by subsidizing costs in the process of: in the places where sustainable sources of energy are already used (thermal waters as energy), to stimulate their use through a subsidized price that corresponds to market conditions. One of the big problems in crop production is the quality of planting material, which limits productivity and directly reduces competitiveness. The basis of successful and competitive fruit growing and viticulture is the quality of planting material. By planting low-quality varieties and using uncertified planting material, conditions are created to threaten the competitiveness of domestic production, which can have multi-year negative effects. Therefore, it is necessary to subsidize the purchase of only high-quality planting material when raising new perennial plantations. In horticultural production, the introduction of certified seedlings with a high degree of procurement support can significantly increase yield and improve competitiveness and productivity. Therefore, at this moment, this is one of the most significant support measures that would improve production both in volume and quality. In that direction, the existing measures for the production and application of certified seed and planting material should be continued and upgraded. These measures should result in the initiation of domestic production of high-quality certified planting material. The government should further harmonize the subsidy programs and measures, preparing the country for the accession negotiations with the EU. In that direction, special attention should be paid to structural problems such as irrigation systems, consolidation of land to hide economically profitable farms, etc. Experiences from other countries show that this process is very significant and that in the medium term support to farmers should be taken into account by subsidizing costs in the process of: in the places where sustainable sources of energy are already used (thermal waters as energy), to stimulate their use through a subsidized price that corresponds to market conditions. One of the big problems in crop production is the quality of planting material, which limits productivity and directly reduces competitiveness. The basis of successful and competitive fruit growing and viticulture is the quality of



planting material. By planting low-quality varieties and using uncertified planting material, conditions are created to threaten the competitiveness of domestic production, which can have multi-year negative effects. Therefore, it is necessary to subsidize the purchase of only high-quality planting material when raising new perennial plantations. In horticultural production, the introduction of certified seedlings with a high degree of procurement support can significantly increase yield and improve competitiveness and productivity. Therefore, at this moment, this is one of the most significant support measures that would improve production both in volume and quality. In that direction, the existing measures for the production and application of certified seed and planting material should be continued and upgraded. These measures should result in the initiation of domestic production of highquality certified planting material. The government should further harmonize the subsidy programs and measures, preparing the country for the accession negotiations with the EU. In that direction, special attention should be paid to structural problems such as irrigation systems, consolidation of land to hide economically profitable farms, etc. Experiences from other countries show that this process is very significant and that in the medium term support to farmers should be taken into account by subsidizing costs in the process of: In that direction, the existing measures for the production and application of certified seed and planting material should be continued and upgraded. These measures should result in the initiation of domestic production of high-quality certified planting material. The government should further harmonize the subsidy programs and measures, preparing the country for the accession negotiations with the EU. In that direction, special attention should be paid to structural problems such as irrigation systems, consolidation of land to hide economically profitable farms, etc. Experiences from other countries show that this process is very significant and that in the medium term support to farmers should be taken into account by subsidizing costs in the process of: In that direction, the existing measures for the production and application of certified seed and planting material should be continued and upgraded. These measures should result in the initiation of domestic production of high-quality certified planting material. The government should further harmonize the subsidy programs and measures, preparing the country for the accession negotiations with the EU. In that direction, special attention should be paid to structural problems such as irrigation systems, consolidation of land to hide economically profitable farms, etc. Experiences from other countries show that this process is very significant and that in the medium term support to farmers should be taken into account by subsidizing costs in the

- legalization of illegally built farms,
- raising the quality of products through a differentiated system for subsidies according to quality category,
- transfer of new knowledge, training and new production technologies through top experts in certain fields,
- procurement and use of computer equipment,
- introduction of mandatory farm accounting and
- implementation of good agricultural practice.

References

- 1. Insurance Supervision Agency;
- 2. Agency for Financial Support in Agriculture and Rural Development (www.ipardpa.gov.mk);
- 3. Andrew Fearne The CAP Decision-Making Process; CAB Int.; Wallingford (1991); p. 116
- 4. Brealey, AR, Myers, SC, Marcus, AJ (2001): Fundamentals of Corporate Finance, University of Phoenix, USA.
- 5. De Soto, Hernando: The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else. Basic Books, 2000
- 6. Dario Rožanković, 2016, Analysis and development of agriculture
- 7. Ewa Rabinovitz Eastward EU Enlargement and the Future of the CAP; Brussels (2005); p. 234
- 8. Frank Hollinger Financing Agricultural Term Investments; FAO; Rome (2004); p. 80
- 9. Grahovac, P: Regionalne šidke posjedovne struktur u hrvatskoj avrištvo u: Čavrak, V. (ed.): Nav.dj.2011)
- 10. http://ec.europa.eu/public opinion/archives/ebs/ebs 336 en.pdf
- 11. http://eur-lex.europa.eu/en/index.htm Council Decision (EC) No. 677; 25.02.2008
- 12. http://www.reformthecap.eu
- 13. Jacquiline Bass and Katrena Henderson Leasing: A New Option for MFIs; Weidermann Associates Inc.; St. Mary's College of Maryland (2000); p. 7
- 14. Kotler, P., Keller, KL (2006): Marketing Management, Data Status, Belgrade, p. 676-677
- 15. Mishkin, FS (2004): The economics of money, banking and financial markets, Columbia University, USA
- 16. Thorsten Giehler Sources of Funds ...; p. 28
- 17. United Nations Department of Economic and Social Affairs Formalizing Microcredit: Crossing the Bridge Between Non-Governmental Organizations and Commercial Banks; United Nations; New York (2004); p. 30
- 18. V. Čavrak: Održivi development of rural areas of Hrvatske. p..179.
- 19. Bogdanovi, M. (1967): Economika poljoprivrede Yugoslavia, Contemporary Administration, Belgrade



- 20. Vasiljevi, Z., Zaki, V. (2006): Financing of agro-business in Serbia in transitional conditions, Economic Perspectives Journal, XI, no. 2, Proceedings of Council, Kladovo, p. 341-352.
- 21. Vujatovi Zaki, Z. (1995): AGRICULTURAL ECONOMY, Faculty of Economics, Belgrade, p. 116 155
- 22. Динђић, S., Lukoviћ, S. (2014): Local self-government financing system, in the book Status and perspective of the economic development of the city of Kragujevac, Kragujevac Faculty of Economics, p. 513-534.
- 23. Eriħ, D., Beraha, I., вЪњигісіп, S., Ketsman, N., Yakishiħ, B. (2012): Financing of small and medium enterprises in Serbia, Serbian Chamber of Commerce, Belgrade.
- 24. Capital number 561; p. 17
- 25. Kljaji, N. (2014): Investment efficiency in raspberry production, Institute for Agricultural Economics, Belgrade.
- 26. Qosev S., Agrarian policy, 2015, University "St. Cyril and Methodius", Skopje, p. 21
- 27. Kovachev, Dr. Goran: Agro-industrial complex (financing and competitiveness). Skóipje 2012.
- 28. Ministry of Agriculture, Forestry and Water Management (http://www.mzsv.gov.mk/?q=node/544);
- 29. Mrdakovi-Cvetkovi, R. (2006): Economic development and inflow of foreign funds in transition countries, Economic Annals Journal, no. 171, Faculty of Economics, University of Belgrade, p. 75-89.
- 30. Munjan, P., Živkovil, D. (2006): Agricultural production management, Faculty of Agriculture, Belgrade.
- 31. National strategy for agriculture and rural development for the period 2021-2027, Ministry of Agriculture, Forestry and Water Management, January 2021
- 32. New Macedonia number 21904; p. 16
- 33. Paraushi, V., Tsvijanovi, D. (2007): Serbian agriculture credit support programs of the state and commercial banks in the period 2004-2007, Economic Annals Magazine, number 174-175, Belgrade Faculty of Economics, p. 186-207
- 34. Window 4 Competitiveness and inclusive growth (Thematic priorities 3: Agriculture and rural development)
- 35. Radović, G. (2014): Financing agriculture in the Republic of Serbia, Zaduzhbina Andrejevi, Belgrade.
- 36. Official Gazette of the Republic of Moldova number 105/2009
- 37. Official Gazette of the Republic of Moldova number 24/1998; 6/2000; 109/05 and 130/2008
- 38. Official Gazette of the Republic of Moldova number 4/2002, 49/2003, 13/2006 and 88/2008
- 39. Subiħ, J. (2010): Specificities of the investment process in agriculture, p. 39