# The Role of Agriculture in the Formation of Macroeconomic Indicators of National Economy

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## ABSTRACT

The most significant and negative trend for national economy of some countries is the decline in farm production and share of agriculture in the total gross value added, as well as decrease in fixed investment and labor and production potential of agriculture. Negative processes in reproduction of farming fixed capital puts forward the need for a deep analysis of the situation. It is also necessary to identify opportunities to overcome the crisis and create conditions for sustainable economic growth of the farm sector of the national economy. This study is devoted to the research of the macroeconomic indicators dynamics that characterize the role of agriculture in the national economy, as illustrated by indicators of Russian Federation. Using the method of analytical alignment of time series, models of the gross value added share, fixed assets, fixed investments, the number of people employed in agriculture in the total national indices were developed and analyzed. The patterns and trends of the Russian economy in the long-term dynamics of 1990–2017 were also investigated. The results show a trend towards a decrease in the analyzed indicators, which should be the basis for making important management and practical decisions in agriculture. The analysis of secular trend allows to apply classical forecasting methods, as they have high accuracy and reliability. The results can be used in the practice of macroeconomic analysis and forecasting, determining the potential and investment attractiveness of individual sectors of the national economy and making justified public administration decisions.

## INTRODUCTION

Current reforms influenced significantly both on the structure of the most important microeconomic indicators and on proportions between them. The most significant and negative trend for the national economy of the country is expressed by the decline in farm production, a decrease in the share of agriculture in the total gross value added, a decrease in fixed investment and a reduction in the labor and production potential of agriculture. Price distortions in the material and technical resources market disturbed the normal reproduction process of the fixed capital (Khabirov et al., 2018). The purpose of this study is to analyze the patterns and trends of the agricultural sector indicators in the formation of the most important macroeconomic indices of the national economy. This analysis makes it possible to build long-range forecasts and effectively show the trends in economic growth that are necessary for the state administration bodies to make important managerial tasks. For illustrative purposes of the research, the Russian economy was chosen, as the development of agricultural production is given a high status here.

Agriculture as a sector of national economy is a material basis for economic and social welfare of a multinational country. The development potential of a state in respect of the socio-economic aspect is currently determined first of all not only by the gross value added but also by total assets, fixed investments and the number of people involved in the economy (Magasumovna et al., 2017). The review of scientific literature allows making a conclusion on the importance of agriculture as an economic activity for the countries all over the world. Agriculture contributes to the economy in general. It plays an important social and economic role with regard to people's health and welfare, and to the country's food security (Magasumovna et al., 2017; Falco et al., 2018; Lombardozzi, 2019). So, scientists consider the rural sector to play a strategic role in the state development (Lombardozzi, 2019). Special importance is given to farming in the countries where living and climatic conditions of people are not good enough, and where there are food problems. Thus, farming plays a central role in Africa's long-term economic development (Rönnbäck and Theodoridis, 2019). According to the opinion of scientists, farming growth in African countries is more efficient in reducing poverty than the development of nonfarm branches (Dorosh and Thurlow, 2018). Food security and farming as a tool for its gaining are of a priority in the economy of Cuba (Diaz Solis and Morejon Rivera, 2018).

In the conditions of progress, digital development and decreased physical activity of people dietary problems are topical issues with regard to public health (Gabitov et al., 2018a; Mingaleva et al., 2018). In connection with the economic reforms carried out in recent decades in the Russian Federation, the experience of China is of particular interest. Unprecedented growth of China's farming compared to other developing and developed countries was due to a significant increase in labour productivity as a result of fundamental reforms in China's farm sector since 1978 (Zhao and Tang, 2018). However, as incomes grew and trade in commodities and services developed, agriculture contributed less to China's economy. Farming employment decreased too (Zhao and Tang, 2018). Thus, there is a constant movement of labor, capital and resources between the sectors of the economy both in Russian Federation and in all the countries of the world. Methods of time series analysis allow us to trace these changes, structural differences and even to identify the role of the factors that caused them. It is relevant and necessary for the development of the economy (Zarova and Chudilin, 2006).

Analysis of the results of scientific research indicates that scientists are concerned about the problems of farming, its development, efficiency, and its environmental and socio-economic functions. The issues of state regulation and support of the industry are discussed in the article (Czyżewski and Grzelak, 2018; Khabirov et al., 2018; Lombardozzi, 2019). An important role of science and technology (Gabitov et al., 2018a; 2018b; Mingaleva et al., 2018; Wang and Huang, 2018) and the role of investments attraction (Wang and Huang, 2018; Lombardozzi, 2019) for farming development are recognized. In modern conditions there is a problem of wide application of macroeconomic indicators, including those which take into account biological processes, climat-

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ic and environmental conditions. These indicators should be used for the analysis of a particular industry in terms of its importance and contribution to the economy and to the country as a whole (Czyżewski and Grzelak, 2018; Fujimori et al., 2018; Sultanova et al., 2018; Yalew et al., 2018). The increase in negative processes of the reproduction of the farming fixed capital puts forward the need for a deep analysis of the situation. It is also necessary to identify opportunities to overcome the crisis and create conditions for sustainable economic growth of the farm sector of the national economy.

# 1. METHODS

In order to study the trends in the agricultural sector when constructing the most important macroeconomic indicators, time-series analytical alignment was carried out. Time-series analytical alignment is a construction of analytical function (regression equation) or a choice of a trend model. Trend is the main development tendency of a phenomenon in time, some general line of development (Magasumovna et al., 2017). When studying the general trend by the method of analytical alignment, it is assumed that changes in the dynamics levels can be expressed with a varying accuracy degree of approximation by certain mathematical functions. The equation type is determined by the nature of the dynamics of a particular phenomenon.

Various functions are used for this purpose: line, power, logarithmic, exponential etc. When choosing an appropriate function, content analysis and visual observation are used. The content analysis can define the character of the dynamics process. Visual observations are made on the basis of the time-series graphic (Lukmanov et al., 2018). When making the analytical alignment of the time series, theoretical (calculated) series values are determined based on the assumption of their dependence on time, i.e. $y = f(t)$. The function is chosen in such a way that it gives an informative explanation of the studied process. Trend parameters are determined by the least-squares method, where time (t) is an independent variable, and time series levels ($y$) are a dependent variable. The largest value of the determination coefficient ($R^2$) and the Student-Fisher test are selection criteria of the best trend form (Zarova and Chudilin, 2006).

Analytical time series alignment consists of the following main stages:

− choosing of the functional dependence type (trend form), which lies at the core of the studied process;
− calculation of unknown parameters of the trend equation;
− calculation of the adjusted values of the series levels based on the trend equation with the forecasting for the future.

To make a comprehensive assessment of the role of agriculture in Russian economy, the analysis of structural changes over the long period of 1990 – 2017 was carried out. It was done to study current patterns and trends and to analyze and compare the dynamics of the most important macroeconomic indicators of Russia (Lukmanov et al., 2018). To do a more detailed research of current structural economic changes in Russia gross value added share of agriculture in the total volume of the gross value added of all the branches of the Russian economy was analyzed. There are models to study fixed assets in agriculture in terms of their percentage in the total stocks of fixed assets as well as the level of capital investments in agriculture compared to the total capital investments in all the domestic industries. The number of people employed in agriculture is also considered in relation to the total number of people employed in the country (Diaz Solis and Morejon Rivera, 2018).

## 2. RESEARCH RESULTS

Table 1 shows the analysis of indicators characterizing the weight of agriculture in Russian economy by reference to current prices of particular years. The official data of the Russian Federal State Statistics Service were used as the informational base of the research.

Table 1. Agriculture in Russian economy for the period from 1990 to 2017

| Indicators | 1990 | Average of five-year periods | | | | | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|
| | | 1991–1995 | 1996–2000 | 2001–2005 | 2006–2010 | 2011-2015 | | |
| Gross value added (GVA) of economic branches, bln RUB | 0.6 | 411.7 | 3427.9 | 12484.7 | 32103.2 | 63755.6 | 77607.6 | 83134.7 |
| Including agriculture, bln RUB. | 0.1 | 30.8 | 240.0 | 688.1 | 1323.7 | 2423.7 | 3380.3 | 3694.7 |
| Share of agriculture in GVA, % | 16.7 | 9.0 | 7.0 | 5.8 | 4.2 | 3.8 | 4.4 | 4.4 |
| Fixed assets value of economic branches, bln RUB | 1.9 | 1327.4 | 14549.4 | 31273.8 | 71562.1 | 134189.3 | 183403.7 | 194649.5 |
| Including agriculture, bln RUB | 0.2 | 164.0 | 1505.0 | 1279.8 | 2244.9 | 3665.6 | 4758.5 | 5791.6 |
| Share of agricultural fixed assets, % | 10.8 | 14.0 | 10.6 | 4.2 | 3.2 | 2.7 | 2.6 | 3.0 |
| Fixed investments of economic branches, bln RUB | 0.2 | 81.2 | 605.5 | 2385.9 | 7471.2 | 12974.4 | 14748.8 | 15966.8 |
| Including agricultural fixed investments, bln RUB | 0.04 | 3.6 | 18.5 | 98.2 | 318.3 | 491.2 | 605.8 | 542.9 |
| Share of investments in agricultural fixed assets, % | 16.2 | 8.3 | 3.1 | 4.2 | 4.3 | 3.8 | 4.1 | 3.4 |
| The number of people involved in agriculture, mln people | 75.3 | 70.2 | 64.5 | 65.9 | 67.7 | 68.8 | 72.1 | 71.8 |
| Including people employed in agricultural economy, mln people | 9.7 | 9.8 | 9.1 | 7.9 | 6.9 | 6.2 | 5.4 | 5.1 |
| Share of the number of people employed in agricultural economy, % | 12.9 | 14.0 | 14.1 | 12.0 | 10.2 | 9.1 | 7.5 | 7.1 |

Note: 1 USD equals to 64 RUB

Source: The official data of the Russian Federal State Statistics service (Rosstat) from 1990 to 2017: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/en/figures/agriculture/

Analysis of the table data characterizes the growth trends of the main macroeconomic indicators of the Russian economy in actual prices including agricultural growth trends. This only shows that the reproduction process was nominally extended due to the increase in the cost of the studied indicators as a result of inflation processes. The study of long-term dynamics over the period from 1990 to 2017 showed the decrease in analyzed microeconomic indicators. As such, agricultural gross value added decreased in 3.8 times (from 16.7% to 4.4%). The share of fixed agricultural assets in terms of their percentage in the total stocks of fixed assets of Russian economy fell by a factor of 3.3 (from 10.8% to 3.3%). The share of capital investments in

agriculture compared to the total capital investments in all the domestic industries declined in 4.8 times (from 16.2% to 3.4%).

There was also a decrease in 1.8 times (from 12.9% to 7.1%) in the number of people employed in agriculture in relation to the total number of people employed in the country. But out of all microeconomic indicators this indicator showed the smallest decrease.

The dynamics of the main microeconomic indicators of Russia in conditions with current prices characterizing reproduction processes in general was investigated by this study. The study results make it possible to conclude on noticeable structural changes over the last 27 years that especially affected agriculture. Completed reforms of agro-industrial complex, which occurred in 1990s also provoked irreversible changes in agricultural production. Redistribution of land, labor, financial, raw materials potential and agricultural properties disrupted intersectional, interfarm social and economic relations. In the end, this led to the decrease in the whole social reproduction.

The method of analytical aligning was applied to identify key trends of the share of agriculture in the total volume of the gross value added of all the branches of the Russian economy and in the gross regional product of the republic. There was noticed a clear tendency of changes in analyzed indicators (Figure 1 and 2).
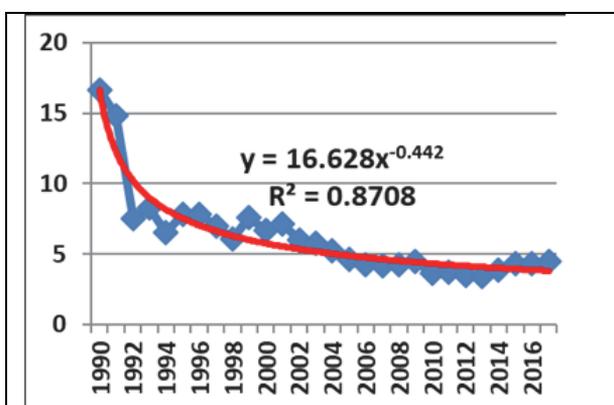


**Figure 1.** Share of agriculture in the total vo-lume of the gross value added of all the branc-hes of the Russian economy over the period from 1990 to 2017, %

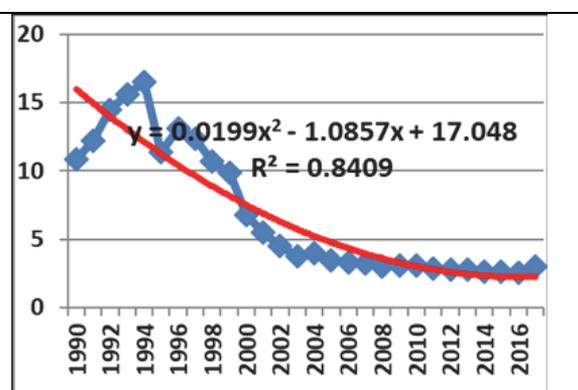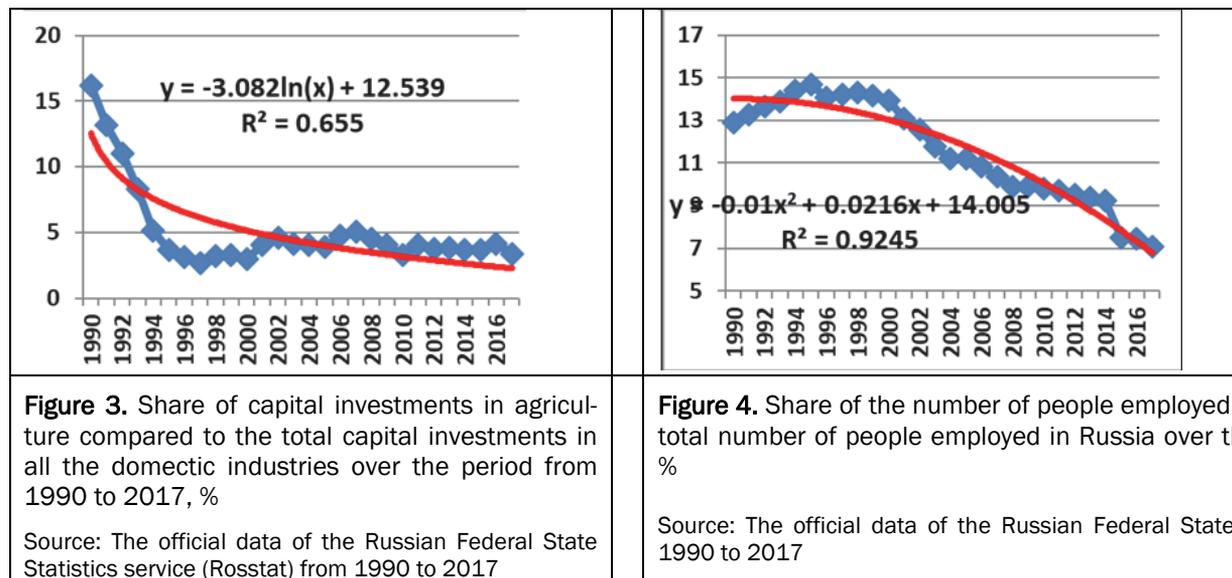Source: The official data of the Russian Federal State Statistics service (Rosstat) from 1990 to 2017

**Figure 2.** Share of fixed assets in agriculture in terms of their percentage in the total stocks of fi[x] period from 1990 to 2017, %

Source: The official data of the Russian Federal State St[a] 1990 to 2017

Analysis of the dynamics of the share of agriculture in the total added gross value shows that during the analyzed period, this indicator, after a sharp decline by 1994, gradually increased until 2002, and then there was a noticeable decrease tendency until 2013. The lowest value of this indicator was 3.4% in 2013. Over the last five years, the value of this indicator increased by 1 percentage point. The share of agriculture in the total volume of gross value added in all sectors of the country's economy has a downward going tendency. Decrease over the entire analyzed period amounted to 12.3 percentage points. A comparative analysis of the agriculture's fixed assets share in the total volume of fixed assets of the Russian economy revealed a similar tendency of their growth until 1994 and a further decline until 2017. The total decline in this indicator for 1990 – 2017 amounted to 7.8 percentage points. The increase in these indicators in 1990 is characterized by regular and mandatory revaluation of fixed assets, which would happen randomly, without prior preparation, without taking into account the actual state, prospects for use and without speci-

fying the level of wear and tear. Thus, attempts to take into account inflation since the beginning of 1992 has led to a significant increase in the reported value of fixed assets, including agriculture, the size of which by that time exceeded the real value of the enterprises property. The value of old fixed assets exceeded the value of the new ones.

Investment and innovation policy aimed at the implementation of projects to support agricultural production can only partially stop the decline in agricultural production during the current economic crisis (Falco et al., 2018; Fujimori et al., 2018). Agriculture's share in fixed investments of the Russian Federation and the number of people employed in agriculture are characterized by the downward tendencies for the entire analyzed period (Figure 3 and 4).



| **Figure 3.** Share of capital investments in agriculture compared to the total capital investments in all the domectic industries over the period from 1990 to 2017, % | **Figure 4.** Share of the number of people employed in total number of people employed in Russia over the % |
| --- | --- |
| Source: The official data of the Russian Federal State Statistics service (Rosstat) from 1990 to 2017 | Source: The official data of the Russian Federal State 1990 to 2017 |

In Russia investment activity occurred at the beginning of 2000. It affected positively the share of fixed investments in agriculture, which amounted to 5.0 %. However, at the end of 2017, this indicator for 1990-2017 decreased by 12.8 percentage points and amounted to 3.4%, reaching its minimum for the entire analyzed period. The number of people employed in agriculture in relation to the total number of people employed in the country in 1990 – 2017 decreased by 5.8 percentage points, also reaching its minimum for the entire period and amounted to 7.1%. To identify the main tendencies of changes in the share of agriculture in the total gross value added, fixed assets, fixed investments and the number of employees in agriculture, analytical alignment was carried out, which showed a clear tendency of decline in the analyzed indicators. These indicators are described by means of different trends (Table 2).

Table 2. Comparative analysis of the trends of the share of agriculture in Russian economy over the period from 1990 to 2017

| *Indicators* | *Trend and development character* | *Equation* | $R^2$ |
| --- | --- | --- | --- |
| Share of agriculture in the total volume of the gross value added of all the branches of the Russian economy, % | *Exponential* Descending arm with an accelerating growth vectors | $$Y_t = 16.628t^{-0.442}$$ | 0.871 |

| Share of fixed assets in agriculture in terms of their percentage in the total stocks of fixed assets of Russia, % | *Multinomial* Descending arm with an accelerating growth vectors | $Y_t = 0.0199t^2 - 1.0857t + 17.048$ | 0.841 |
|---|---|---|---|
| Share of capital investments in agriculture compared to the total capital investments of Russia, % | *Logarithmic* Descending arm with a slowing growth vectors | $Y_t = -3.082 \ln(t) + 12.539$ | 0.655 |
| Share of the number of people employed in agriculture in relation to the total number of people employed in Russian economy, % | *Multinomial* Descending arm with an accelerating growth vectors | $Y_t = -0.01t^2 + 0.0216t + 14.005$ | 0.925 |

Source: The official data of the Russian Federal State Statistics service (Rosstat) from 1990 to 2017: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/en/figures/agriculture/

When comparing the tendencies of changes dynamics in the share of agriculture in the total volume of Russian economy, it is obvious that these particular indicators are described by means of exponential, multinomial and logarithmic trends with accelerating and slowing growth vectors.

## 3. DISCUSSION

The results obtained during the research showed that the development of agricultural production in Russia is of a key importance, since this branch of the national economy is the material basis for ensuring the economic and social welfare of the multinational population of the country. The development potential of a state in terms of socio-economic aspect is now determined first of all not only by the gross value added, but also by the volume of fixed assets, fixed investments and the number of people involved in the economy. The wealth of any country is, first of all, its investments saturation, including their elements and components by means of which they are defined and formed. Therefore, investments, their volume, types, differentiation in areas and forms of ownership represent a strategic basis for the development of the entire economy and are of a great interest for a state in general (Gabitov et al., 2018a; 2018b). These findings and results are consistent with other studies. It is noted, that science and technology can help to sustainable and stable development of agriculture. The investments in agriculture, technologies and e-business development, as it is seen from the research, will contribute to the economic growth of agriculture (Wang and Huang, 2018). According to the opinion of compatriots, Russian scientists, modern scientific achievement will promote agriculture and food production. The article writers proved the reasonability to attract scientific and production potential of the Russian technological parks for technological modernization of Russian agriculture (Mingaleva et al., 2018). This confirms results and conclusions of the research about the need of further attracting investments in the industry and its technological development. So, according to the results and conclusions, it is necessary to attract investments required for the industry and for its technological development.

Investors are mostly interested in stable and sustainable production. Transformation of large agricultural enterprises into different types of production cooperatives, farms as far as appearance of private farms resulted in the violation of the whole reproductive agricultural process in Russia. There is a question about the role of small farms in the industry, which is constantly discussed by scientists. Numerous studies confirm the results of the analysis contained herein. The results of the study prove, that the role of small holders is different in different countries which is due to a combination of such factors as capital, labor and land resources (the indicators analyzed herein), income level, economies of scale, market imperfection and the choice of reforms (Burkitbayeva

and Swinnen, 2018). It is also noted that young and more dynamic smallholders have now integrated into modern value chains. The older generation of farmers produces goods only for their own consumption (Burkitbayeva and Swinnen, 2018). The opinion of some researchers is quite different. They suggest that when applying the best agricultural technics on farms, farm management becomes more effective. Business capacity and manufacture diversification increase, incomes grow, family food stability and welfare become stronger (Diaz Solis and Morejon Rivera, 2018). Some researchers have shown that the growth of agriculture led by small farmers is even more effective for economic development than the growth of production on large farms (Dorosh and Thurlow, 2018). It is agreeable that everything depends on the peculiarities of the country, the way of life of its inhabitants and its historical development. It also confirms the necessity of time-series indicators analysis, which was carried out in this research. Thus, the dynamics of the main microeconomic indicators of Russia in conditions with current prices characterizing reproduction processes in general were studied. The study results allow us to conclude on noticeable structural changes over the last 27 years that especially affected agriculture. Redistribution of land, labor, financial, raw materials potential and agricultural properties disrupted intersectoral, interfarm social and economic relations. In the end, this led to the decrease in the whole social reproduction.

The issues of resources redistribution between sectors and structural changes in the economy are relevant all over the world. The findings are largely consistent with this research. Scientists also offer different research methods. One of them is using the "input – output" model to make structural economic assessments, especially in agricultural sector. Analysis made according to this model proves the existence of obvious transformations, i.e. the growth of relations between agriculture and other industries, the priority of import growth compared to self-sufficiency in Poland (Czyżewski and Grzelak, 2018). This model is also interesting. The data of the "input – output" table made partly by the Russian Federal State Statistics service were also used in this research.

In Uzbekistan, there was a government intervention in agriculture by means of excessive intensive product extraction and economies of scale. This contributed to the investments into industries with value added (Lombardozzi, 2019). The fact is confirmed by the conclusions and the redistribution of resources in the economy is not in favor of agriculture because of its characteristics, lower productivity and wages compared to the industrial sectors of the economy. But at the same time, the growth of agriculture is the growth impulse for other sectors of the economy, especially for the processing sector. Studies based on the example of African countries show that the low level of productivity and capital in agriculture in the historical aspect was the cause of slave trade because it was more profitable to export people abroad than to grow and export products (Rönnbäck and Theodoridis, 2019). These are of course extreme cases, but temporary studies make it possible to identify such cases and emphasize the relevance of the rational distribution of resources, from the point of view of social justice in society as well. This also confirms the relevance and usefulness of the long time series method. In addition, for the modern world, in particular, for Russia, international labor migration is relevant for various reasons.

In order to improve methods of analysis, it should be noted that climatic conditions and environmental factors are of great importance in the development of agriculture. In many ways, they determine historical development of countries (Rönnbäck and Theodoridis, 2019). It is necessary to take into account these indicators when studying agriculture. There are also studies showing that structural changes in a country can contribute to the resilience of the economy to climate change. Otherwise, climate change can make agricultural development unpredictable and disrupt the country's economic progress (Yalew et al., 2018). It is noted that further research should be aimed at helping with food security in the development of the country and the sustainability of the economy, the methodology of measurement, which is largely insufficient in modern research on climate change and the redistribution of resources between industries and countries (Falco et al., 2018).

Changes in productivity of agricultural crops as a result of climatic change will influence the efficiency of land use, agricultural production, food prices, and macroeconomic indicators. Observations and measurements of these changes make it possible to assess the impact of climate change on different sectors (Fujimori et al., 2018). In this regard, it is also important to consider and research forestry. Many studies in this field prove that transfer of a large part of forests to agricultural and pasture lands results in negative changes in biodiversity, ecosystem and socio-economic life of the society. Macroeconomic policy of Brazil, for instance, pervasive in deforestation, needs urgent revision, because this policy has a long-term impact on the environment without evidence of improved welfare (Dupin et al., 2018). The strategy of economic development needs to be work out not only from the point of view of increasing revenues and profits. Conservation of natural resources and improvement of ecological environment should also be taken into account when working out this strategy.

The conclusions of economic research on the study of environmental indicators are agreeable. When making analysis, the influence of natural conditions was taken into account by authors of this study and other researchers (Magasumovna et al., 2017; Khabirov et al., 2018; Lukmanov et al., 2018; Sultanova et al., 2018).

## CONCLUSIONS

The study of macroeconomic indicators characterizing the processes of agricultural reproduction in the Russian Federation allows us to draw the following conclusions. Sustainable development of Russian economy depends on many factors. Among them are significant fixed-capital formation and its expansion, effective use of fixed assets, the increase in the amount of investments into the fixed-capital and, finally, the increase in the number of people employed in the economy. All the above mentioned will contribute to the growth of the gross domestic product and to the consistent capacity-building of different production branches, including agriculture.

Agriculture is among the most important sectors of the economy. However, there is a steady trend of the decrease in the share of agriculture in the total volume of the gross value added of all the branches of the Russian economy, in the volume of fixed assets and in the amount of all investments. All this goes to prove negative processes occuring in agricultural production and difficult social and economic situation of agricultural producers. Reproduction processes in agriculture of the Russian Federation are characterized mostly by similar trends countrywide. Thus, it can be concluded on the same reasons of the appearance of reproduction problems.

Transition to market economy in the 1990s was characterized by a sharp fall in the share of agriculture as one of the main indicators of the country's economy. Economy reformation of the country's agro-industrial complex led to large socio-economic changes in agricultural production, to the appearance of private farms and creation of a new community of agricultural producers. This community appeared as a result of the transformation of large agricultural enterprises into various types of producers' cooperatives, farms and farm households organized and functioning before the 1990s. The new community couldn't attract neither funds available for investment, nor its own savings, which resulted in the frustration of the agricultural production process. This accordingly affected the decline in gross value added production of the branch.

A comparative analysis of trends in the share of agriculture showed that the share of fixed investments in agriculture has a slowing growth vector, unlike other indicators. This fact shows the trend of economic stagnation and should be the basis for making important managerial and practical tasks by state administration bodies of the economy. Under the conditions of innovative economy, reproduction investment of the fixed assets should be the major factor for the further progressive economy development. Investment policy in the future should ensure economic growth, simple and expanded reproduction of fixed assets of all sectors of the economy on the basis of

innovative technologies with the prospect of increasing the physical volume of gross value added of the agricultural sector.

The practical significance of this analysis is largely determined by the applied strand of the research performed. Theoretical analysis of economic models and empirical data on structural changes supports the hypothesis that in the Russian Federation, as well as in other countries, the best results in forecasting can be obtained by time series methods. A large amount of retrospective information makes it possible to apply the classical methods of time series forecasting, as they have a high accuracy and reliability.

The results obtained can be directly used in the public administration practice for carrying-out macroeconomic analysis and forecasting in the development of recommendations on economic policy. These results will make it possible to make justified decisions when forecasting the potential of individual sectors of the economy, taking into account their social and economic characteristics. Evaluation of the macroeconomic situation in various sectors of the economy and forecasting future indices are also necessary to determine the investment attractiveness of individual sectors of the national economy, and to take the necessary measures to reform the current policy.

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