# THE CONTRIBUTION OF AGRICULTURAL SECTOR TO GDP IN THE REPUBLIC OF MOLDOVA

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#### Abstract

Currently, we are witnessing to a steady decline of contribution of agriculture in the Republic of Moldova to the formation of macroeconomic indicators. However, agriculture remains an important sector for the national economy in the Republic of Moldova. About 24.3% of the working population is employed in agricultural sector, and the share of agriculture in gross domestic product in 2013 was of 12.3%. The approached subject in this scientific work is current and emphasizes the problems which farmers are facing in economic, social and uncertain conditions.

**Key words:** agricultural sector, GDP, economical growth, productivity

# **INTRODUCTION**

Based on the decisive role that agricultural sectors play in economic and social aspect for any state, addressing problems that prevent its development presents an interest of maximum importance and topical.

The regulations of agricultural sector by the state governments aim to achieve 4 main objectives [4]:

- -to protect farmers from uncertainties related to price developments;
- -to ensure with their own food (food security through self-sufficiency);
- -to maintain the viability of farms and small farms;
- -to achieve certain objectives of spatial planning, such as maintaining a specific regional scale.

These objectives are in accordance with the objectives of Common Agricultural Policy (CAP):

- -increasing the agricultural productivity by promoting technical progress and by optimal using of production factors;
- -ensuring a fair standard of living for the population employed in agricultural sector by increasing the individual earnings of farmers;
- -stabilizing markets;
- -ensuring availability of supplies;
- -ensuring certain reasonable prices for

consumers [6].

The State shall ensure the sustainable development mechanism of agricultural entities through promoted policies. Besides contribution to the employment of population, also agriculture plays a major role in growth economic through important relationships between production consumption, ensuring non agricultural sector (industry and trade) with raw materials for production and commodities. Also, the agriculture is a consumer of energy, mineral and chemical products, etc.

The above mentioned require the necessity to promote protectionist policies from governments side.

# MATERIALS AND METHODS

Informational support of the research is represented by empirical studies of different researchers on agricultural growth and its impact on poverty reduction [5], the World Bank's study conducted by Anne Krueger, Maurice Schiff and Valdes Alberto on the attitude to agriculture [1].

As analytical support for this study served the data of the National Bureau of Statistics of the Republic of Moldova, National Strategy for Agricultural and Rural Development for the years 2014 - 2020 and other relevant data

processed by the author.

### RESULTS AND DISCUSSIONS

The agriculture of XXI century is highlighted from other sectors of the economy through size and potential impact on including macroeconomic issues. growth. multifunctional economic Its character confirms that agriculture is not just about food production. In addition, the XXI century has generated new challenges, such as price volatility, increasing climate changes, rural poverty to which agriculture must face. Also, agriculture provides jobs and incomes to the majority of the rural population.

The labor force as a factor of economic growth occurs through increasing the level of work done at the macroeconomic level and also through increasing its quality, which is expressed synthetic through labor productivity indicator. Although, the Republic of Moldova is among the first countries of Europe with the largest areas of agricultural land per capita, also continue to lead among the poorest countries of Europe with the lowest standard of living and economic development. The Republic of Moldova ranks on the last places regarding the usage of labor in rural areas, compared with EU countries. This is reflected by differential between rural share of the total population and share of agriculture in employment in some EU countries.

Productivity in the agricultural sector is very low both compared to productivity obtained in this sector in countries with developed agriculture as well as to productivity to other sectors, such as industrial and service sector [3].

Chart 1 shows an increased trend of labor productivity in agriculture simultaneously with reducing the number of employees working in this sector.

The decrease of employment of labor in agriculture in relation with the increased production of the sector has led to increased productivity in the Republic of Moldova's agriculture during 2000 - 2009. In the last 4 years of the analyzed period has been a steady trend of the labor productivity.

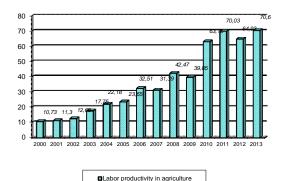


Fig.1.The evolution of labor productivity in agriculture during 2000-2013, thousand MDL.

Source: authors' calculations and processing based on data of the National Bureau of Statistics of the Republic of Moldova

Despite this, agriculture remains the sector with the lowest level of labor remuneration, with the largest number of day laborers. Working conditions and low level of labor remuneration lead to the abandonment of this sector, labor people migrating to other sectors or abroad looking for better paid jobs.

According to author, targeted theoretical models suggest conflicting views regarding the role of agriculture in developed countries, because they have on their base, assumptions resulting from different economic models, namely and the role of agriculture in each model is specific to it.

A low productivity may be determined by several factors. The main factors could be lack of appropriate technologies and lack of adoption (adoption). While the first requires for a better targeting of research in developing countries' economies and their conditions, the second requires a reduction of barriers to implementation technology. Of course, the problem of low productivity can also be a combination for both inadequate technologies as for barriers implementation and restricted access to resources of financial market.

Although new and available technologies are more productive, farmers are deprived of information on their existence and knowledge necessary for their use. Extension services represent educational tools that are designed to teach and to provide information enabling farmers to use and manage effectively new technologies. Also shall be considered global climate changes.

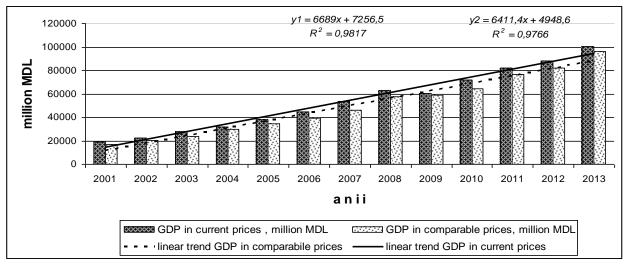


Fig.2. Trend of GDP evolutions (in current prices and in comparable prices) in the Republic of Moldova Source: authors' calculations and processing based on data of the National Bureau of Statistics of the Republic of Moldova

New crop varieties resistant to drought and increased investment in irrigation are required. These adaptation efforts shall be part of general strategies for agricultural development.

Agricultural sector in the Republic Moldova is characterized as one subsistence agriculture, uncompetitive compared to agriculture of other European countries [5]. Some theorists believe that the importance of the agricultural sector decreases with economic development. From this point of view, the role of agriculture in economic development is to provide cheap food and work places [2].

The Republic of Moldova's macroeconomic environment is similar to that of Eastern European countries, but different from the new member states of the European Union. If we represent the share of gross added value of agriculture in the region's GDP, it becomes obvious that agriculture plays a vital role in the economies of Eastern Europe. On the other hand, the role of agriculture in GDP has decreased in all Eastern European countries in the last decade.

The GDP's evolution in Lei million in the Republic of Moldova in the last 14 years shows an upward trend with a relatively constant linear evolution. Linear regression models of the GDP's evolution indicates a high degree of certainty, the R<sup>2</sup> values being

about 98 p.p. Simultaneously, there has been a decrease in the contribution of agricultural sector to GDP.

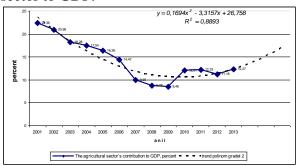


Fig.3. Trend of evolution of the agricultural sector's contribution to GDP, percent, during 2001-2013. Source: authors' calculations and processing based on data of the National Bureau of Statistics of the Republic of Moldova

Starting with 2000 in the Republic of Moldova has been a trend of evolutions of second degree parabola to agricultural contribution to GDP, indicating the decrease of this indicator with regular insignificant increase.

At the same time, as describing in Chart 4, although agriculture through its global production contributes to economic growth measured by GDP, this contribution is one simple negligible, taking into account the number of population employed in the sector concerned.

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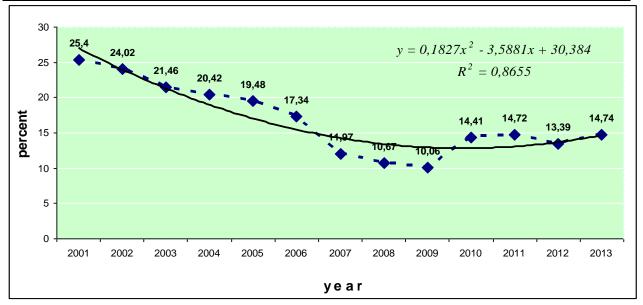


Fig. 4. The contribution of agriculture to gross added value in the Republic of Moldova. Evolution and trend, 2001-2013

Source: authors' calculations and processing based on data of the National Bureau of Statistics of the Republic of Moldova

The contribution of agriculture to gross added value has a trend of evolution similar to that of contribution to GDP. Thus, if in 2001 the contribution of agriculture to gross added value exceeded 25%, currently we are witnessing to a contribution of approximate 14.7%.

# **CONCLUSIONS**

Agriculture remains an important sector in the economy of the Republic of Moldova, but one in decline for now. Thus, if in 2013 the contribution of agriculture to GDP was 12.3%, compared with those 23% recorded in 2001. This decrease was determined by upward development of the services sector, currently contributing with about 2/3 to GDP. The registered trend has a trajectory described by development models of other developed countries, where services sector plays a more important role in the economy, agricultural sector being in a downward trend. Thus, the attention to agricultural sector from the government side both at EU level as at national level is important. Besides grant funds. the European Union allocates substantial funds in promoting innovation in agricultural sector, which contributes to increases the efficiency and welfare of the population employed in this sector.

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