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Farm Diversification and the Corresponding Policy for Its Implementation in Georgia

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***Abstract*—**The paper shows the necessity of farm diversification in accordance with the current trends in agricultural sector of Georgia. The possibilities for the diversification and the corresponding economic policy are suggested.

The causes that hinder diversification of farms are revealed, possibilities of diversification are identified and the ability of increasing employment through diversification is proved. Index of harvest diversification is calculated based on the areas used for cereals and legumes, potatoes and vegetables and other food crops. Crop and livestock production indexes are analyzed; correlation between crop capacity index and value added per worker and per hectare is studied.

Based on the research farm diversification strategies and priorities of corresponding economic policy are presented. Based on the conclusions relevant recommendations are suggested.

***Keywords*—**Farm diversification, diversification index, agricultural development policy.

I. Introduction

DIVERSIFICATION of farms in Georgia is determined by the current trends and opportunities in Georgian agriculture. In particular, demand for diversification occurred from consumers and producers; control on the quality and safety of agricultural products required speeding up of this process; new technologies are being introduced in the production, processing and transportation of raw materials; vertical integration has deepened both at national and international levels; a significant impact of global competition on domestic market can be observed; shortage of natural resources occurred; the state policy for farming is changing [1].

Farm diversification is a problematic issue for Georgia as small-sized farms are dominant in Georgian agriculture. 20% of Georgian farmers own less than one hectare of land area and they produce only for self-consumption; 75% of farmers own from one up to three hectares of land and they produce for self-consumption as well as for sale on the market; only 5% of farmers own up to 100 hectares of land area and are fully oriented to markets [2].

Agricultural sector plays an important role in stimulating development of rural areas in Georgia. In general, management of this process requires two preconditions: a) agriculture should be closely integrated with local economy and society; b) having close integrational ties, agriculture should have a substantial impact on the development of local economy, in particular, on the improvement of competition, social relations and local ecosystem [3]. One way to meet these requirements is to diversify farming and reflect corresponding supporting directions in agricultural development policy.

Through solving the problem of diversification, farmers will be able to enter the sectors; they don't have direct industrial links and functional relations with currently. By increasing the variety of the products and services offered, farming activities will cover new spheres.

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II. Methodology

Different research methods, such as dialectical, induction and deduction, comparison, statistical (observational, selection, grouping, indexation, analysis, trend) methods as well as expert evaluations are used in the paper. Reports of National Statistics Office of Georgia and theoretical and applied researches by different international organizations and economists are applied for determining relationship between analytical and statistical assessments.

III. Discussion

Climate and natural conditions of Georgia provide good possibility for producing ecologically friendly agricultural products. There is an increasing demand for such products on world market. There are several measures essential for exporting Georgian products to international market, in particular: increasing the scale of production, execution of optimal economic policy, working out an agricultural development strategy.

Agricultural policy should promote the growth of income of the people living in rural areas as well as reduction of poverty and achieving the goal of general welfare, in particular, to fully meet the demand for healthy food and agricultural raw materials [4].

According to the data of National Statistics Office of Georgia, in 2013 the share of agriculture in Georgian GDP was 9.3%, production of crop and livestock slightly increased in 2013 compared to the previous year. However, in previous years, decreasing trend was observed in the production of most of the products [5]. The share of income from the sale of agricultural products in total revenues is quite small and is only 15.3% per household and 14.7% per capita [6].This means that most of agricultural products is produced only for self-consumption and in fact, there is no interest in development of farms oriented to business. In some regions of Georgia instead of cultivating the land, people prefer to be

below poverty line in order to get alternative income (social assistance). In these years, economic diversification was taking place in general and therefore, opposite tendency was expected.

Productivity is very low in agricultural sector in Georgia. For instance, economic wealth created by every for persons living in rural areas in Georgia is equal to economic wealth created by one Estonian and the wealth created by six-member family is the same as the wealth created by one Bulgarian. These figures are much lower than compared with the figures of developed countries – the value of wealth created by 30 Georgian people living in rural areas is the same as the value created by one person living in France [7].

Growth of gross product in agriculture is limited as demand for agricultural products is determined by various global and domestic factors, most of which can't be controlled by Georgia. There are far more possibilities for increasing productivity. Without diversifying small-sized farms won't be able to meet the requirements of increased productivity. Most of farms in Georgia are small and increasing the number of such farms may cause significant social problems. In fact, the government achieved stimulation of small farms and there is some progress in establishment of sustainable farms, though additional long-term measures still have to be carried out in this direction.

In 2011-2014, the government of Georgia declared that development of agriculture was one of the main priorities for the country. This sector has good potential from the perspective of resources, but production growth possibilities aren't fully realized. Diversification of farms and development of adequate measures within the frames of agricultural policy is a good possibility for realization of the existing and unused resources.

In order to identify the factors that hinder farm diversification process in Georgia, first we have analyzed the level of income in agriculture: 1. from social farms; 2. from household farms; 3. from farms; 4. from social funds. The analysis showed that despite structural reforms, the level of income is still low, while poverty and unemployment is steadily high. In 2013, average income per household was 887.2 GEL, 0.1% higher compared with the previous year. Average income per capita was 246.6 GEL, which is similarly 0.1% higher compared with the previous year [8]. The main source of household income is cash income and transfers. Non-cash income has been gradually reducing lately.

Growth of income and improving welfare of the people living in rural areas directly depend on the diversification of farms. Diversification significantly increases possibilities to reduce unemployment and therefore increases productivity. In order to identify these possibilities, we have calculated harvest diversification index (DI):

$$\mathrm{DI} = \sum Xi / (\sum Xi)^2,$$

where Xi is land area suitable for cultivation.

Index of harvest diversification was calculated based on the areas used for growing cereals and legumes, potatoes and vegetables, food and other crops [9].

Calculations showed that this indicator is quite changeable (see Fig. 1). The level of diversification was steady between 2006-2009 and 2010-2011. In 2010 and 2012, diversification was increasing. In addition, it was observed that in case of diversification the level of use of labor is much higher.

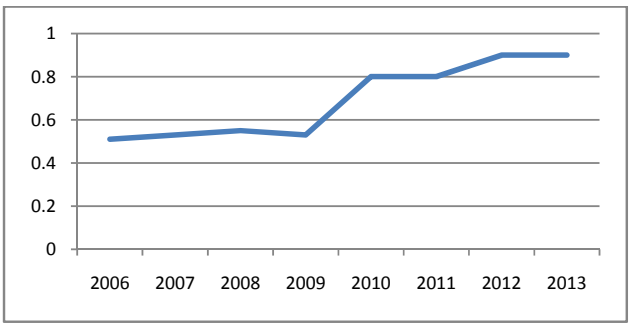

Fig. 1 Harvest Diversification Index in Georgia [10]

Harvest diversification index has been assessed based on the comparative analysis of crop and livestock production indexes (see Fig. 2).

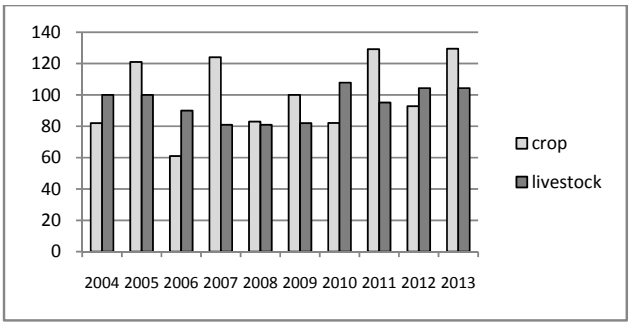

Fig. 2 Crop and Livestock Production Indexes [11] (Previous year = 100)

Analysis of agricultural production indexes showed that production of crop and livestock production ratio varies over years, slight increase has been observed in recent years. In 2013, production of agricultural products increased by 928.9 million GEL compared to 2007: production of crop increased by 229.2 million GEL and production of livestock - by 625.1 million GEL, the rest was for the increase of services. The main causes of the above are small scale of production, low productivity, lack of financial resources, underdeveloped horizontal and vertical links, low use of resources, etc.

In order to identify possibilities of diversification we have studied correlation between crop capacity index and value added per worker and per hectare.

Added value in agricultural sector of Georgia amounted to 15443 million GEL in 2006, 1562.8 million GEL in 2007, 1551.0 million GEL in 2008, 1457.2 million GEL in 2009, 1518.2 million GEL in 2010, 1854.9 million GEL in 2011,

1933.3 million GEL in 2012 and 2168.2 million GEL in 2013 [12]. We have calculated this indicator per worker employed in agricultural sector and per hectare and determined correlation between these indicators and DI. As it turned out, correlation between DI and added value per worker in agricultural sector was negative between 2006 and 2009 and it was positive in 2009-2013. Nearly the same trend can be observed in correlation between DI and added value in agricultural sector per hectare. Thus, diversification of farms in Georgia is possible through increasing the involvement and participation of qualified farmers and specialists on the one hand, and by increasing cultivated land areas on the other. In addition, taken into consideration correlative links, diversification of farms will also result in the increase of added value in agriculture.

It's necessary to identify possibilities of farm diversification within agriculture and beyond it. For example, when growing flowers, the following model of diversification is possible: pharmaceutical and aromatic plants; energetic plants; industrial fiber plants; non-intensive plants for cattle; the following model of diversification can be considered outside agriculture: production and transportation of juice, cheese, meat and meat products, cream, cakes, wool and others; consultations, collecting fruit in forests, etc.

In foreign trade with food products of Georgia import exceeds export four times [13].In addition, one problem small and medium farmers face is instability of export markets. Diversification of farms will significantly increase export of agricultural products. In order to encourage these processes, it's essential to develop a program oriented on the export rather than import of agricultural products and to reflect this program in the priorities of economic policy.

Currently farmers lack the knowledge and information about the possibilities of diversification; in many cases, they don't have qualification to use modern technologies. In addition, farmers find it hard to do business projects to apply to various national, international or other donor organizations. They find it hard to get full information regarding different supporting programs and projects. Improving awareness and the level of education among farmers will play an important role in the process of diversification. This can be done by offering different courses in this sphere and increasing accessibility to business consulting, providing trainings, conducting information campaigns regarding programs and projects aimed at development of agriculture.

Promoting diversification of farms requires a number of measures to be taken – to launch stimulating programs, harmonize the farms with international norms and standards, create stable environment with regulatory framework favorable for increasing farm size, provide farmers with special state funded programs to improve their skills and adapt them to the needs of diversification. Diversification of farms will become the key factor for increasing production of agricultural products and improve welfare.

IV. Conclusion and Recommendations

The analysis of farm diversification in Georgia revealed the following key problems:

- The size of farms is small;
- Farmers have low income;
- Vertical and horizontal coordination is quite weak, that hinders efficient usage of resources and creation of additional products;
- Farms aren't sufficiently supported by the state;
- Farm diversification has direct impact on overcoming poverty and improving welfare;
- Farm diversification is an important factor influencing the growth of added value in agriculture;
- Awareness of farmers on the possibilities of farm diversification is quite low;
- Possibilities of farm diversification in agriculture as well as in other fields aren't identified;
- The corresponding strategies for entering new markets aren't developed.

The following recommendations have been developed based on the above analysis and conclusions:

- In order to begin the process of farm diversification, first of all, the size of land areas owned by the farmers should increase. For this purpose, it's essential to create favorable environment for land market development;
- It's essential to develop the policy, which will make long-term loans with low interest rates accessible to farmers;
- Focusing on farm diversification will ensure overcoming of poverty and increase of welfare in rural areas;
- The economic policy oriented to farm diversification will make it possible to increase added value in agriculture;
- Farm diversification will increase employment rate in rural areas;
- It's essential to identify priorities of agrarian reforms and economic policy to promote farm diversification. The state should take responsibility for the new policy, business opportunities and international relations;
- Diversified farms are the main source of creating export potential of agricultural products. It's important to include export supporting measures in agricultural development policy and to develop international market entry strategies;
- It's important to develop a state program, that will ensure purchase of agricultural products produced by diversified farms;
- It's important to provide farmers with special educational courses and business consulting services, conducting frequent informational campaigns about supporting programs and projects of agriculture, increasing accessibility to internet, etc.

References

[1] E. Kharaishvili, Diversification of Farms in the Eastern European and Central Asian Countries, Journal of Economics and Business, 2012.
[2] E. Kharaishvili, The Issues of Competition and Competitiveness in Agricultural Sector of Georgia, Tbilisi, 2011, p.102.

[3] Development of Agriculture in Europe, FAO Investment Center, Trends in Agricultural Development, FAO, 2010 (in Russian), p. 28.
[4] G.Erkomaishvili, Economic Development Priorities of Georgia, Tbilisi, 2013, p.46.
[5] National Statistics Office of Georgia, Agriculture of Georgia, 2013, Statistical Publication, Tbilisi 2014, p. 15-16.
[6] Incomes and Expenses of Households, www.geostat.ge
[7] Productivity in Agriculture In Georgia and Armenia, www.iset.ge
[8] Household Income, www.geostat.ge
[9] E. Kharaishvili, Diversification of Farms in the Eastern European and Central Asian Countries, Journal of Economics and Business", #2, 2012
[10] Statistical Yearbook of Georgia: 2014, National Statistics Office of Georgia, Tbilisi, 2014.
[11] Statistical Yearbook of Georgia: 2014, National Statistics Office of Georgia, Tbilisi, 2014. p 157.
[12] National Statistics Office of Georgia, Agriculture of Georgia 2013, Statistical Publication, Tbilisi, 2014, p 15.
[13] External Trade of Georgia 2014, National Statistics Office, www.geostat.ge.