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Perspectives of Moldavia's agricultural sector after potential accession to the EU

Abstract. Development of intensive agriculture is a perspective direction in the world, but also in Moldavia. The natural factors, as well as knowledge and technology developed on this basis, ensuring a high yield, quality, competitiveness and specialization of production, will be both contributing to the development of agriculture as a branch, as well as the social efficiency of production. European integration and scientific progress offers new opportunities for raising agricultural output. The goal of the paper was to characterize perspectives of Moldavia's agricultural sector following country's potential accession to the European Union. As a conclusion we can say that the main factors in ensuring the competitiveness of agricultural products are quality, which manifests itself through price differentiation and diversity of sales channels.

Key words: competitiveness, integration, specialization, productivity, effectiveness.

Introduction

Economic and social changes have been undergoing in Moldavian agriculture and food economy that involve issues of regional development, the main tasks of which are the following [Timofti & Popa 2009]:

- creation of conditions for stable economic development of economic agricultural entities in the region
- maintenance of the necessary standard of living and the social security of the region's population
- resolving of the ecological problems.

Accession to the European Union mechanisms includes:

- further harmonization of legislation and institutions in agriculture with the acquis communautaire in the European Union, practical application of country's economic and social activities
- increasing premises of advantageous integration of Moldavia into the European Union
- development and implementing a quality standards aligned with those in the European Union countries;
- creating channels of product support.

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Discussion

Macroeconomic conditions

Progress offers new opportunities for boosting the agricultural output of many industries. This task can be achieved by targeting priority to production and export of food products of high competitiveness. Economic efficiency and social economic effects are beneficial both for producers, by saving inputs, their rational use, reducing costs while increasing quality and, consequently, a better positioning in the competitive environment and for consumers, by increasing the nominal and real wage and thus increasing the purchasing power of income, saving working time, recovery time, etc.

The competitiveness of production is a complex notion, which reflects, on the one hand, the producer's interests, and on the other hand the consumer's interests. In the first case the product is considered competitive if it assures efficiency of the producer's activity. In the second case, it is a product which assures a maximally useful effect per unit of consumption. Through these assertions we stipulate that in the assessment of competitiveness of production it is necessary to take into consideration so much producers interests as well as those of consumers.

We are convinced that an improvement of production quality in the agricultural sector, raising of sale price as a result of differentiation in production quality as well as an improvement of distribution ways constitute a set of levers which determine the main direction of increasing the economic efficiency of production and the competitiveness of enterprises.

Increasing agricultural production quality can not be rationally considered separately from economic categories such as labour productivity, unit cost, selling price, profit, profitability, etc. A close and direct connection exists, however, between the quality of agricultural products and their selling price [Timofti 2009].

An economy can not be considered efficient if it is not sufficiently receptive to the technological and scientific progress and is using irrationally the economical resources. For an efficient economy, a high level of using its economical and production possibilities is characteristic. The efficiency is a production result and this result can be of a low, high or negative level. That is why in certain cases favourable conditions for the effectuation of the large production process can be created, but in other cases the created situation is leading to a diminution of production.

A system of indicators is used for the economic efficiency characterization of all production branches. These indicators reflect the level of utilisation of the production factors, also the selling conditions, the demand, the offer, the competition between the producers, etc.

The system of the appraisal indicators offers to us a possibility to analyze in a complex mode and to obtain certain results concerning a new direction of development and of refining the production economic efficiency.

The results of efficiency estimation demonstrate in a concrete mode to the merchandise producers how to organize the production structure in order to correspond to the competitive market demands.

By the notion of 'system of indicators' a set of multiple reciprocally interconnected indicators is understood, which have basically a unique conception concerning the consumer, the calculation methodology and the aggregation means, which are coordinated

and have hierarchic structure of multiple levels, respect the comparability, characterize the main aspects of the economic process, oriented to unravelling of some concrete objectives [Timofti 2009].

Investment

In accordance with data from agricultural enterprises in the Republic of Moldavia, which farm more than 60% of the agricultural land area in the country, researches were effectuated in the field of economic production efficiency.

Fixed capital investments play a major role for the agricultural development. Fixed capital investments for agricultural development, by forms of ownership, are presented in Table 1.

Table 1. Fixed capital investments in agricultural development, by forms of ownership, current prices, leu million

Capital source	Year							
	2003	2004	2005	2006	2007	2008	2009	2010
Fixed capital investments with production purpose	92.3	317.9	455.9	489.2	731.6	1020.2	923.3	992.2
of which:								
public	25.4	28.2	41.5	37.5	37.8	41.2	23.7	29.2
private	154.7	258.7	369.6	382.5	558.8	861.9	795.8	818.8
Mixed (public and private). without foreign participation	6.7	5.7	6.9	5.4	20.1	14.9	2.6	0.9
Joint ventures	3.6	25.2	32.9	61.8	10.2	98.1	87.2	16.8
Foreign investors	1.9	–	5.0	2.0	5.2	4.0	14.0	26.6

Source: National Bureau of Statistics, Republic of Moldavia

Table 1 data indicate that capital investments with purpose of production rose in 2010 by 7.5% as compared to 2009, while mixed capital investments (public and private) and joint ventures were significantly reduced without foreign participation in the last year of analysis.

The way of approach, the criteria of efficiency hierarchy and their contents are changing when passing to the new economic relations of competitive economy. Obtaining of a profit, being the main objective of activities in agriculture in conditions of competitive economy, as a criterion of economic efficiency will be the maximisation of profit per unit of resources consumption, in conditions of a high level of quality and assurance of production competitiveness. In the case of implementing new modern technologies, the criterion of efficiency will become the minimisation of resources consumption per unit of final result.

SWOT analysis

As a tabulation of research results of the economic efficiency of agricultural production through the SWOT analysis, a series of conclusions that assess the strengths, weaknesses and opportunities can be shown in order to improve the estimation

methodology of increases in economic efficiency of production branch agriculture, which is a priority of the economy.

Table 2. SWOT analysis of the agricultural sector in Moldavia

Strengths	Weaknesses
• Agro-science based on de-monopolization of agriculture developed a concept of its functioning under various forms of joint ownership and activity. • Total agricultural area is relatively high and arable land has a considerable weight. • Producers of goods of highly valuable agricultural products (fruit, vegetables, etc.) are employed in private enterprises and large corporations. • In the prevailing cases some products can not be produced in large enterprises (beans, peas, buckwheat, melons, berries, herbs, quail eggs, goat milk, rabbit meat, honey, and fish). • The Republic of Moldavia agricultural market has access to markets in the East and West. It offers great opportunities for sales in the domestic and export agricultural markets. • Reforms have provided opportunities to a large part of farmers to show entrepreneurship and strive to achieve high results, profits and other successes. • Producers of goods are given the right to independently solve problems and develop production operations. • An opportunity was created to develop agriculture in many forms of ownership and production meeting the need of cooperation on different principles. • Implementation of strategies, programs and mechanisms to support agricultural sector. The legislative basis for development of agricultural sector has been created and continuously improved. • The country's favourable geographical location, situated between the EU and CIS countries. • The labour force with skills in foreign languages. • Well developed telecommunications system including the internet access. • New and transferable skills acquired by returning migrants.	•Lack of investment in agriculture, existence of a large number of unprofitable farms. • Increasing dependence of agriculture on industrial processing enterprises. This makes a disparity between agricultural and industrial production prices. • The manufacturers of agricultural products still do not feel confidence in their powers. • Natural factors influence risk (hail, frost, fire, landslides and floods). • The disparity between prices of food and industrial products. • Lack of personal experience in agriculture and economic studies. • Lack of counselling centres. • Difficulties with selling products. • Economic efficiency of agricultural production at a lower level. • Crop and animal productivity is low as compared to other countries. • The low level of labour remuneration. • Ageing workforce, the youth migration to cities and other countries. • Lack of state subsidies. • The high interest rate on loans. • The low quality of products. • Reduced work discipline and technological discipline. • Increasing costs of agricultural products. • Technical and material destruction. • Low skilled workers. • Not sufficient changes taking place in the necessary structural systems (financial and organizational) which are not adequate to ensure effective development of agriculture. • Low productivity reasons: • reducing rates of mineral and organic fertilization • reducing crop area cultivated with intensive technology • reducing the irrigated areas due to failure of irrigation systems. • Worsening labour and technological discipline; • Conditions conductive to extensive reproduction. Crisis in agriculture has generated agricultural market distortions, mainly caused by: • problems in the orientation of production structures in relation to the domestic and external demand • lack of recovery in the processing and storage of food products • poor promotion of foreign investments in processing of agricultural products • poor protection of domestic production • lack of services to promote sales channel performance • inefficient allocation of resources • reduced efficiency of legislative base implementation • political instability • limited financial capacity of the state for support to agriculture • underdeveloped business support infrastructure and capital market • lack of financial support instruments for innovation projects • low level of competitiveness of agricultural sector • low level of development and absorption of innovations • low level of entrepreneurial culture and training • poor knowledge of techniques of access to foreign export markets and reduced rate of exports of agricultural sector.

Table 2. continued

Opportunities	Threats
• Initiation of competitive business in agriculture and demand for the agricultural land based on increasing returns. • Increases in crop yields and product quality. • Diversification of crops in line with other emerging markets and their development. • Encouraging foreign investment. • Modernization of processing procedures in the way of investment. • Greater access to the EU markets and the EU financial funds. • Improving the producers, processors and traders activity in the supply chain. • Cooperation between agricultural units in the storage of products and increasing their market influence. • Introduction of exchange transactions and a growing use of modern sales instruments. Increase in the state attention to the problems and needs of the agricultural sector. • Development of public-private partnership. • Pro-European vector in national development. • Development and continuous improvement of observation of intellectual property rights. • Extension of international cooperation, development of cooperation in agriculture and regional infrastructure to strengthen the contact points. • Further development of the internationalization of agricultural sector. • Further development of technologies and innovations and their absorption capacity.	• Use of inappropriate agricultural policies to improve production and/or sale of agricultural products. • Increase in international competitiveness not ensuring increased competitiveness of the Moldavian agricultural products. • Processing capacity and technical and technological equipment possibly damaged. • Difficulties in adjusting to and integration with the European agricultural production requirements. • Low production volume, disparity with industrial prices, naturalization of agriculture, risk of financial dependence, poor social infrastructure development. • Expensive loans, high interest rates, farmers' problems with getting loans when taking into account the specific natural conditions in agriculture. • Existence of territorial conflict. • Instability of the legislative framework. • Significant migration of the active population. • Lack of inflow of young professionals specialized in agricultural activities. • Increasing shadow economy. • International competitive pressure. • The energy dependence. • Adaptation of the education system too slow to meet the labour market demand. • Low participation of entrepreneurs in entrepreneurship education programs. • The tendency to increase the tax burden.

Source: [Decision… 2006].

The impact of potential EU accession on the agro-food sector in the Republic of Moldavia (opportunities, threats) can be analyzed through a methodology like the SWOT analysis. By identifying strengths, it was intended to highlight the capabilities, resources, abilities and skills characteristic of the agriculture in Moldavia that can be sources for a successful development. In fact, the strengths in SWOT analysis are defined also in amounts and both internal and external factors created are valued. In contrast, gaps in legislation governing the sector, poor resource areas and internal conditions that are otherwise actual values, are the points of weakness. Opportunities are the virtues that can be advanced skills, ways that can be exploited to the limits of their force and faults that can be removed at least vulnerability and that prevent the agricultural sector in the country to attain the most developed level of economy in which the contribution by this sector to creating the value added and the GDP are very important. Threats are some negative aspects arising from the limits imposed by the external unstable environment of the sector, external relations of the state, the pressure exerted by state bodies through regulations and taxation. The main objective pursued through the SWOT analysis is to view items separately and to recommend strategies that would create optimal alignment of the agricultural sector to international standards.

The SWOT analysis indicates the existence of advantages and opportunities for development of agricultural sector, but the weaknesses and threats in relation to agriculture

remain substantial. In this context, there is a need to support agricultural sector, creating stable legal and economic conditions.

In such a context, the reconstruction of agriculture concerns a series of important segments of this industry. Vital, urgent and interdependent processes and attention are taken by the present government through its governmental programme. It includes many directions and actions to drive a significant turnabout in this subsystem of the national economy, including the following:

- quantitative and qualitative growth of crop and animal production, by building national productive potential and promotion of organic farming systems, stimulating a growth of farmers' performance and competitiveness of Moldavian food products in domestic and international markets and expanding organic farming [Law… 2001, p. 9]
- consolidation and private sector development by promoting specific investment programmes, effective and profitable for farmers;
- technical equipment of agriculture, primarily by supporting farmers in the purchase of tractors, agricultural machinery, equipment, plants, fertilizers, pesticides (within the limits of ecological balance) and petroleum products, agricultural products including payments for industrialization and export
- competitive, reliable and stable development, ensuring adequate income to farmers, including tax policies directed primarily at products such as wheat, sugar beet, sunflower, soy, cow's milk, poultry, pork etc.
- promotion of a comprehensive rural development programme in all developing regions in a complex concept of rural development, economic and social integration of Moldavian villages
- ensuring an enabling environment to attract, on favourable terms, the foreign capital investment to support programmes and agricultural production in Moldavia. [Law… 2007].

For Moldavia, an integration into the European Single Market is an economic necessity, social and political. The EU accession strategy is based on the major objectives to be met by our country which has to meet the requirements of integrataion into the EU economic structures and creation of a food system and market performance, competitive internally and externally. Food requirements in the Moldavian market are very tough.

Price regulation in the EU has necessitated the creation of a complicated mechanism that manages the land market price movements. The basic element of this is guaranteeing prices. The guaranteed prices usually include three types of prices: prices for special intervention, prices of involvement, limit prices (import prices).

The intervention prices are always below the price for special purposes (usually 10% to 15%) [Timofti & Popa 2009]. They function as the minimum price guarantee. The intervention price is the price that the purchasing agencies in each EU country are required in November until May to purchase products from farmers at (only standardized products are purchased). If market prices fall below intervention prices or the demand for agricultural products is not sufficient, the EU procurement organizations buy from producers any quantity at the intervention price. A limit price is the minimum import price. Import duties are custom duties by which import prices are set at the limit price. Import duties are paid by importers of EU products and should not exceed the intervention price by 55%. Export subsidies (refunds) are payments by which export prices are set in the export

market. Export subsidies are designed to eliminate the divergence between EU prices and world prices. Their total volume is not mounted automatically but depends on the internal market price and the price obtainable in the third countries markets. Subsidies are usually established by decision of the Committee for Administration based on daily auction price bidding. Fixed volumes of product export certificates are issued that allow receiving export subsidies. Products from intervention stocks may also be sold in export markets at world prices. If the intervention prices for grains stay below limit prices over a part of the year, monthly pay increases for goods' manufacturer and trading firms as a stimulus to store products instead of selling them at early intervention prices [Decision… 2006].

Much of the intervention payments structure is occupied by payments to farmers growing grain crops (57%). Most state subsidies were distributed in Italy (28.3%) and France (14.4 %). Small subsidies have received Belgium, Sweden, Denmark, Portugal and Great Britain. In the structure of the trade subsidies to producers dominate grain crops payments (64.7%). Among the EU countries, greater support receive commercial producers in France and Germany (35% and 23.3% respectively) and the smallest get manufacturers in the Netherlands, Luxemburg, Portugal, Greece, Belgium and Denmark.

An important factor of the EU agricultural policy is also a permanent control over markets and prices. As one of the EU market regulation measures it serves for seizure practice of a large proportion of agricultural products and for keeping the so-called 'state reserves'. Consequently in most cases the product comes as a result of exports support. An European Union permanent deposit keeps agricultural products worth 1 ÷ 1.5 EUR billion [Decision… 2006].

Commodity interventions are a constituent of the mechanism of price regulation in the EU. When prices fall below the intervention level, the purchase and storage takes place and when the world prices fall below the EU prices (which is a common situation) the exporters receive compensation payments. Maintaining domestic EU production at reproductive balance is achieved at the expense of export subsidies compensating the exporters when the EU goods are more expensive than the world market price. Thus, the EU market is operating in an enclosed space determined by actions appropriate for maintaining an adequate stability of the internal market independent of world prices.

Social development programs have been established and the support for agricultural products is explained by the cohesion framework. First of all, these programs are conducted on a regional scale. The cohesion policy pertains to numerous agricultural districts. These are all territories of Greece, Portugal and Ireland and much of Spain, Southern Italy, Sardinia, Corsica and France's foreign departments. Besides, the reason for inclusion of the regions mentioned above into the economic programme are also three other criteria: a high level of employment in agriculture, low living standards of population and/or a well-marked tendency of diminishing number of population. In these regional programmes are included many other traditional actions financed on the EU account. Investments in industrialised farms, social programmes (early retirement, helping young farmers, professional training), help for districts with unfavourable conditions for agriculture and with regional environmental tensions, support for farm forestry, development programmes for processing and marketing of agricultural products, financing environmental safeguards can be highlighted. In districts with ecological tensions, entrepreneurs can receive subsidies as compensation for possible losses of income from taking measures of environmental protection, recommended by the EU.

Payment shall be made per hectare of agricultural land and may be from EUR 25 to 200 per hectare. Territory size of ecological tension must not exceed 10% of the EU territory [Decision… 2006].

The grant is paid annually; the amount depends on the size of the lost income and expenses. The maximum grant is EUR 600 per hectare of annual crops, EUR 900 per hectare of permanent crops and 450 hectare of agricultural land under crops per year.

Even in the current crisis of the condition of agriculture, approximately 15% in the state budget revenue is formed at the expense of agriculture, while rural areas get in return only one tenth of that rate. Price divergence has become a legitimate form of extracting money from agriculture. In the EU, agricultural producers receive from 65% to 75% of sales worth. In Moldavia, this indicator is 10 ÷ 30%. [Decision… 2006].

Food imports in Moldavia whose supply from the world market is directly and indirectly subsidized by governments, mean for Moldavia a double danger. On the one hand, it is an evident threat of liquidation of national manufacturers, especially as it relates to animal husbandry. On the other hand, it is threatening with the national consumer price rises as a result of possible import trend towards achieving possible weakening export subsidies requirements by the World Trade Organization. In these circumstances, we need a new foreign trade regulatory approach that would help out of the crisis in Moldavian agriculture. The question of regulatory tools is not as simple. Quotation can be made in connection with the preparation for Moldavian accession to the World Trade Organization and a decrease in customs duties on imports of large volumes of food may have inflationary effect.

The state regulation of adapting the agricultural sector to the EU requirements encompasses a central mechanism of regulating prices that simultaneously help to stabilize farmers' income, protects domestic agricultural products against those imported from the EU at lower prices than domestic, helps to regulate the structure of agricultural market. The EU is actively involved in setting prices, their regulation and in the redistribution of incomes. Namely, the need to defend the national producer and the purchaser was the root cause for the formation of a unified EU Common Agricultural Policy. There, as the main instruments of domestic origin, are used defensive duties and compensation payments called upon to balance the difference between high domestic prices and the world ones.

Resulting from the EU experience, it is necessary in Moldavia to introduce systematic payments which have demonstrated high efficacy for the protection of domestic producers and are able to operate in an automatic mode, need not repeated political decisions and, what is most important, can be accommodated with the international trade. At this level of protection they should be essentially higher than those in the existing tariff system in Moldavia. It is important that the compensation payments system is situated outside the budget but in a common fund which serves to maintain the market price. Another possible way is a system of state involvement in agricultural markets, as the agricultural product purchases guarantee minimum prices established under applicable EU mechanisms models. This would allow for solving the task while supporting rural producers as a result of their production activity, and address both product development and adjustment in marketing. Maintaining the price level should be indicated with the customs defence. Moreover it is necessary to establish a direct channel of distribution network for assets acquired at the expense of import tariffs on agricultural products with guaranteed co-financing of their acquisition by domestic producers. Such a combination will not only regulate the problem cheaper but will have more ‘transparent’ meaning for the society. Not just talking about

spending additional money from the state budget but about imposing customs duties on imports for development of national production. The EU member states' compelling development experience shows that market conditions, vitality of farmer households, agribusiness full effectiveness, enhancement of economic sphere level and significant improvement of ecological protection are subject to state regulation of agricultural products. A dominant role in the complex and valid measures for state regulation of agricultural holdings in the EU belongs to the price regulation system. Agrarian production efficiency improvement is impossible without a state regulation and support for agricultural production under which the price system is necessary to pledge guarantee payments of compensation, export subsidies and purchases by the state. It is also necessary to take comprehensive approach to state regulation system of agricultural products, to fortify the support of agriculture basing on the experience of developed countries in order to protect national agriculture and to raise its efficiency. To improve the situation in the agrarian sector of economy and achieve an efficiency gain, the state regulation of agricultural industry is necessary.

Conclusions

The main findings from the study are summarized as follows. In order to enhance competitiveness of Moldavian products the following actions are needed:

- improving the competence of farmers and people who will ensure a more efficient farm management (need for improved training, consulting and information services)
- improving competitiveness of farms in terms of achieving the promotion of investment as well as the technological and scientific progress, reducing production costs, achieving a compliance with the EU standards
- modernisation and changes in the processing and sales of agricultural products (requires a system of small and medium processing, storage and packaging of food products.

As a recommendation, in order to enhance perspectives of Moldavia's agricultural sector, it would be good to improve the living standards of rural population and to develop competition in agricultural production. In the EU market regulations of production are based on following principles: abolishment of any restrictions on trade between the EU countries, mechanisms that contribute to stabilization of producer unit prices of agricultural products, domestic market defence from competition of third countries products, financing of agricultural holdings from a unique fund consisting of contributions from participants.

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