

Structural Changes in the Conditions of Agro-Industrial Integration in Post-Soviet Region

MAMMAD GURBAN MUSAYEV

Ph.D. in Economics, Azerbaijan Scientific Research Institute of Economics and Organization of Agriculture

Address: 3097th kvartal, Darnagul settlement, Binagadi district,
AZ 0130, Baku, the Republic of Azerbaijan

Email: musayev_mammad@mail.ru

Abstract

In this article we have specified the mutual relations of structural changes in the conditions of agro-industrial integration and intensive development and clarified the role of those relations in intensification. We have estimated the level of adequacy of the taking into account of the development requirements in agrarian structural policy and determined the indicators reflecting realization process of those requirements. The changes in the institutional support, increasing dependence of production structure on the supply-demand factors, expansion of the activities of various types of corporations and unions require the new approach to the evaluation of the sustainability of the agrarian structures. All these aspects have been analyzed.

Key Words: Industry, Agriculture, Integration, Agrarian Structure, Sustainable Development.

Introduction

The integration between the industry and agricultural sector started in 20th century when an intensive development was attained by the means involvement of different types of equipment and other technique in order to increase the productivity. Surely it was not by the chance and agriculture cannot develop in a line with the other sectors without the involvement of high level technology.

In post-soviet region the technical equipment, refinery and realization problems of the major sectors of the agricultural sector cannot be resolved only in account of the agricultural sector itself, as a result the basis for further integration with the other industrial sectors. The establishment of the relations of the agricultural sector with the other sectors of the national economy can be considered as another form of integration. During the integration process the available resources are used effectively and as a result the unique system is forming.

According to the conducted researches we can say that the integration between the sectors is done based on the intensive development factors. "Integration is unification of the economic subjects and development of the relations between them. Integration can be realized both between the economies, as well as between the companies, firms, entities, corporations and etc.

Economic integration is reflected in spread and development of production-technological relations, mutual utilization of the resources, merge of capital, establishment mutual favorable economic condition, elimination of hampers for the economic development" [1, pp. 375-376].

At certain development stage if the planting and animal breeding sectors, they lose their economic independence and turn into the first step of the integration process. Integration with the trade, service, refinery and other realms of the economy brings the relations and connections within the agro-industrial sector to new qualitative level. The more such relations between the mentioned areas are, the larger part of the ultimate agricultural product is produced outside the agricultural sector.

Increase of the intensive development factors in the agro-industrial sector brings about formation of different types of complexes with various functionalities. Last decade in post-soviet region can be characterized as period when such complexes were not well-developed and the existing hampers for their registration and functionality were gradually removed. In other words, the deeper the integration relations within the agro-industrial sector, the higher the level of institutional support for such development.

Repercussions of the Intensification of Relations between the Agro-Industrial Sectors

The experience of observed in post-soviet region as well as in Azerbaijan shows that the agro-industrial integration complexes and purposive programs should be specified. Only in case if these program will need the requirements of real economy, we can obtain the wide opportunities for the intensive development. If we pay attention to the experience of the developed countries, we can see that the coordination of all production stages after the agrarian sector is supported by the high level resource-saving technologies, which provide the quite positive results.

According to the conducted researches the intensification of relations between the agro-industrial sectors increases the integration opportunities. As a result the opportunities to reduce the production costs increase the quality and increase the output of the production. As we can see mentioned above aspects are affected by the other factors as well. Thus we need to design the specific approaches for the determination of the integration role in improvement of the financial position in agrarian sector.

Increase of the intensive factors in development of this sector increases the attention to the structural approaches. Considering that the agro-industrial sector is very diversified the relations within it require the vast variety of approaches to be applied. The structural approaches to integration are the following: functional-region, product, area-production, social-economic, re-production and institutional management. Functional-area aspects defined the functions and correlations of re-production. Thus mentioned aspect is more covered as part of the analysis of the integration process.

In relevant sources the agro-industrial sector is evaluate by three or five sectorial models. In the first case the model includes: production of the production means, production of agricultural products, refinery, storage and realization; in the second model: production of the production means, agricultural raw materials and production of consumption products, refinery, product realization are unified into the production-service step. Such differences in the institutional approach are explained by the degree of application of innovations and new technologies to the processes within the agro-industrial sector. The other factors defining such differences are approaches to the innovations, their location and variations.

The structural policy within the integration conditions considers the measurable economic, social and technical structure of the included structures and measurement of the opportunities within them. The purpose of such management is establishment of more efficient structure and unity of mentioned above elements. The agriculture related reforms in post-soviet countries require the management of necessary changes and implementation of the structural changes. The changes in the institutional support, increasing dependence of production structure on the supply-demand factors, expansion of the activities of various types of corporations and unions require the new approach to the evaluation of the sustainability of the agrarian structures.

In the post-soviet countries, as well as in Azerbaijan, the establishment of inter-sectorial relations, re-distribution of revenues and qualitative aspects plays important roles in formation of such aspects. The changes in production-economic, social and technical structural aspects can explain the structure of the current integration.

The opportunities of the structural sustainability is based on the size of the entities, the intensively of relations between the entities and other factors. The agrarian reforms as well as formation of number of small family based entities do not positively affect the integration process. Thus in most of cases the small sizes of such entities limit the utilization of agro-industrial technologies as it is required. In our opinion, the evaluation of the intensive development of the agrarian policy can be evaluated by the means of the following determinants:

- The profitability of the agrarian production entities;
- The opportunity for application of accelerated depreciation of the assets;
- The current condition of the financing channels;
- The parameters of the of the evaluation system;
- The parameters of the taxation system;

We should consider the adequacy of structure of the agrarian policies through the evaluation of the applied procedures. Therefore the following actions should be implemented:

- The economic-technological and technical-technological aspects should be developed at the same time;
- The changes in the structural aspects should be considered during the evaluation the efficiency of the innovation-oriented investments;
- The indexes comparing the economic, social and ecological goals should be used and coordinated between each other;
- The intensive development potential should support the sustainability of the developed programs and policies.

The structural changes as part of the intensive development pattern are directed to the expansion of specific elements and correlations between the specified elements. The following factors are supporting the differentiation of these approaches:

- The application of various methods mutually in the establishment of agrarian production;
- Various implication of the natural and climatic factors to the agricultural production;
- The differences in labor customs and traditions;
- The principle differences in production directions and specialization.

The integration within the agro-industrial sector increases the dynamism in correlation between the supply and demand. We would like to note that in this case we consider the supply-demand equilibrium not only between the agricultural products, but also between the other elements and products used in agro-industrial sector. The activation of the intensive development factors on products and resources markets of the agrarian sector positively affects the competition environment there. The modernization of the elements of the system does not incur in random manner. The criteria of the structural policy consider the realization of the allocative effect of technical support. We would like to note that the allocation considers the allocation of resources between the economic entities based on their demands.

The effectiveness of the social-economic structure is evaluated partially and in full context. It could be provided in 3 separate levels:

- The production-technological structure of the agrarian entity;

- The institutional structure of the agrarian economy;
- The social structure of the labor.

The production-technological structure of the agrarian entity consists of the technological processes and technical-production relations between the structure components. The variety of the process and the correlations is the basic conditions for the formation of the system. We have already indicated the reasons for such variety. "The hierarchal structure of the production-technological process can be explained from two perspectives. Thus, both vertical (sector) and horizontal (regional) forms can be considered" [2, p.550]. In both cases the lowest elementary level can be accepted as a single technological operation. The further division of the system is not recommended. In such case, the justification of the social-economic purpose of the system became more complex. In fact, the elementary units of the production-technological structure can be evaluated in different aspects (physical, physical-quantitative, biological and etc.).

The Principle of "Structural Step Flow"

The experience of the post-soviet countries as well as Azerbaijan shows that the technological aspects of the agricultural and other related sectors are formed based on principle of "structural step flow". The horizontal formation on the regional level shows that the intensive development depends on high extends on the macro-economic conditions. In regional aspects the agrarian activity is reflected by area-production complex.

Institutional policy in form of new property, finance, social and other formations, elimination of the amortization or its formal status directed to its improvement is considered as unified structure and forms the structure of the economy. Thus in the period of the economic reforms the structural changes are paid a high level attention and forms the significant part of the social structure of the society. We can say that after the institutional structure has attained its necessary and sufficient levels, it starts implement self-formation and organization. During the increase of the growth rates of the agro-industrial integration and its scale, its characteristics are reflected in economic and administrative factors and their intensity affecting it.

During the intensive development conditions the institutional changes are reflected in economic and legal aspects, and this trend is reflected in systematic structure and its sustainable condition. Although the effect of the integration process on the variety of agro-industrial sector is increasing, its effect on the hierarchy of the social groups and levels tends to decrease. The main reason for this is a priority of the social-economic factors over the other sufficient factors of intensive development. Considering that the historical aspects of this phenomenon are not a subject of current investigation, the major force of the intensive development is reconciliation of the interests of the various economic entities. The regulation of the intensity and development of social psychology requires more serious approach to the problems associated with the labor related issues. Conducted researches show that such approaches should serve the sustainable development and social-economic development of society.

The social aspects of the agricultural sector and in general development of this sector play the significant role. Thus:

- The formation of social level of the private owners increases the dynamism of economic relations and formation of the social groups and levels;
- The relations between the population dealing with the agrarian production and non-country production acts as factors affecting the migration and regulation of their revenues. Therefore the realization of purposive programs in social-economic development of the regions considers the restoration of social and production infrastructure and their modernizations, as a result the injections from the budget can positively affect the income of the population living in the regions;
- The innovation of the structure of employment in the regions can also draw the attention of the society to the institutional changes in this area.

The correlation between the factors of intensive development and the integration process itself is reflected in the changes of the structure of the production cost. Application of the innovative technology to the agricultural production requires the more detailed analysis and evaluation. The increase of the efficiency of the production-technological horizontal relations between the sectors requires timely resolutions of economic, ecological and institutional problems.

The information about the acquisition prices and quantities of the mineral fertilizer, chemical products and other production related raw materials is valuable source for information for the further analysis. At the same time the information about the acquisition of agricultural equipment and incurred related costs are more informative. However, considering that the major part of such equipment is acquired by the means of the leasing agreements distorts the comparative information about the acquisition of the fixed assets. Thus all information from the various sources should be obtained and analyzed in order to get entire picture about the ongoing process within the agricultural sector.

Conclusion

The updated in equipment base in the agrarian sector plays important role in its technological structure. The information support for this sector is currently under the progress. The reliance on only the official statistical information cannot reflect the true picture; therefore application of the information from the other sources is necessary from the analysis purposes. The classic approach to the classification of the fixed assets in the agricultural sector (buildings, constructions, transporter equipment, cars and vehicles; transportation means; working and breeding animals; multi-year plantations and etc.) allows the evaluation of the innovations and improvements on general level. The increase of the portion of the vehicles and equipment in total assets can provide the information about the structural changes within the technological areas of the agricultural sector. Based on the researches conducted by the independent experts, we can identify the portion of the various types of the assets within the total population of the assets and as a result predict the trend within the sector and changes expected in the foreseeable future. However, the reliance on the information based on personal researches can be lower.

The formation of relations between the agrarian entities is a result of the structural changes in their social-economic relations. Thus we can agree with the following division of formation and realization of these relations:

“... firstly, establishment of legal base for formation of various types of entities with different types of ownership; second, the privatization of land in accordance with the law requirements and creation of new owners based on realization, refinery and service organizations; third, formation of new production, refinery, realization and service relations between the newly established entities based on compulsory requirements; fourth, establishment of new organizational forms based on new production-economic relations” [3, pp.255-256].

The structural changes caused by the agrarian reforms in Azerbaijan should be paid attention as well. Thus during the last 10 years, the local agricultural policy was directed increase of supply of the raw material, products for the population and local production. The portion of family and individual producers in total agricultural products increased significantly. As part of the agro-industrial integration and intensive development the consideration of the role of the private sector is essential.

References

- Explanatory dictionary of economic terminology* (2005). Volume I. Baku, Nurlan, 536 p.
Mathematics and Cybernetics in Economics (1975). Moscow, Economics, 700 p.
 Shalbuzov, N. A., (2005). The role and place of agrarian reforms in structural changes happened in agriculture. Agrarian reforms for ten years: *Proceedings of the Republican scientific and practical Conference*. Baku, pp. 253-259.