## ABOUT CONCEPT OF SUSTAINABLE DEVELOPMENT IN AGRICULTURE

**Romanyuk Maria** - PhD, associate professor of the department of Forecasting and Planning of Russian State Agrarian University - MTAA named after K A. Timiryazev, Moscow, Russian (tel: (499) 976-06-25; e-mail: romanyuk@timacad.ru)

Lichko Klementy - Dr, professor of the department of Forecasting and Planning of Russian State Agrarian University - MTAA named after K A. Timiryazev, Moscow, Russian (tel: (499) 976-06-25; e-mail: prognoz2@timacad.ru)

Abstract: the essence of the concept of the sustainable development, based on a complex estimation of economic, social and ecological activity is specified. The main trends of the transition economies to sustainable development are showed. Methodological problems of formation strategies of sustainable development in agriculture are analyzed.

Key words: a sustainable development, the stability concept, stability level, targeting, system of indicators of an estimation of stability, strategy.

Sustainable development is one of the most popular topics in the world and not only in the economic science. To a certain extent, the discussion of this concept indicates the scientific and moral maturity of the society, who thinks not only about the current consumption, but also about the long-term consequences of economic activities. To a large degree of sustainable development associated with agriculture, however, a decisive influence on it is socio-economic, demographic, climatic, historical factors, as well as the type of development of the economy of the country and the form of agriculture.

In its essence the concept of sustainable development is a compromise between the divergent targets: social, economic and environmental. Therefore, the solution of these tasks should not be limited to the industry level. The concept of sustainable development is formed on the state level and is reflected not only in the agrarian and regional policy, but also in other spheres of socio-economic development of the country. Moreover, sustainability becomes the principle of regulation of the development at all levels of management and planning. In this connection special importance is the problem of understanding of the general concept of sustainable development and its systemic manifestations in the world economy, regional and industry within the borders of a single country, as well as questions of formation and evaluation of the sustainability of the agricultural sector and at the level of the individual organizations.

Planning problems of sustainable development are reflected in the works of foreign authors such as E. Altman, I. Ansoff, P. Drucker, R. Taffler, G. Alberti and others and our scientists - L.I. Abalkin, N.Y. Petrakov, S.Y. Glazyev, V.A. Barinov, V.L. Kharchenko, L.A. Bazarova and others.

The concept of sustainability was introduced at the beginning of last century. Now there are several hundreds of interpretations of this term, and in spite of many differences, the majority of scientists and specialists in solidarity in determining the key aspects - first of all, the ability of the system to restore the settings after the external influences and the ability of the system to the conservation of parameters in the influences. Sustainable development of the economy can be defined as the development on the marked paths achieve the set targets, or with minimal deviations from parameters of development of this path.



Fig. 1. Influence of environment on

The main criterion of sustainable development is the harmonization of the processes of interaction of economic, social and ecological environments (fig. 1) [4].

In accordance with this should be provided at the same time the production of sufficient quantities of food for the society, the production must be profitable and ensure a high level of prosperity in agriculture of all participants of the process, not harm the environment and to ensure environmental stability.

Socio-economic sustainability may cause disturbances in the functioning of ecosystems, which leads to economic instability. At the same time, as the experience shows, it is impossible to ensure acceptable environmental situation and the rational use of natural resources in an

unstable economic environment. Thus, sustainable development should be considered as a complex, taking into account all three major factors.

In the global economic system can distinguish three groups of countries depending on the type of sustainable agriculture [3].

1. Ecologically oriented agriculture. The countries, which are in this group, approximately correspond to the list of developed countries. In a historic scale, together with the development of the productive forces there were consistently solved the problems of social sustainability (done with hunger) and then economic sustainability (achieved a high level of income of people employed in agriculture). Now the evolution is close to completion, attention is mainly focused on environmental issues.

2. Socially oriented agriculture. This group includes the countries of the third world. Some of them, mainly in the poorest states, remained at the first stage and could not cope with the problem of hunger.

3. Economically oriented agriculture. These are the countries with economies in transition, such as Turkey, Mexico, Brazil, with some reservations in the group enters and Russia. This group is characterized by progress on the path of progress to economically oriented agricultural production, or hangs in the intermediate positions.

The main idea of such division can be observed in the main priorities of agricultural policy of these countries. In developed countries, according to some estimates, about 60% of legislative acts, connected with the sector, have an environmental focus. While in poor and densely populated countries from 60 to 90% of the agricultural budget goes to the opposing goals, namely to subsidize the purchase of mineral fertilizers with the aim of increasing doses of application, increase of productivity and solution of the food problem.

Under the influence of processes mechanization, chemicalization and electrification of agriculture, this sector has become much more productive and intense, but at the same time a significant difference in the progress made agriculture less stable from the point of view of the balance of the three environments. If not to take into account all the intermediate steps, then the process of evolution can be divided into main forms of agriculture (fig. 2).

The most acceptable from a position of sustainability is integrated agriculture, which combines environmentally oriented agro-technologies and methods of industrial production.

Traditional agriculture (without chemicals and mechanization)

Organic agriculture (certified production, minimum chemicals and cancellation of GMO) Industrial agricultural (using means of chemicalization, mechanization and progress scientific achievement, GMO) Integrated agriculture (combination organic and industrial technologies)

Fig. 2. Stages in the evolution of forms of agriculture

In table stipulate changes of the most common strategic trends of development of the economy at the sectoral level in the conditions of transition to sustainable development.

The process of sustainable development can be represented as a sequence of cycles of evolutionary changes of states inside the loop with abrupt transition in the end on a new quality level, which means a new cycle of development [1]. Based on the above, it is possible to assert, that the stability and sustainable development are managed and there are objective and subjective mechanisms which allow regulating these processes.

However, there are significant methodological problem: depending on the type of sustainable agricultural development of the country will be limited to strategic goals for

Parame- ters	Development	Sustainable development
conditions functioning industry		Availability of technologies that reduce the consumption of raw materials per unit of the final product. Social partnership.
Basic cond for the funct of an indu	The growing demand is satisfied by in- creasing volumes of production by the price policy, supply of substitute products if the seasonality of production.	
Industry structure	Availability of sufficient number of compet- ing buyers and sellers, product diversifica- tion in the conditions of the predominantly vertical integration while maintaining of barriers and cost structure at the entry into the industry.	c
Behavior of the industry	Commodity price competition subject to quality of products. Local flexibility and in- novation. Aggressive advertising. The de- sire to the acquisition or remove of com- petitors. Industrial integration.	Competition of quality and consumer proper- ties with a flexible price policy and reduction of execution time. Increase of the rates of the processes of cooperation and integration.

	Trends o	f development	of economy	of industry
--	----------	---------------	------------	-------------

Parame- ters	Development	Sustainable development
Effectiveness of the functioning of the industry	sure the reproduction process. Technolog-	The result of production is balanced on the reproductive, technology and the life process with a minimum of damage to the environmen- tal protection and the maximum involvement of the recovered resources. Qualifying em- ployment. The harmonious combination of the interests of the individual and the society with the consumption of results.
State policy	Support of individual and corporate busi- ness, the regional autonomy, legal regula- tion of relations subjects. Limited regula- tion of prices, restriction of monopoly.	Support of integrated structures, network of or- ganizational innovation, the cooperation of the authorities and business, including the collec- tive promotion of infrastructure development. Agreed taxes uniform rules for partnerships with business, the modern state regulation, active information and marketing support.

development of the industry and individual enterprises. If at state or industry level it is difficult to make the leap in the concept of sustainable development to a more qualitative level, ahead of the prevailing trends, but on the level of the individual enterprise it is possible.

This process is fraught with many methodological problems:

1) The need to improve a process of management in the conditions of sustainable development.

2) The necessity of clarification the methods of strategic analysis, planning, monitoring and control at the level of the organization.

3) Understanding of management and all employees of the strategic targets in the

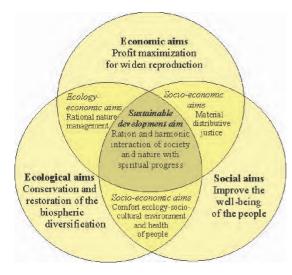


Fig. 3. Types of sustainable development targeting

format of sustainable development.

It is obvious that the formation of the new strategic goal of sustainable development of the object or the transformation of the already goal will require from the top-management the special style of management thinking and taking into account the principles of sustainability (fig. 3).

4) The formation of the methodological tools of sustainable development is to identify those indicators which will be a stability estimate .At present, the method of measuring economic sustainability is the most developed, as well as its adjacent areas.

The main key point to achieve the economic stability of any organization is making a profit sufficient to expanded reproduction. In addition to the objectives and conditions for sustainable development of the organization can include the achievement of competitiveness, meeting the demand of customers, control over the optimization of costs, market expansion, and others [1]. The main key point is specified in the detailed key points aimed at improving the internal environment of the organization (production, marketing, finance, investments).

Socio-economic sustainability of the organization directly depends on the efficiency of personnel management, the result of which is to ensure the efficiency of the production process and the satisfaction of employees of the results of the work.

Ecological and economic sustainability of the organization is assessed from the standpoint of environmental safety of production.

All of the above criteria are not hard to integrate into the system of quantitative indicators. At the same time, two other areas - environmental and social as well as their adjacent areas - are evaluated primarily in terms of quality.

Hereby, the number of parameters describing the different types of stability is large enough and, most significantly, they are multidirectional and interchangeable. Therefore, to ensure the methodological unity of private systems of indicators, the generalizing evaluation is completed integral indicator of assessing the level of sustainable development organization. Integral assessment enables to correctly compare the levels of sustainability of the organizations in dynamics, as well as form their rating.

But even here there is another methodological problem: the system of assessing the sustainability of the object must take into account the degree of influence of each of the spheres: economic, social and environmental. Strictly speaking, the ideal balance between all three spheres can't be achieved. At best it is only achieved between two spheres. In addition, the target priorities of the object are formed under conditions specified by the features of the economic system of the country, which will inevitably affect the assessment of sustainability. Therefore, in practice the strategy, based on sustainable development, describes by a system of indicators and realize through the activities, which essentially reflect only private aspects of sustainability.

Obviously, the template methods of strategic management are not able to offer management solutions based on sustainable development. This requires a different concept of targeting, the interaction between society and nature, taking into account the common spiritual values.

## References

1. Bazarova LA. Management of a sustainable development. M: Publishing house ASV, 2007.

2. *Korobkova Z. V* Economical mechanism of a sustainable development of the enterprise in the conditions of growing economic globalization // Functioning of the enterprises in the Russian economy: problems and decisions / under the editorship of V.V. Titov, V.D. Markovoj. Novosibirsk: the Siberian Branch of the Russian Academy of Science, 2006.

3. Rubanov I. Soha is not calling //Expert № 16 (750), 2011.

4. Romanyuk M.A., Zybkina E.I. About strategy forming under conditions of stable agricultural development // Izvestiya TSHha, issue 5, 2011. P. 117-125.

## О КОНЦЕПЦИИ УСТОЙЧИВОГО РАЗВИТИЯ СЕЛЬСКОГО ХОЗЯЙСТВА

Аннотация: уточнена сущность концепции устойчивого развития, базирующаяся на комплексной оценке экономической, социальной и экологической деятельности. Показаны основные тренды и перспективы устойчивого развития экономических систем. Проанализированы основные методические проблемы формирования стратегий устсптивого развития в сельском хозяйстве.

Ключевые слова: устойчивое развитие, концепция устойчивого развития, уровень стабильности, целеполагание, система индикаторов для оценки уровня устойчивого развития, стратегия.

Автор для корреспонденции: Личко Климентий Павлович - д. э. н.; тел. (499) 976-06-25; e-mail: prognoz2@timacad.ru.