INNOVATIVE WAYS TO IMPROVE THE EFFICIENCY OF MANAGEMENT OF ECOLOGICAL PRODUCTION IN AGRICULTURE

Abstract. The article presents theoretical substantiation of innovations and innovative management. Reveals signs of innovative enterprises. The activities proposed for the implementation of managerial innovations in the field of ecological production of agricultural enterprises.

Keywords: environmental, production, innovation, innovation management, activities, natural resources, efficiency of management.

Statement of the problem. Now with confidence it can be argued that the global economic crisis has had a negative impact on the operations of all enterprises. In this regard, increasingly fierce competition in the international market puts in front of industrial enterprises in different countries new issues:
- the limited time required to create the product and the organization selling it;
- the need to improve the quality of design processes and production;
- competition in the market manufacturers;
- direct costs decrease (direct capital; wage in manufacturing, logistics units, etc).

Difficult economic conditions for the demand and ecological production of agricultural enterprises of all great efforts towards constant self-improvement, search of new directions of activities, finding reserves of cost reduction that meets the objectives of the strategic development of the company, implementation of newer methods of effective corporate governance.

Zorya P.S.
That is why the innovative way of development are increasingly offering in their speeches, economists, practitioners, government officials, politicians, promoting it as one of the alternative options out of crisis.

Modern economic development is characterized by strengthening the role of scientific and technical progress and intellectualization of major factors of production. The share of new knowledge embodied in technologies, equipment, education of personnel, organization of production in developed countries ranges from 80 to 95% of GDP [3]. The introduction of new technologies has become a key success factor in market competition, the main means of increasing production efficiency and improving the quality of goods and services.

Managerial, economic, environmental, innovation is a necessary condition of success in the competition, a prerequisite of obtaining windfall profits through monopoly intellectual appropriation of rents generated in the use of new products and technologies.

Therefore, in our opinion, the modern scientific researches allow to classify and summarize managerial innovations in the field of efficient ecological production of agricultural enterprises.


However, while appreciating the significant contributions of theoretical and practical developments researchers should note a certain lack of illumination in modern scientific literature ways of implementing and creating innovative performance management of ecological production on agricultural enterprises.

The purpose of this paper is the formulation of recommendations concerning the possibility of joint implementation of managerial innovations in the field of ecological production of agricultural enterprises as a prerequisite for the competitiveness of ecological products.

Presentation of the basic material. Since the main purpose of the environmental company is the production of eco-efficient goods, services environmental orientation and the formation of the country’s population, the region’s culture of healthy eating and living, the development of this type of agricultural production is a reflection of deep concern to the forefront of the public growth of the ecological crisis, and the understanding of the economic benefits of reducing pollution and consumption of resources. The content of the modern market environmentally friendly products and fight against man-made pollution have become vital prerequisites for the sustainable development of the world civilization. This is one of the most important steps toward improving the efficiency of use of natural resources and environment, the ultimate goal should be the advantage of reducing the number of resources used in the economic system. Continuous innovation of the management effectiveness of environmental production embodies in the reality of such ecological-economic process.
In relation to agriculture, to give an explanation of environmental performance as a process of obtaining a larger amount of products a person needs, at the lowest possible cost of material, labour resources and minimum adverse impacts on ecosystems [2]. Unfortunately, modern economic approaches rule out this aspect, for environmental effectiveness reduces economic. To improve the efficiency of agricultural production it is necessary not only to increase production, but also efficiently use it in agriculture and spread through the distribution channels. The most important results of every enterprise are profit and profitability, which depend largely on sales. In every company sales of products shall take place in accordance with the plan in its volume, range and timing.

Analysis of the available international experience of effective implementation of clean production allows to highlight the principles that will positively distinguish them from other approaches to solving environmental problems and have innovative component:

- the principle of a proactive approach implementing innovative, resource-saving, waste-free technologies, more environmentally friendly raw materials, manufacture of needed goods and services. This gives you the opportunity to increase the competitiveness;
- the principle of preventive action — prevention education and the use of toxic and hazardous substances; minimization and recycling of waste the prevention of environmental damages. The introduction of renewable energy and materials, it is based on this resource-, energy- materialization;
- the principle of integrity — an integrated approach to the use and consumption of natural resources, openness of information regarding the materials used, and manufacturers who make them. Such actions contribute to the formation of the Union between sustainable production and sustainable consumption;
- the democratic principle — democratic governance throughout the entire product life cycle, the openness of all activities for the society.

For the last almost one hundred years with the development of economy, the concept of «innovation» has become broader and now applies not only to the improvement of production technology, but extends to the organizational, financial and any other areas of the enterprise. Innovation is also currently referred to as innovations in human resource management, cash payments, trade policy, use of functional structures and so on [3]. This term may have different meanings in different contexts, and their choice depends on the particular objectives of measurement or analysis of the process or phenomenon of the study [4].

The greatest contribution to the development of the theory of innovation belongs, according to experts, the Austrian economist J. Schumpeter, who developed in the beginning of the century, his own theory of economic development. He believed that the bases of economic growth are innovations. According to the classification of Th. Schumpeter, the concept of “newly introduced” is considered [1, 2]:

- manufacture of new, i.e. not yet known to the consumer good or a new quality of a good;
- the introduction of a new, that is, the industry is still virtually unknown method (method) of production, based on new scientific discovery and can also be in the new commercial use of the relevant product;
- development of new markets, i.e. the market in which until now the industry of this country was not represented, regardless of whether this market existed before or not;
- obtaining a new source of raw materials or semi-finished products in the same way regardless of whether there was this source before, or was considered inaccessible, or it is still to create;
- conduction of the respective reorganization, such as securing a monopoly position (through creation of trusts) or undermining the monopoly position of the other entity.

Innovation related to innovation management — innovation management, innovation process and the relations arising in the process of innovation [4]. Innovation is subject to the influence of the economic mechanism, which affects both the processes of creation, implementation and promotion of innovation and the economic relations between producers, sellers and buyers of innovations [7].

According to the Polish scientist A. H. Sunskogo, a company focused on innovation, or another innovative company is such that [5]:
- performs in a wide range of research and development (or purchases new products or technologies);
  allocates to such activities relatively high financial resources;
  systematically implements new scientific and technical solutions;
  represents a large share of innovations (products and technologies) in the amount of products and services;
  constantly introduces innovations to market.

As follows from the definitions innovation as an economic category can be represented by:

  first, as the result of this stage of creation, within which is the control, the embodiment in practice of new ideas, discoveries and inventions, new scientific solutions, patents, and other intellectual developments. This result is usually manifested in the form of product or process;

  secondly, as a novelty, able to meet market demand. In this case, innovation takes on a commodity form and therefore acts as a commodity on the market of innovations and commercialization of innovations.

  thirdly, as a factor of the production process, constantly renewable and essentially inexhaustible. This is reflected in the introduction of new technology, changing organizational structures, management methods, etc. resulting from the use of the progressive innovation of the production system moves to a higher level, increases the efficiency of its functioning;

  fourth, as the effect due to the use of innovations. The effect can be very different: technical, social, economic, etc. Economic impact at the micro level is manifested in the increase in the profits of the enterprise, which contributes to further capitalization. At the macro level, the economic effect is expressed first of all in achieving the main goal of the society is to improve the quality of life of the nation in General [8, 5, 9].

Process management in accordance with the schematic diagrams begins with the formation of the system of goals and tasks of the innovation activity (or project) for a certain period of time [10]. The goal of innovation management is required or desired state of the innovation system in the planning period, expressed as a set of characteristics. The purpose of the organization or activity must set certain benchmarks of their development for specified periods of time [2]. Thus, the purpose of the organization, on the one hand, is the result of forecasts and assessment of the situation, and on the other hand, acts as
a constraint for planned innovation activities. The process of forming goals is one of the most important procedures of innovation management. It is an integral part and starting point of all planning of settlements in the innovation sphere.

Enterprises using innovative solutions, can take a two-pronged method: internal — through the development of their own activities with research and development — or external — by taking part in technology transfer (for example, purchase licenses or participating in strategic alliances).

Successful innovation in domestic companies, examples of which are already available in practice management, will contribute to:

- the introduction of a systematic improvement of technological, economic and environmental activities with the aim of reducing the volumes of emissions, discharges and industrial wastes;
- improvement of organizational activities with the involvement of all staff to identify the environmental aspects and establishment of environmental management systems;
- the establishment of a permanent economic-environmental monitoring plans and projects of clean production;
- the mobilization of financial and material resources for target implementation of ecological production;
- the creation and development of modern systems of environmental management with the gradual certification of domestic and international standards.

In the modern economy the space between enterprises of different size, localized in different parts of the world, thanks to information and communication technology is not a barrier for cooperation. At the present stage of economy development there are almost unlimited possibilities of entering enterprises in diverse cooperation in the field of innovation [9].

Organizational structure of innovation is a very dynamic element of innovative management and flexibly adapts to the changing external and internal conditions. Often within the same company uses several different types of organizational structures of management innovation: emerging areas of engineering and technology to create software systems, and for traditional products use sustainable staff structure. The combination of different types of structures within one enterprise creates conditions for the most rational spatial organization of innovation.

Innovation management allows the use of various forms of organization of innovation, the forms of which are methods of operation and combination in space and in time elements of innovation processes at the same Time inherently a form of innovation represent different ways of division of labour when carrying out innovation projects. Distinguish between these forms of innovation, as concentration, specialization, cooperation and combination.

In accordance with the requirements of an effective management control system in the enterprise should include implementing various kinds of control activities. Of fundamental importance for the company have the following characteristics: the purpose of monitoring, subject area, scope and forms of control (Pic. 1) [6].
Management types of innovation processes

<table>
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<tr>
<th>The control objectives</th>
<th>The subject of control</th>
<th>The magnitude of the control</th>
<th>Forms of control</th>
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<td>Strategic</td>
<td>Financial</td>
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**Pic. 1. Management types of innovation processes**

Source: developed by the author based on [6]

Strategic control is the content of the activities of higher management in a company and provides accounting, evaluation and analysis of results of development and implementation of promising concepts of innovation. It is carried out both at the stage of strategy formation and its implementation. Strategic control focuses on the vital aspects of policy of the enterprise: marketing, scientific and technical forecasts, grocery-themed portfolio. During the organization and conduct of strategic control methods used are qualitative assessments, comparative analysis of trends, international comparisons.

Operational control is the content of the activity to a greater extent of middle and lower management. It focuses on current accounting, analysis of ongoing innovation processes and has as its goal ensuring the implementation of the adopted targets. The objects of operational monitoring are thematic and production jobs, terms of work, plan the resources associated with the activity of the enterprise costs. During the organization and implementation of operational controls, most commonly used methods for quantifying and analyzing the state of innovation projects. All types of management control on the enterprise by thematic features are divided into financial and administrative.

**Conclusion.** Therefore, to create an effective innovation management processes at environmental enterprises must be created system of innovative management. To solve the problems of increasing of management efficiency of the ecological production in agriculture based on innovation, we consider it expedient to implement the following measures:
- to prepare production staff and free up extra workers;
- increase capital investment on the development of agriculture;
- to combat the illegal use of banned substances (to enhance the role of ecological monitoring and ecological expertise);
- to ensure a greening of agricultural production;
- complete disregard for environmental norms, for the sake of economic interests;
- implement advanced mechanization of agriculture with regard to ecological requirements;
- to strengthen theoretical research in the field of innovation and modern concepts to create the ability to forecast the prospects for long-term economic and technological development of ecological production;
- at all levels to form a modern management and business philosophy, entrepreneurship as the basis of entrepreneurial innovation, corresponding to the new organizational forms of innovative business;
- at the state level in developing the program for the development and support of enterprise pay more attention to the formation of the national system of innovative entrepreneurship as an equal part of it, contribute to the formation of appropriate organizational structures, financial mechanism and the system of tax benefits;
- focus the attention of managers of domestic enterprises on the feasibility of using the world experience in financing innovation processes, especially those tools that would allow efficient to attract additional financial resources in the necessary volume with a maximum effect at minimum cost and at the right time;
- to unite the efforts of scientists who are interested in creating models of innovation management, to develop its methodology, based on the intellectual product of the evolution of the knowledge system of science management.