

THE ECONOMIC CONTENT OF ENVORONMENTALLY FRIENDLY PRODUCTION OF HORTICULTURE

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Abstract. The work resumes the directions of environmentally friendly production of horticulture items and defines the priority of ecological safety of reproduction processes in the sphere. Noted social and economic consequences of ecological production of fruit and berries. Ways to improve the situation of greening production processes and implementation of the environmental component in horticulture. The problem of ensuring the implementation of the environmental component in horticulture through implementation of energy-saving technologies and integrated production biological systems maintenance of plants. Solved the issue of compliance of quality parameters during production fruit and berries production and management of existing natural resource potential of individual regions growing orchards and berry fields. The terms of achieving the environmental effects of the implementation of environmental protection measures by expanding the range of variability next steps towards improving the efficiency of business operations and achieve reasonably influence of the environmental effect. The factors improve the effectiveness of projects for the development of innovation-intensive horticulture and features of the mechanism of environmental safety.

Keywords: economic content; horticulture; environmentally friendly production; ecological safety.

1. Introduction

The issue of defining the priorities in the development of horticulture requires reasoning of strategies of forming the potential for increasing the output of competitive horticulture products. Alongside with this, there arises a problem of elaborating and applying new approaches of evaluating separate achievements in the sphere of management, economy, finance and ecological safety of production.

The efficiency of the branch development is an economic category, however the processes of restoring fruit plantations all in all depend on weather factors.

The restoration of fruit plantations is a complex dynamic system, which effectiveness depends on numerous natural, technological and economic factors. To enhance the activeness of reproduction processes in horticulture, we must consider qualitative and quantitative features of these factors to choose those, that will have a decisive impact on each stage of the branch development. Thus, providing environmentally friendly production of horticulture items is the priority of these processes.

In modern science, the concept of environmentally friendly production of husbandry items is not confined to natural and biological impotence. The transformation of the current views on the system of running agriculture taking into account biological features of nature and wildlife, has been reflected in the concepts of developing economic ecology. Nowadays, the issue of producing environmentally friendly agricultural items is in the centre of scientific attention. Ecologic transformations of manufacture systems and elaborating the ways of its providing have been considered in the works of V. Borisova, V. Hapotiy, M. Gladiy, B. Danylyshyn, A. Ivanchenko, M. Kniuk, M. Kocherga, P. Koreniuk, A. Orlova, G. Pogrischuk, O. Karasiov, P. Koralinchik, O. Ulianchenko and others. Thus, in their works scientists study

the issues of development and realization of organization and economic measures of solving environmental problems, improving the system of state regulation, seeking the ways of raising money for ecological activities. However, the issues of improving the existing and implementing new approaches to the development of environmentally friendly industries within the national economy, as well as building an effective mechanism of their functioning n this basis, has acquired a primary topicality.

2. Materials and Methods

The aim of the article is to reason the ways of supporting environmentally friendly production of horticulture items and define the priority of ecological safety of reproduction processes. Since, revealing the concept of ecological process transformation and studying the economic part of this concept is based on the optimization of the industrial impact on the ecosystem by developing organization and economic activities within the reproduction process on the environmentally friendly basis. Theoretical and methodological basis of the research is the dialectic method of comprehension and a system approach to study the issue of branch development, overall reservation and effective functioning of horticulture; scientific works of scientists of economics, reference issues, author's own observations.

3. Results

With the development of our knowledge of compliance nutrition, the rapid development of therapeutic horticulture and relentless deterioration of ecology, the value of fruits, berries and products of industrial processing as no essential consumer products and at the same time those who have ant radiation properties is increasing. According to many years of experience in the developed world has

become a long-standing trend of increasing production of high-value products. Moreover, one can not ignore the fact that the development of industrial high yielding horticulture is increasingly emerging not only as a purely industrial and economic factor, but also as very important - social and spiritual.

Feature of berry fruit trees as fixed assets, is that they actually produce a new product and processes of reproduction is the basis for the development of horticulture. This explains their formative role of industry in agriculture. The formation of the resource potential of the industry affected by the fact that fruit and berry plantations are created directly in horticultural farms that bypass one of the stages of implementation - stage exchange. The lack of commodity orientation requires compliance natural conditions and the formation of the basis of the economic basis of production.

The basis of the formation efficiency of reproduction processes in horticulture is a comprehensive display of technology in the production of biological features of fruit and berry crops and making appropriate changes in the structure of Nursery directions depending on their economic use. Thus, the achievement of planning during playback gardens and berry achieved by developing an effective system turnover gardens, ensuring continuity of production processes in gardening.

The stability of the production of certain products in horticulture depends on a balance between fertile and young plantations, which in turn is an integral part of gardening transition to innovation-intensive development basis. Factors improvements in this way is to increase the efficiency of production facilities and optimize the structure of fruit and berry plantations.

Characteristic of perennial plants is also the fact that they are attached to a particular place. Physical perennial plants belonging to the land requires development approach to their territorial location, subject to full compliance with the most biological requirements; selection of plots bookmark and growing conditions not only certain types of trees, but the selection of varieties on this basis.

Nowadays we all know about the negative impact of the intensive agriculture on the environment, resulting from the use of machinery and chemicals. Therefore more and more people are supporting ecological agriculture as an alternative for the traditional one. The most significant argument of launching this technology is smaller consumption of chemicals than in the agriculture of other countries. The development of environmentally friendly fruit growing on the territory of Ukraine is reasoned by the necessity of health rehabilitation measures of the population, especially of children. It is common knowledge that consumption of ecologically friendly agricultural products promotes the normal growth and physical development of children, prevention of diseases, creates conditions for normal body adaptation to the environment. The development of environmentally friendly fruit production will encourage the creation of new working positions in the rural areas, new possibilities and prospects for farming, as well as other social advantages, which is very important for Ukraine.

However, we can't but mention the difficulties arising at launching new ecologically friendly technologies in Ukraine: shortage of qualified workers, appropriate certification system, modern legislature, which should consider current world and European trends. Years long experience of the EU's countries (Germany, the Netherlands, Austria) can be used by the countries that are just launching ecologically friendly technologies within the frames of the International Federation of Organic Agriculture (IFOAM).

Thus, the strategic way of development of a number of countries is transition to biotechnologies of food production.

In the process of development of environmentally friendly production it is necessary to solve a number of problems, such as:

- Creation of the home market for environmentally friendly products;
- Enhancing the effectiveness of the system of ecologic management;
 - Development of agriccological infrastructure;
- Production and application of environment protective means;
- Developing ecologically safe agritechnologies, increasing the output of organic foods;
- Defining the outcomes of applying biotechnologies.
 (reproductive and therapeutically cloning), social outcomes of genetic engineering.

In order to further ecological effectiveness of agriculture in horticulture it is necessary to maintain quality parameters in the process of fruit production; rationally use the available natural and resource potential of the horticultural regions; implement energy and resource safe technologies of production and integrated systems of plants bio-care.

Making production environmentally friendly implies turning to the factors of ecological, reproductory, protection, agricultural and zoo technical, forestry and melioration character to further the environmental balance and health protection of the population, and can be realized on two levels: state (macro-level) and business (micro-level).

Ecologization of the production implies constant improvement of natural conditions for its development, shift to adaptive systems of running and allocation in the most favorable natural conditions; intensive implementation of biotechnologies; selection/breeding development, introduction and spread of new productive and weather and disease resistant crops.

The economy of the agricultural production does not function according to the abstract law system. Like any artificial system aiming at maximal entropy, it is not self-regulating even under the conditions of competition, since the demand for food products is less elastic, reducing for the means of production due to the absence of capital of producers [1].

In the agrarian sector the economic activity is inseparably connected with the natural environment, while the last when it comes to using natural resources, is affected by agricultural activities. Sometimes it has negative results as any agricultural activity is connected with using chemical fertilizers and pesticides, which are harmful for flora and



fauna and devastate soils. Such a negative trend has been traced for a long time, since the intensification of production has often based on irrational utilization of non-renewable resources, exceeding melioration, increasing use of nature-hostile pesticides, irrational system of animal breeding. Such irrational agricultural strategy must be characterized as a chemical- and anthropogenic, harmful for nature and destructive activity.

The modern type of technological development drastically changes societal attitude towards ecological problems. The technological revolution and government's rational economic policy made elaborating and application of nature safety technologies one of the most attractive spheres of capital and intellect investments.

Ukraine's integration into the world's economic space makes it necessary to bring national agrarian production necessary to a qualitative new innovative way of development and calls for considering up-to-date technological and technical market policy. Lately, drastic changes have been traced in the technologies of agricultural production. The innovative concept of agrarian technological development implies reducing energy and resource consumption, biology-based arable farming, optimization of terms for fulfilling definite activities, providing environmentally friendly production. Innovative gardening and horticulture implies continuous renewal of breeds and sorts of perennial plants, their production technologies, improvement of the system of production and sales management [2].

The driving force of the economic growth is the development of innovative, highly productive technologies able to meet international standards of production quality and profitability of horticulture.

The factor of achieving ecological effect refers to a complex of criterial restrictions while realizing projects for innovative and intensive horticulture development, this factor is preliminary forecast since the cost of achieving it can affect the outcome of the agricultural economic activity. Once these outcomes are not considered, it can be impossible to achieve the expected result. But when this ecological effect is achieved, the range and scope of further actions grows towards boosting the efficiency of agricultural activity. This practice can be useful for producers of husbandry items (fruit, berries) while making and planning their investments.

Nowadays it is of utmost importance to make a shift from extensive to a progressive innovative investment model of economic growth. Only on the basis of innovative investment maintenance of industrial horticulture development one can enable crucial technical, technological, organizational and economic modernization of all branches of agriculture, enhancing its efficiency [3, c. 67-76]. Besides, to our mind, a major stress must be put on the factor of ecological safety of horticultural products.

Alongside with the estimation of ecological impacts in the frames of the project investment analysis, which means the analysis of planned, expected economic decisions, the problem of considering ecological factors within the existing production on all levels of economy must be scrutinized study.

Taking into consideration all the peculiarities in the content and purpose, we differentiate the following kinds of nature protection projects and marketing measures [4, c.213].

- industrial and technical (designing and installation of sewage disposal machines, means of control and monitoring technological processes, introduction of closed technological processes, acquiring environmentally friendly methods of production, disposal and utilization measures for secondary resources, etc.);
- 2) organizational and managerial (elaborating and introduction of new standards and norms; formation of a new uniform ecological control and monitoring system; restructuralization and rationalization of fuel energetic balance in regions. elaborating environmental legislation etc.);
- scientific researching (study and development of nature protecting machinery, ecologically safe products, ecologically friendly technological processes, etc.);
- educational (they are aimed at realization of the system of sustainable ecological education and environmental education of the local population, etc.).

Ecologically friendly development must also be supported by the realization of definite priorities in agriculture:

- support of environmentally safe methods of farming it is necessary to subside it as much as possible;
- imposing a tax on using chemical fertilizers and pesticides in agriculture and farming.

The mechanism of effective use of natural resources must involve:

- taking into account value indices of using natural resources while estimating economic outcomes of the agricultural activity when producing agricultural products;
- mechanism efficiency of the of responsibility for damaging the environment and creating a system of reimbursement of losses caused by the damage when ecological regulations were broken.

From the economical point of view, mechanisms of efficient use of these or those tools, as well as those of raising distribution and utilization of funds for the sustainable development of the country and its regions are of utmost practical importance [5].

The creation of an effective mechanism of ecologization of horticulture processes will be enforced by developing an effective mechanism of ecological safety. It can be considered as a system of organizational and economic measures of utilization of natural resources and nature protection during agricultural activity, which implies simultaneous organizational, administrative and economic procedures. Thus, planning, developing, running, fulfilling and monitoring the programs are carried out with the help of the mechanism of ecological safety management. They have the elements of economic influence.

In particular, the monitoring of the state norms is carried out by administrative bodies, but fines are imposed on the consumers of natural resources, which has its economic effect. In a narrower sense, the economic mechanism involves only economic activities without administrative influence. For

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instance, consumers are ready to pay more for organically or ecologically safe products, which stimulates producers to manufacture such products. The concept of economic mechanism, choice of definite measures depend on solving the question of goals of economic development for each separate sector of the state economic complex or a region [6].

The stability of the ecological legislation, its flawless design and uniformity for the subject of legal supervision, available policy on ecology at all levels of state and non-state bodies of ecological regulation and control - these and other factors determine the ability of our country to solve environmental problems and prevent them. Unfortunately, while carrying out ecological monitoring and taking into consideration the current international relations, we can tell for sure that most negative ecological factors haven't been mentioned by the state legislature or have a declarative nature [7, c.121].

To prevent ecological destruction from any agricultural activity, it is necessary to carry out ecological expertise and economic ecological estimation of all industrial and agricultural projects, technological decisions, arable farming systems and ecological auditing. Providing ecological safety of the production must be the vector of the state support following the example of the developed countries. For this purpose, it is necessary to realize environmental programs, which involve educational, technical and financial support of the strategic ways of the safe functioning of the whole ecosystem. To these ways refer:

- promoting and propagation of active use of biologically safe methods of utilization of natural resources;
- introducing an ecologically safe approach of protecting fragile territories, water reservoirs, arable lands;
- applying environmentally safe technologies,
 machinery and breeding;
- enhancing research on ecological aspects in agriculture and developing more perfect systems of agricultural and food production, including organic foods, as well as training more specialists in ecology of agriculture etc.

The improvement of the ecological safety of products must be achieved by:

- elaborating and endorsing ecological standards
 and requirements for food products and introducing state
 supervision of their compliance;
- certifying food products for their conformity to ecological standards, norms and requirements, especially of those manufactured in the zone of radioactive contamination;
- radiological and toxicological control over the animal and plant food products at markets and stocks, places of purveyance, processing and realization;
- depriving of, utilization or elimination of the products contaminated by radionuclide's exceeding the norm, banning production, processing and realization of such products;
- -enhancing responsibility of each entity of the system for breaking sanitary, technological and ecological norms of production, shipment, storing and saling food products or raw ware, and imposing sanctions for doing harm to the consumer.

To protect the consumer market from invasion of low quality imported goods and counterfeit products, it is necessary to bring national regulation in conformity with the European ones, improve mechanisms of international collaboration on observing ecological standards, carry out the expertise of legislation for standardization of products, elaborate new legitimate acts involving:

- development of certification system for food production and import of food products;
- certification of national and imported technological equipment;
- licensing the production of the most important kinds of food, including fruit and berries to guarantee their high quality.

Nowadays there arises the need of creating conditions which will enable to adjust to the constantly changing natural environment, while each economic entity, subject should not only extrapolate the past and define the prospect (long term planning), but also set a goal, take measures aimed at the feasible development of all the entities. Besides, they must be able to adapt to the environment in the most efficient way [8].

The entrepreneur as an economic entity works in a definite economic, social and political environment. They all predetermine the level of development of entrepreneurship, its constructivism and the economic development of the country overall. Measures of reforming agrarian enterprises on the basis of private property for land and stock, achieving stabilization of agricultural production are connected with rational use of land resources as the main means of agricultural production and a natural resource [9].

Modern conditions widen not only the range of natural resources attracted to the economic activity, but also the total amount of waste disposed to the environment. Therefore, nature protecting measures and replenishment of natural resources call for large investments.

4. Conclusions

High efficiency of producing horticulture items can be achieved in case of complex and system improving organizational and industrial factors of functioning agricultural enterprises on the basis of considering nature and economic factors alongside with nature safety of production. The development of such enterprises should be supported by distinct and well-informed government decisions.

The main principle of the agrarian and industrial development must be ecologization of all its parts based on implementing scientific and technical achievements. Step-by-step realization of the concept of innovative development calls for a new system of ideas about the goals and ways of development of ecologization of agriculture, its vectors at innovative inventions, type of relations among its subjects and objects while exchanging innovative ideas, as well as connections among all the elements of the total system, their character in the subsystems.

The key role in the whole mechanism of ecologization must be given to the state policy, which defines the conditions 0

of rational consumption of natural resources, improving the environment, creates legislative support of all processes of ecologization of agriculture.

Further research should be done into implementation of new technologies based on the observance of ecological safety.

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