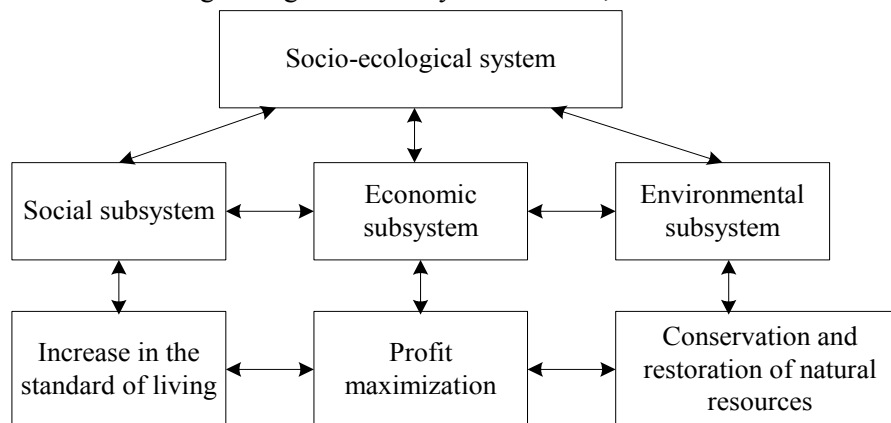


## PRIORITY OF ECOLOGICAL INNOVATIONS IN UKRAINE

All processes in the biosphere are interdependent. People - only a small part of the biosphere, and the man is just one of the types of organic life. Mentality identified the man from an animal world and gave him enormous power. People for centuries tried not to adapt to the environment, and to make it comfortable for its existence. Now we realize that any human activity affects the environment, and deterioration of the biosphere is dangerous to all living creatures, including the human.

Socio-ecological system is one element, which tries to find ways to decrease the crushing impact of humans on the environment. It is functioning through three subsystems: social, economic and environmental (Figure 1).



*Figure 1. Functioning of the socio-ecological system*

As you can see all of elements of socio-ecological system are connecting. But improvements in social, economic and ecological subsystems are performed separately. It is the biggest problem, because all spheres of life are interrelated. That's why in the system introduced solve the problems collectively, in terms of all components.

Modern problems, which are trying to solve the socio-ecological system, are: deficit of grocery resources, water, oxygen, and genetic degradation speed up population degradation, gradual their extinction. This system attempts to find the only right solution of the problems for the all sides: economy, sociology and ecology. Therefore it is using ecological innovations as conjunctive factor.

Ecological innovation – is the result of creative activity, which directed on working, creation and plantation innovations in the form of new production, technology, method, organization manufacturing, what directly or indirectly will promote on reduction of eco-destructive manufacturing and consumption impacts on environment and solution of ecological problems. According to this definition, to ecological innovations include [1, p. 69]:

- development, creation and implementation of new technological processes, technological cycles of development and coordinated evolution of all functional chains from the extraction of resources, their recycling, usage of waste and reproduction of these resources;
- development and application of saving resource equipment, development and plantation of low-waste, non-waste technologies, including saving energy, evolution technologies, which provide comprehensive reclaiming of natural resources, development of bio-technologies;
- reclaiming of new territory, and also expansion of active one, considering ecological safety of population and manufacturing;
- development and outturn of new clean ecological products and creation capacity for their production, development variants of usage new and renewable energy sources;
- plantation of new organization forms, including improvement of organizational and territorial structure of potentially dangerous industries with the aim to reduce their ecological menace;
- formation of new thinking in innovations developers in a point of view of necessity its ecologization by the way of plantation mandatory ecological education.

Each of this mentioned elements have its specific features and signs, from which depend character of ecologization innovation, separately: potential signs of innovation characterize their ability to prevent a negative impact on environment, to liquidate this negative impact, caused in the environment; fictional characteristics – special properties, which acquired the system by pre-defined parameters, such as ecology, safety, low level of ecological risk, - are provided by improving of organizational management structure with the innovation processes through their direction in new ecological economical direction.

The problem is that innovations require considerable costs. Some enterprise is mainly engaged financing of applied programs that focused on creation of improving innovations. Creation of a basic innovations, fundamentally new product – is very laborious process that requires considerable financial resources and time-consuming (according to international experience, from 3 to 7 years). Therefore, there is no interest for private investors, who are focused on immediate returns.

For the solution of these questions needed dialogue of science, business and government, consolidate of their efforts [2]. Only on the basis of ecological-economic system of market reforms in Ukraine could the relationship between human and nature be reshaped (balanced).

Government should establish new tax instruments: environmentally focused loans, subsidies, compensations; ecological fees, prices, payments for the conservation of natural resources or their saving, sale of environmental rights on emissions and pollution. Namely to decrease the level payments of businesses that don't work or work intermittently, because such enterprises don't have bad impact on the environment, to increase payments of manufacturing enterprises by the way of seize such businesses, which have an idea to avoid the payments. Also should be trained enterprises to perform their duties before the environment, namely - timely pay fees to the state budget, which will allow filling the coffers and increasing spending on defense an environment from its damaging.

In the socio-ecological system should be created the legal framework for the regulation of the market of environmentally friendly products, ecological services, control and protection of the interests of domestic producers and the Ukrainian state. Altogether it is necessary to improve ecological management in Ukraine, which will accord with eco-effectiveness and eco-justice.

The economic development of Ukraine at modern stage should consist in transition from making separate, and even the integrated environment protection measures, to develop and implement a comprehensive ecologization concept of social production and other spheres of activity.

The main directions of the implementation ecological innovation of industry are [3]:

- orientation on the causal character of actions, which involves overcoming during the implementation of innovation processes reasons rather than consequences;
- division of responsibilities, which determines targeting and responsibility level of subjects eco-distractive actions;
- formation motivational tools by adequate existing socio-economic conditions;
- maximizing efficiency, which involves achieving goal of ecologization with minimal expenditures and receiving maximal returns from investment funds.

As a conclusion, ecological innovation is difficult way of linkages economy, ecology and sociology. Its implementation requires a lot of time, much money and applied effort not only of the government, but also enterprises and every single person. Solution the problem of financial support innovation activity relies on the state, which must operate in two directions: provide direct budget support and create effective system of incentives for private investment in scientific-technological sphere.

To improve the environmental culture of the society, the state should implement a comprehensive educational program in the field of environmental protection, starting from pre-school institutions and ending with the primary, secondary schools and universities.

Environment should be protected from the activities of humanity, because of this depend our lives, animal and vegetable existence and also the lives of our descendants.

*1. Лайко П.А. Удосконалення інноваційної діяльності в АПК – вимоги часу // Економіка АПК, 2007, № 12. - С. 85. 2. Черничук Л.В. Особливості державної інноваційної політики в розвинених економічних системах / Л.В. Черничук // Вісник НУВГП. Економіка. Ч. 2. – 2006. – №4(36). – С. 372. 3. Лапко О. Екологічний фактор в інноваційній діяльності // Економіка України. – 1998. - №8. – С. 6.*