

CURRENT TRAINING SPECIALISTS ENVIRONMENTAL DIRECTION BASED ON THE CONCEPT OF SUSTAINABLE DEVELOPMENT

***NIKOLAENKO S.M., Doctor of Education, Professor
DOLIA M.M., doctor of agricultural sciences, professor,
RIBALCO U.V., Candidate of Science, docent
National Agriculture University of Ukraine***

There are represented the basic principles of content and form of education for the training of specialists for sustainable development of agriculture, according to the specialities of the faculty - plant protection and quarantine, biotechnology and ecology.

Sustainable development, BSC, MSC, ecology, plant protection, biotechnology, plant quarantine

In modern conditions for agricultural development urgent priorities of environmental policy is the training of highly qualified personnel professionally capable of adaptation and self-realization in terms of greening agriculture. Thus one of the objectives of national environmental policy in education is to improve information management system highly on sustainable development, namely implementation in the educational process eco-educational and educational research-based programs of environmental and economic security of Ukraine.

The overall concept of sustainable development is considered to maintain the balance to meet the contemporary needs of society and protect the interests of future generations, given their need for a safe environment. That concept and National Education Development Doctrine of Ukraine stipulates that teaching and learning activities of educational institutions forms a system of priority values, including the key role given to the relationship between man and nature. [1]

According to the Concept of Education for Sustainable Development and the UN "Education for Sustainable Development" educational institutions recommended to promote training programs in basic principles of transition to sustainable human development, which involves the formation of social abilities to lead a life based on the latest knowledge and skills to sustainability.

The current study the nature of environmental education and culture are presented in the works of G. Bilyavskaya, E. Zhelibo, A. R., G. Pustovit S. Stepanenko, V. Nekosa T. Safranov V. Sobchik,

Vladimir Bogolyubov and others. This problem of formation of competence in the context of interaction with the environment studied by scientists L. Vygotsky, S. Deryabo D. Elkonin, A. Leontyevoyu,

B. Madzihon, S. Rubinstein, A. Sydelnikovskym, John. Butler et al.

Urgent is the issue of quality of education, especially practical knowledge of protection, plant quarantine, biotechnology and ecology.

The purpose of the study is the theoretical rationale for training specialists focus on environmental principles of sustainable development.

To realize the objectives of the study were used the following methods: analysis and synthesis, which allowed to explore the philosophical, psychological and pedagogical scientific literature, compare and summarize the experience of higher education, teaching documents on the Development experts environmental focus.

Results and discussion. The changes taking place in the social development of Ukraine's agricultural sector require the formation of ideology of modern humans through close interaction with nature. Therefore, sustainable development is a significant tool in the formation of ecological consciousness of humanity, based on a systems approach and modern innovative resource saving technologies that enable evidence-based model and predict the areas of quality and choose the best environmental and economic development of agriculture [7].

If we consider the three elements of sustainable development, we can conclude that the mechanisms of interaction between economic, environmental and social components is quite important to produce informed of new challenges faced by specialists from different areas of training. However, this requires a high level of training and the adoption of ecologically-based, professional environmental and phytosanitary oriented, informed decisions.

Therefore, the department of plant protection, biotechnology and ecology NUBiP Ukraine organizing continuous and holistic educational, scientific and educational process of training for the environmental field is subject to regulatory and regulatory documents, the main of which is the study of fundamental disciplines for new features training of future professionals. The basis of preparation is the industry standards of higher education qualification levels "Bachelor" in "Plant Protection", "Biotechnology", "Ecology, Environmental Protection and Sustainable Use of Natural Resources" and "Master" in the field "Plant protection" "Quarantine of plants", "environmental biotechnology and Bioenergy", "Ecology and environment", "environmental control and audit." The main objective of the faculty is to train highly qualified specialists in protection and plant quarantine, biotechnology, sustainable environmental management and environmental control for ecosafety activities in the agricultural and environmental industries with the acquisition of practical knowledge in the farms of all types of property [2].

The main goal of the faculty of plant protection, biotechnology and the environment is the organization of educational process on the basis of modern information technology training opportunities NUBiP, Ukrainian and foreign universities. The main landmark - highly professional specialists both in the classroom and self-study. Creating conditions for mobility and adapting to current market requirements, continuous updating of scientific knowledge concerning the monitoring of the environment and society ecosafety socioeconomic development of regions, the use of modern Ecobiotechnologies, development and application of integrated plant protection system, environmental management of high environmental and phytosanitary safety of production raw materials and agribusiness.

Within step involved training students to actively participate in scientific research projects and faculty associated with the study of contemporary issues, including: resource saving technologies, forming safe for human health commodity areas, improvement of methods and systems of environmental management and biosafety in agriculture; quality and timely environmental labeling of agricultural products and raw materials; development of local molecular genetic diagnostic systems for the detection of latent viruses, identification of genetically modified organisms; technology development microclonal reproduction of agricultural, industrial and ornamental crops biotechnological methods and DNA certification of varieties and hybrids of plants; environmental study of traditional agriculture in terms of biological and land use; ecotoxicological hazard assessment nanopreparativ new species to prevent their negative impact on biological objects of natural ecosystems and others. [3, 4, 5, 6].

Master training is carried out both on the production, "Environmental control in the agricultural domain, monitoring, certification and expertise", "Ecology and protection of water resources agrosphere", "Environmental control and audit", "Modern environmental biotechnology in the agricultural domain" ("Environmental Biotechnology", " biomonitoring and management of reclaimed land, "" The biological protection of agro-ecosystems ")," Fitomedysyna "," Phytosanitary monitoring and forecast, "" Quarantine of plants "," Methods Entomological control in plant and wildlife "and research spramuvannyam" System analysis environmental quality and environmental safety "(" environmental management and policies "," Sotsioekolohichna expertise and sustainable development of agricultural areas "," man-caused environmental and radiation safety "," Hydroecology and systematic analysis of aquatic ecosystems ")," Innovative biotechnology Ecobiotechnology and bioenergetics' ("Alternative energy", "Biosafety and bioethics"), "Management agrocenoses largest insects in the crop," "Biological control study obligate and facultative plant pathogens"; including research specialization (with the EU), "Teaching about the environment" ("The quality of the environment and System Analysis" (with the options chosen by the student - "The quality of the soil and systematic analysis of terrestrial ecosystems," "Water quality and

systematic analysis of aquatic ecosystems", "Air Quality and systematic analysis of anthropogenic climate change ") "Environmental management and policy ", "ecosafety technologies ", "Environment and GIS geosphere (the study of GIS) ").

The general concept of training highly qualified specialists of environmental direction is realized through continuous, integrated programs as the basic and specific areas, including governance, including adapted to the level of the best world analogues, joint or concurrent training partner universities by combining training and a research centers or international university consortia. This allows you to gain special skills to complete higher education NUBiP Ukraine.

During preparation of experts in protection and plant quarantine, biotechnology, sustainable environmental management and environmental control for ecosafety activities in the agricultural and environmental sectors into account scientific and manufacturing capabilities of scientific institutions of Ukraine: environmental awareness and providing general environmental component of professional training of all stakeholders; reflected in the learning process of social and ecological order for sustainable development; an enabling environment the integration of education, science, innovation, information academic training; formation of competencies for graduates to develop concepts, strategies, plans and programs of socio-economic and ecologically sustainable development and environmental management to optimize the quality of life and the environment through ecologically-oriented management decisions by improving the quality of education and research; mechanisms for ensuring the effectiveness of environmental policy and management at the global, national, regional and local levels [3, 4, 5, 6].

Experts in protection and plant quarantine, biotechnology, sustainable environmental management and environmental control for ecosafety activities in the agricultural and environmental industries are unique, because they are able to carry out a systematic analysis of the quality of the environment as a whole in terms of the object studied in ecosystems different types of build scripts representation of ecosystems and their components research methods, such as description, explanation, interpretation, modeling, forecasting, warning, design, construction of basic and applied studies.

Of jobs graduates are high-tech modern agricultural enterprises of different ownership forms, namely of "Ahrohimservis"; SE "Agroresurs" signature agricultural firm "Hermes", CJSC software "Ahrorehion", LLC "Druzhba-Nova», Kraft Foods Ukraine, CJSC "Trans Oil", LLC "Avangard" Corporation "Skvyрка", LLC "Karapyshi", JSC Software "Ahrorehion", JSC "Mirgorod plant of foodstuffs" Kalinka ", International ecological charity Fund" AQUA-VITAE "of" Swede "SPE" Eco-Dnepr "SE" Ukrainian research and training center of standardization, certification and quality ", CJSC" SVS Dnipro "NPP" Bio-test Labs ", CJSC" Environmental security firm

KREOMA-FARM "JV" Iceberg Ltd "LLC" Tavria-Agro Capital "RISE Agroservice, Ecotechnology Agro KB Ltd., Creative union "green studio" GMP "Eco-Ukraine" UkrTechnoPhos, AGRO Trydenti Agency for rational energy use and ecology "Eco Arena" and others.

Conclusions. Education of plant protection, biotechnology and the environment is one of the most important factors for sustainable and highly efficient development of the society meet current and future needs of humanity, solving economic, social, environmental, phytosanitary and other problems. Acquisition of high knowledge and skills in the field at this faculty NUBiP Ukraine is the foundation of sustainable (balanced) economic and social development of Ukraine.

Список літератури

1. Боголюбов В. М. Стратегія сталого розвитку: [навч. посіб] / В. М. Боголюбов, В. А. Прилипко. – Херсон : Олді-плюс, 2009. – 322 с.
2. Закон України «Про вищу освіту» [Електронний курс]. – Режим доступу: <http://zakon3.rada.gov.ua/laws/show/2984-14>.
3. ГСВО зі спеціальності «Захист рослин», 2013 р.
4. ГСВО зі спеціальності «Екологія та охорона навколишнього середовища», 2012 р.
5. ГСВО зі спеціальності «Екологічний контроль та аудит», 2013 р.
6. ГСВО з напрямку «Біотехнологія», 2012 р.
7. Рибалко Ю. В. Значення природоохоронної спадщини у формуванні екологічної свідомості людства / Ю. В. Рибалко // Духовність особистості: методологія, теорія і практика. – 2012. – № 1 Ч. 43. – С. 132-147.

Представлены основные принципы содержания и формы образования по подготовке специалистов для устойчивого развития сельского хозяйства по специальности факультета - защита и карантин растений, биотехнология и экология.

Устойчивое развитие, бакалавр, магистр, экология, защита растений, биотехнология, карантин растений