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STUDENT EXCHANGE PROGRAMS IN AGRICULTURAL SCIENCES: BUILDING GLOBAL KNOWLEDGE NETWORKS

У публікації розглядається роль міжнародних студентських обмінів у сфері аграрних наук як інструменту формування глобальних освітніх і наукових мереж. Участь у програмах мобільності сприяє поширенню інноваційних методів вирощування культур, обміну досвідом та розвитку міжкультурної комунікації. Такі програми впливають на підготовку фахівців, їхню здатність працювати у міжнародному середовищі та впроваджувати сучасні технології у сільське господарство.

Ключові слова: *студентський обмін, аграрні науки, міжнародна освіта, глобальні знання, інновації у сільському господарстві.*

The publication examines the role of international student exchanges in agricultural sciences as a tool for forming global educational and scientific networks. Participation in mobility programmes contributes to the dissemination of innovative crop cultivation methods, the exchange of experience and the development of intercultural communication. Such programmes influence the training of specialists, their ability to work in an international environment and to introduce modern technologies into agriculture.

Keywords: *student exchange, agricultural sciences, international education, global knowledge, innovation in agriculture.*

One of the most well-known programs is Erasmus+, which covers European universities and allows students of agricultural specialties to study at foreign institutions, participate in research projects, and practice on modern farms [1]. This promotes the dissemination of knowledge about sustainable development, precision farming, and environmental practices that are actively implemented in France, Germany, and the Netherlands. The program also funds summer schools and joint training courses where students from different countries work on sustainable development projects. Universities establish partnerships that allow them to exchange knowledge and develop dual degrees recognized in several countries at once [1]. This significantly increases the competitiveness of graduates in the international labor market.

In the US, the Borlaug Fellowship Program supports young researchers from developing countries. The program aims to promote food security and innovation in agriculture. Internships at leading American universities allow students to work with modern laboratories, biotechnologies, and agribusiness management systems [2]. Upon returning home, students become leaders in adopting new technologies in their regions.

In Israel, the Robert H. Smith Faculty of Agriculture, Food and Environment at the Hebrew University of Jerusalem accepts foreign students through the International School of Agricultural Sciences. The focus here is on biotechnology, plant genetics, and the efficient use of water resources, which is critically important for countries with arid climates [3]. The faculty actively cooperates with international organizations such as FAO and conducts seminars on water conservation and biotechnology [3].

In Ireland, the UCD School of Agriculture and Food Science organizes exchanges with universities in the US, Australia, and New Zealand. This allows students to gain experience in different climatic conditions and learn to apply innovative crop cultivation methods in a global context [4]. The programme includes internships on farms, where students learn about organic farming, livestock management and agribusiness methods [4]. This allows them to understand different models of agricultural production and adapt them to the conditions of their own country.

In addition to their educational and scientific impact, mobility programs have an important

cultural dimension. Students learn to work in multinational teams and develop intercultural communication and leadership skills. This is particularly important for future agricultural specialists, as modern agriculture is a global system where decisions made in one country affect food security around the world [5;6]. As part of the Worldwide Farmers Exchange and CAEP programs, students live with farming families, which gives them a deeper understanding of local culture and traditions [5;6]. This experience combines academic knowledge with cultural immersion, shaping a global view of agriculture.

International student exchange programs in agricultural sciences have a multidimensional impact. First and foremost, they open up access to different models of agricultural education, allowing students to integrate best practices into their own educational and professional experience [1;4]. This creates a new level of training, where knowledge is combined with practice on modern farms and research stations.

At the same time, exchanges stimulate scientific cooperation: students participate in international projects related to sustainable agriculture, food security, and innovative crop cultivation technologies [2;3]. This creates global knowledge networks that are of practical importance for the development of the agricultural sector.

The cultural aspect is no less important. Mobility programs develop intercultural communication and leadership skills, preparing students to work in multinational teams. This increases their ability to operate effectively in an international environment [5;6].

Finally, the practical effect is that students gain access to modern technologies and methods that are not yet widespread in their countries. This enables them to become drivers of innovation and contribute to the modernization of local agriculture [7]. The Ministry of Education and Science of Ukraine supports the integration of students into international programmes, which contributes to the modernisation of educational programmes [7]. Ukrainian universities are introducing new courses in precision farming, digital technologies and sustainable development, in line with global trends.

Thus, international student exchanges in the field of agricultural sciences not only spread innovative crop cultivation methods, but also form global educational and scientific networks that become the basis for training a new generation of specialists.

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