

Ministry of Agriculture of the Republic of Kazakhstan
S. Seifullin Kazakh Agrotechnical Research University

Reviewed
at the meeting of the Faculty Council
Protocol No. 11 dated «18» 04 2024

«APPROVED»
Acting Dean of the Agronomy Faculty of
NJSC «S.Seifullin Kazakh Agrotechnical
Research University»
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**DEVELOPMENT PLAN FOR
EDUCATIONAL PROGRAM
8D08102 «ORGANIC FARMING»
for 2024-2028.**

Reviewed at expanded meeting of the Department of Agriculture and Crop Production
Protocol No. 4 from "08" 04 2024

Astana, 2024

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1 Passport of the development plan EP 8D08102 "Organic farming"

Passport of the development plan of the educational program 8D08102 "Organic farming" for 2024-2028

1	Grounds for development of the development plan of the educational	program The development of the educational program is based on new regulations for the implementation of the Law of the Republic of Kazakhstan dated July 4, 2018 No. 171-VI "On Amendments and additions to certain Legislative acts of the Republic of Kazakhstan on the expansion of academic and managerial independence of higher educational institutions", and in accordance with professional standards
2	Main developers of the plan Development of the EP	Academic Committee (order No. 374-N of 18.10.2023) - Stybaev G. Zh., Shestakova N. A., Kipshakbaeva A. A., Nogaev A. A., Mukhanov N. K., Amantaev B. O., Saurov S. (doctoral student of the 3rd course of the EP 8D08102-"Organic agriculture"). Invited guests: Irina A. Zhirnova, M. Sc. of Agricultural Sciences, Head of the Department of Selection of cereals, legumes, forage and oilseeds TOO «of A. I. BarayevAGRICULTURAL RESEARCH CENTER LLP; Pavel V. Lushchak, Director of Naidorovskoe LLP..
3	Terms of implementation of the EP development plan	2024-2028
4	Scope and sources of funding	State budget
5	Expected final results of the implementation of the EP development plan	training of doctors of philosophy (PhD) with a high level of professional competence in the field of production of environmentally friendly crop products, able to formulate and solve modern experimental and practical problems in the educational and scientific "Crop production", successfully carry out research, production and management activities in local and republican state institutions, agricultural formations, Universities agricultural universities

2 Analytical justification of the EP "Organic farming"

2.1 Information about the educational program

The educational program "Genetics and selection of agricultural crops" is designed on the basis of a modular system of studying disciplines and consists of 2 modules that form general cultural and professional competencies in the scientific and pedagogical direction. The educational program involves fundamental, educational, methodological and research training and in-depth study of disciplines in agricultural areas of education for higher and postgraduate education and agricultural enterprises.

The educational program includes a course of theoretical training, including the study of cycles of basic and profile disciplines; additional types of training: pedagogical and research practice, research work of a doctoral student, including the implementation of a doctoral dissertation, as well as final certification-a comprehensive exam and registration and defense of a doctoral dissertation.

The relevance of this educational program is that the market in the country requires environmentally friendly products, so an increasing number of specialists using environmental technologies in agriculture is required, which is one of the priorities for promoting this direction in the world, including in Kazakhstan.

The special feature of the "Organic Farming" educational program is the need of the labor market for specialists of a new formation, capable of ensuring the preservation of the environment and sustainable production of safe crop products.

The uniqueness of the educational program consists in the formation of doctoral students' competencies aimed at preserving biodiversity and protecting the environment.

2.2 Student information

The Department of Agriculture and Crop Production of the Faculty of Agronomy of the S. Seifullin Kazakh Agrotechnical Research University is a graduate in the direction of training 8D081-Agronomy.

In the 2023-2024 academic year, 6 doctoral students are studying in EP 8D08102 "Organic farming" on the basis of a state educational grant.

2.3 The internal conditions for the development of EP "Organic farming"

For the implementation of the educational program 8D08102 "Organic farming" there is an appropriate material and technical equipment. The department has classrooms for theoretical training and laboratory rooms.

Doctoral students of EP 8D08102 "Organic agriculture" conduct research on the basis of the Agroecological Testing Center (laboratory), which was established in 2019 on the basis of NAO "S. Seifullin Kazakh Agrotechnical Research University" and is accredited in the state system of technical regulation of the Republic of Kazakhstan in accordance with the requirements of ST RK ISO/IEC 17025 - 2019 (certificate of accreditation no. KZ. T. 01. 2238 dated 22.07.2019). The agroecological testing center has all the necessary base of regulatory documents – state standards, technical conditions and regulations, regulatory documents for research methods. It is equipped with modern domestic and European equipment that allows you to provide high-quality services in the field of soil science, agrochemistry and ecology. Students on the center's equipment, under the guidance of a scientific supervisor, conduct experiments and research on the topic of the dissertation. In addition, the practice bases of students of EP 8D08102 "Organic farming" are scientific centers and large farms. One of these farms is "Naidorovskoe" LLP, "Akmola Phoenix", "Agro Niva". In addition, since one of the areas of research is the study of environmentally friendly products, doctoral students work with the production of honey, through the selection of feed crops, etc. The necessary conditions for conducting research are provided by the university, including the department.

2.4 Characteristics of the surrounding society

The EP development plan is formed taking into account the availability of financial, informational, labor, material and technical resources. The material and technical, information and library resources used to organize the learning and upbringing process are sufficient to fulfill the stated mission, goals and objectives and meet the requirements of the EP.

For questions about the educational process, students can contact an adviser who helps them choose the learning path (form an individual curriculum) and master the educational program during the training period, as well as information on the organization of the educational process can be found in the schedule of the educational process. In case of problems related to the educational process, for example: passing an exam session on an individual schedule, the student applies to the dean's office of their faculty and provides the dean of the faculty with supporting certificates: about illness, due to the birth of a child, the death of close relatives, in connection with a business or study trip.

If the student has completed the course program in full, but has not scored the minimum transfer score, in order to improve their GPA, they are given the opportunity to re-study certain subjects in the summer semester on a paid basis. However, in the doctoral program, the theoretical course is only for 1 year of study.

2.5 Information about teaching staff implementing the educational program

Educational activities of EP 8D08102 "Organic farming" are implemented by 1 Doctor of Sciences, 12 candidates of Sciences, 4 PhD (Ph. D.). The degree of security is-100%, which meets the requirements.

EP teachers constantly improve their professional level in accordance with the Law of the Republic of Kazakhstan "On Education", professional development is planned 1 time in 5 years at the international or national level.

Advanced training of teaching staff in the educational program was carried out in various areas. The choice of directions is determined by the need to improve pedagogical skills, introduce innovative teaching technologies in the educational process in the EP, improve the content of the taught disciplines in accordance with modern scientific requirements. Within the framework of S. Seifullin Kazakh Agrotechnical Research University, the department's teaching staff improved their skills in the following courses: "Distance learning", "Study of state and foreign languages", etc. Outside the university, professional development was carried out on the basis of the IPK, in the central universities of Kazakhstan.

Teachers are proficient in modern methods of evaluating learning outcomes, such as tests, portfolios, case measures, contextual tasks, and project creation.

The educational program is focused on the formation of basic and professional competencies related to research and practical activities, taking into account the requirements of employers and partner universities, as well as the needs and interests of undergraduates. Advanced fundamental training in the framework of the educational program will allow the master graduates to continue their studies in the doctoral program.

The faculty of the department is engaged in research work taking into account the needs of industries. There are publications of teaching staff articles in journals included in the highly rated databases Web of Science, Scopus, KKSNIVO of the Ministry of Internal Affairs of the Republic of Kazakhstan.

2.6 Characteristics of achievements of the EP "Organic farming"

The educational program EP 8D08102 "Organic farming" is implemented using modern effective teaching methods aimed at actively involving students in the educational process and increasing their independence and responsibility for the results of the educational process.

The effectiveness of the educational program is the achievement of the goal of program implementation and evaluation of the quality of program implementation.

The main indicator of implementation is the results of training, which are reflected in the educational program.

In order to improve the teaching methodology, the University regularly organizes and conducts educational and methodological seminars in the following areas: technologies of personality-oriented education; modern teaching methods; integration technologies in education.

Assessment and correction of pedagogical methods are carried out within the framework of organizing open classes, mutual visits to classes, meetings of methodological seminars, the academic council workshops, and master classes. At the beginning of the academic year, the department draws up a plan for conducting open classes, a schedule of mutual visits to classes.

The department implements 4 grant-funded research projects, which involve students in the field of crop breeding, each doctoral student conducts research within the framework of scientific projects. In addition, doctoral students can conduct research on the basis of a third-party organization, if the research is carried out as part of a scientific project, but consultations, as well as laboratory research, are carried out at the department.

3. Characteristics of the problems to be solved by the development plan of the EP "Organic Farming", and justification of the need to solve them

Doctoral students of EP 8D08102 "Organic Farming" conduct research mainly within the framework of funded scientific projects, within which they have the opportunity to improve their professional qualifications, as well as within the framework of training, doctoral students improve their qualifications by completing internships in leading universities and scientific organizations that are included in the top 500 of the QS rating.

This educational program requires timely strengthening of the material and technical base, due to the fact that different methods are used in breeding, and in order to expand knowledge and skills in working on modern equipment, constant updating of laboratories is required. In this regard, the department plans to create a training laboratory in this area in 2024.

4 The main goals and objectives of the development plan of the EP "Organic Farming" with an indication of the terms and stages of its implementation

The purpose of the educational program 8 D 08102 "Organic farming" is to train doctors of philosophy in the field of plant breeding who are able to formulate and solve scientific and practical problems of breeding using modern methods of genetics, carry out teaching activities in schools, colleges and universities of agricultural profile, production and management, research activities in state institutions and agricultural formations.

In this regard, the purpose of the development plan of the educational program "Organic Farming" is to develop various types of activities aimed at creating conditions for the successful development of the educational program.

The tasks of the development plan of the educational program "Organic Farming" include the development and implementation of planned activities aimed at the formation of a new type of educated scientific personality that meets the needs of the regional economy and the international labor market, involvement in scientific research, expansion of the partner scientific environment, etc.

5 Measures to reduce the impact of risks for EP "Organic farming"

Possible risk	Risk mitigation measures	Responsible and time implementation
external risks		

1. High competitive environment in the educational segment	Development and implementation of distance learning courses, including MOE for use by external users	Department's teaching staff, during each academic year
	Increase in the number of author's certificates from the material developed	the department's teaching staff, during each academic year
2. Lack of modern equipment in laboratories	Equipping with modern equipment and devices due to the funding of the GF, PCF and international projects	the Faculty of the department, during each academic year
3. Low motivation to use the e-learning system	Training at specialized trainings and training seminars	head of SEP, teaching staff
2023-2027 internal risks 1.		
Insufficient proficiency of teaching staff in foreign languages	Planning of teaching staff in advanced foreign language studies	Head of the Department, teaching staff
Insufficient funding for research projects	Increase in the number of contractual topics and research projects	Head of the Department, teaching staff

6 Action plan for the development of EP "Organic farming"

№	Name activities	Deadlines	Responsibility	Expected result	Resource provision
1	Improving EP doctoral studies at the requests of stakeholders partner (international consultants), employers, students	2024-2028	Head of the Department, members of Academic Committee	Editing of the educational program, the results of which meet the requirements of the time, including in the production of science and	the recommendations of the foreign consultants, employers and other stakeholders
2	the Development of a new UML in the state, Russian and English	2024-2028	Head of the Department, teachers of the Department	Development of a new UML in the state, Russian and English languages, taking into account the need to ensure	the Development of scientists, academics and others.
3	the increase in the number of faculty, foreign language speaking people	2024-2028	Head of the Department, teachers of the Department	Increase of the number of faculty who have passed the exam with international standard with certificate, every year 10% of	the English language courses offered by the University and at its own expense

4	Equipping classrooms	2024-2028	Head of the Department	laboratory will be equipped in the direction EP	research projects
5	Publication of scientific articles in journals included in the database of Thomson Reuters, Scopus, and Springer, in scientific journals with impactfactor	2024-2028	Head of the Department, teachers of the Department	Publishing of at least 1 article per year	In the framework of research papers
6	Involvement of leading scientists from countries near and far abroad to give lectures, seminar etc. for students	2024-2028	Head of the Department	Invitation of scholar to read guest lectures, at least 1 per year	as part of the invitation of foreign scientists in research projects, and other sources of
7	passage of an independent national specialized accreditation	2024	Head of the chair	Accreditation of EP, in accordance with the need	
8	International and Republican scientific and practical training of faculty, including young scientists of the Department	2024-2028	Head of the Department, faculty	at least 1 teacher will undergo training	at the expense of the project, or to/from the University
9	monitoring the employment of graduates	2025-2028	Head of the Department, resp. for employment	Annual monitoring of the employment of students	data Analysis
10	contracts on the passage of the research practices of doctoral students	2025-2028	Head of the Department, resp. for the practice of	Concluding agreements on the need, the passage of research practice, depending on the number of doctoral students	Analysis of collateral and base practice

7 Mechanism for implementing the development plan of EP "Organic Farming"

The main mechanisms for implementing the development plan of the EP "Organic Farming" are:

- regulatory framework - Development programs of NAO "S. Seifullin Kazakh Agrotechnical Research University" for 2024-2029, Regulatory documentation developed by S. Seifullin Kazakh Agrotechnical Research University.

- clear distribution of areas of work among the main group of developers and stakeholders;
- a system for planning the work of the main group of developers and stakeholders;
- reflexive management of the work of participants in the development plan by the head of the main development group;

- information on intermediate and final results, broadcast to the public, by publishing on the official website of the university;

- o- students ' completion of the main educational program in accordance with the RUP;
- providing students with the opportunity to test themselves in various areas: social and moral, artistic and aesthetic, research, scientific, cognitive in relation to each other;

- creating an appropriate development environment: educational, creative, social, etc.;
- ensuring a favorable moral and psychological climate.

8 Socio-economic efficiency of implementing the development plan of the EP "Organic Farming"

As a result of the implementation of the EP development plan, it is assumed that the following socio - economic effects will be achieved:

- improving the quality of pedagogical and scientific education and, as a result, the competitiveness of specialists in the field of crop breeding;
- improving the professional literacy of graduates and better meeting the needs of potential employers;
- increasing the role of employers in the training of professional personnel;
- improving the system of training specialists at all levels;
- expanding the opportunities for professional self-realization of young people;
- raising the level of income of employees in the field of education;
- preventing the outflow of promising teaching staff to other industries;
- an increase in the number of young people employed in the economy (an increase in the number of graduates who are employed or have moved to the next level of education);
 - increased academic mobility of students, academic and administrative staff;
 - growth in the export of educational services (an increase in the number of citizens of other countries studying in institutions of higher professional and postgraduate education of the Republic of Kazakhstan);
 - updating of the educational and material base (educational and laboratory, computer and technological base that meets modern requirements and standards).

9 Model of the EP graduate by levels of study

Graduates who have mastered the program of the educational program "Organic Farming" can work in research, research and production organizations in the field of agriculture, agricultural plant protection, seed farms; local and republican state institutions, as well as in enterprises of various types of agricultural formations; educational spheres of higher, secondary - special, vocational and technical education. technical, agricultural and biological institutions; research and production institutions, in the offices of local, district, regional, republican structures of the Ministry of Agriculture of the Republic of Kazakhstan.

Graduates of the educational program "Organic Farming" should have key skills and know the competencies described in the educational program, and should also be competent in the field of scientific and scientific-pedagogical activities in the context of rapid updating and growth of information flows, in conducting theoretical and experimental scientific research in the field of crop selection, in setting and solving theoretical and practical problems. applied tasks in scientific research, in carrying out a professional and comprehensive analysis of problems in crop production, agriculture, in issues of interpersonal communication and human resource management, in issues of university training of specialists, in conducting expertise of scientific projects and research, in ensuring continuous professional growth.

Head of the Department
Of Agriculture and cropproduction



A. A. Baitelenova