Periodical Report 6 Months of project implementation

New and Innovative Courses for Precision Agriculture





TURKMEN AGRICULTURAL INSTITUTE







Table 1. Working group for the NICOPA project



Responsibility (Work Packages

Coordinator

2.2 Dev., 2.4 Dev., 2.5 Dev.,

2.6 Dev., 4.3 Diss., 4.4 Diss., 5.1 Manag., 5.2 Manag.

Academic leader

2.1 Dev., 3.1 Quality

4.1 Diss., 4.2 Diss.,

1.1 Prep., 1.2 Prep.,

TÜRKMENISTANYN OBA WE SUW HOJALYK MINISTRLIGI TÜRKMEN OBA HOJALYK INSTITUTY



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«29» rancoar 2019 v.

BUÝRUK



Türkmenistanyň Bilim ministrliginiň 2019-njy ýylyň 11-nji ýanwaryndaky 6/218 belgili hatv esasynda, Yewropa Komissiýasynyň Bilim, okatmagyň audiowizual serişdeleri we medeniýet baradaky ýerine ýetiriji agentligi tarapyndan maliýeleşdirilýän ERASMUS+ maksatnamasy boýunça seçilip alnan 597985-EPP-1-2018-1-KZ-EPPKA2-CBHE-JP belgili "Takyk ekerancylyk üçin täze we innowasion okuwlar" atly taslamasynyň Türkmen oba hojalyk institutynda talabalaývk ýerine ýetirilmegini üpiün etmek maksady bilen,

BUÝURÝARYN:

- I. Taslamany utgaşdyrmak üçin institutyň Iş toparyny aşakdaky düzümde tassyklamaly:
 - 1. B.Kurbanow Oba hojalygynyň meliorasiýasy kafedrasynyň můdiri, institut boýunça taslamanyň utgasdyrvivsy;
 - 2. **D.Durdyýew** Amaly mehanika kafedrasynyň můdiriniň w.b.ű.ý.;
 - 3. S.Nurgeldiýew Okuw bölüminiň esasy hünärmeni;
 - 4. B.Nuryýew Kompýuter tehnologiýasy kafedrasynyň mugallymy;
 - 5. B.Orazgylviow Traktorlar we oba hojalyk masynlary kafedrasynyň
 - 6. A. Ataýewa Bagbançylyk we gök ekerançylyk kafedrasynyň mugallymy;
 - G.Ýazmedowa Kompýuter tehnologiýasy kafedrasynyň mugallymy;
 - 8. M.Ataýew Maglumatlar we okatmagyň tehniki serişdeleri bölüminiň başlygynyň wezipesini wagtlaýyn ýerine ýetiriji.
- II. Taslamanyň cäklerinde ýerine ýetirilýän isler baradaky maglumatlary her çärýekde institutyň rektorlygyna we Türkmenistanyň Bilim ministrligine tabşyrylmagyny üpjün etmäge taslamanyň utgaşdyryjysy B.Kurbanowy borçly
- III. Şu buýrugyň ýerine ýetirilişine gözegçilik etmegi Okuw işler boýunça prorektor K.Kurbanowa tabsyrmaly.

Esas: Türkmenistanyň Bilim ministrliginiň 2019-njy ýylyň 11-nji ýanwaryndaky 6/218 belgili haty.

Rektor



Name, No Position in the university tasks according to the Work Plan) surname

Babageldi Kurbanov

Dovlet

Durdyev

Shageldi

Batyr

Nurgeldiyev

Batyr Nuryev

Orazgylyjov

Aynabat

Atayeva

Gulalek

Head of the Department of

Agricultural land reclamation

Mechanics

and Agricultural Machines

Head of the Department of Applied 1.1 Prep., 1.2 Prep., 2.1 Dev.2.4 De v., 2.5 Dev., 4.5 Diss.

Specialist of the educational part of the institute

Lecturer of the Department of Computer Technology

4.3 Diss., 4.4 Diss. Lecturer of the Department Tractors 1.1 Prep., 2.1 Dev., 2.4 Dev., 2.5 Dev.

Lecturer of the Department Gardening and vegetable growing Lecturer of the Department of

2.6 Dev., 4.3 Diss. 1.1 Prep., 2.3 Dev., 4.5 Diss., 4.6 Diss.

Merdan Atayev

Yazmedova

Computer Technology Head of Department of Information and Technical Training

4.1 Diss., 4.2 Diss., 3.1 Quality

Table 2. Courses that are to be upgraded and the deadlines of their updates



Name of the course to be upgraded	Person/teacher/department/faculty responsible for the course upgrade	What has to be upgraded in the course?	Deadlines	
The engineering geodesy	Babageldi Kurbanov	Curriculum update with the introduction of topics containing new technologies	01.09.2020	
Agrometeorology	Babageldi Kurbanov	Curriculum update with the introduction of topics containing new technologies		
Hydrology	Babageldi Kurbanov	Curriculum update with the introduction of topics containing new technologies 01.09.2020		
Soil science	Aynabat Atayeva	Aynabat Atayeva Curriculum update with the introduction of topics containing new technologies 01.09		
Geographic Information Systems	Batyr Nuryev	Curriculum update with the introduction of topics containing new technologies	1 01.09.2020 1	
Mechanization of technological processes in animal husbandry	Dovlet Durdyyev, Batyr Orazgylyjov	Curriculum update with the introduction of topics containing new technologies	01.09.2020	
Machine and tractor fleet operation	Dovlet Durdyyev, Batyr Orazgylyjov	Curriculum update with the introduction of topics containing new technologies	01.09.2020	
Organization and management of agricultural production	Gulalek Yazmedova	Curriculum update with the introduction of topics containing new technologies	01.09.2020	

Table 3. Criteria for evaluating candidates



No	Criterias	Under criteria	Points	% of total score
	Academic progress I	involvement in scientific work	10	
		additional knowledge and skills	5	
		diplomas and certificates of achievement	5	
1.		academic degree: doctor of science, candidate of science, doctor PhD; and / or academic degree: master.	10	50 %
		experience in developing educational and methodical complexes	10	
		lecturing experience of at least 2 years	10	
		educational program and curriculum development experience	10	
2.	Motivation	the desire to gain new knowledge and competence in the field of Precision Agriculture on the experience of European universities and their implementation in the educational process at TAI by upgrading or developing new courses	10	25 %
3.	Language proficiency		30	25 %
	Total		100	100

Table 4. List of teachers



No	Name, surname and e-mail address	Position in the university	
1	Babageldi Kurbanov, <u>baba_kur_83@mail.ru</u>	Head of the Department of Agricultural land reclamation	
2	Dovlet Durdyev, meh.durdyew@mail.ru	Head of the Department of Applied Mechanics	
3	Batyr Nuryev, batyr-info@mail.ru	Lecturer of the Department of Computer Technology	
4	Batyr Orazgylyjov, <u>batyrtohi@gmail.com</u>	Lecturer of the Department Tractors and Agricultural Machines	
5	Aynabat Atayeva, aynabat-atayeva@mail.ru	Lecturer of the Department Gardening and vegetable growing	
6	Gulalek Yazmedova, yazmedowa1980@gmail.com	Lecturer of the Department of Computer Technology	
7	Shageldi Nurgeldiyev, shageldinurgeldiyev@gmail.com	Specialist of the educational part of the institute	

Table 5. Responsible persons for the installation of the equipment & software



Equipment/Software	Name of the person(s) responsible for the equipment/software installation	Occupation of the responsible persons	Contact information of the responsible persons
	Babageldi Kurbanov	Head of the Department of Agricultural land reclamation	baba_kur_83@mail.ru
	Batyr Orazgylyjov	Lecturer of the Department Tractors and Agricultural Machines	batyrtohi@gmail.com
	Batyr Nuryev	Lecturer of the Department of Computer Technology	batyr-info@mail.ru

Table 6. EVENT PLAN for disseminating information about the NICOPA project at TA

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No	EVENT	Date
1.	Seminar of the working group of the NICOPA project.	Monthly
2.	Participation in coordination meetings.	According to plan
3.	Participation of 3 teachers of the institute in trainings held at the Berlin Technical University.	August 2019
4.	Seminar for teachers on the results of the training of 3 teachers at the Berlin Technical University.	September 2019
5.	Preparation of documentation sets for PAL and VCR;	September 2019
6.	Presentation of the project NICOPA for the participants of the scientific-practical conference of students, undergraduates and graduate students of TAI	September 2019 November 2019

3.	Participation of 3 teachers of the institute in trainings held at the Berlin Technical University.	August 2019
4.	Seminar for teachers on the results of the training of 3 teachers at the Berlin Technical University.	September 2019
5.	Preparation of documentation sets for PAL and VCR;	September 2019
6.	Presentation of the project NICOPA for the participants of the scientific-practical conference of students, undergraduates and graduate students of TAI.	September 2019 November 2019 December 2019
7	To develop and approve a package of organizational documents for the creation of PASO at	0 (1 2010

	University.	8
4.	Seminar for teachers on the results of the training of 3 teachers at the Berlin Technical University.	September 2019
5.	Preparation of documentation sets for PAL and VCR;	September 2019
6.	Presentation of the project NICOPA for the participants of the scientific-practical conference of students, undergraduates and graduate students of TAI.	September 2019 November 2019 December 2019
7.	To develop and approve a package of organizational documents for the creation of PASO at TAI.	October 2019
8.	Meeting of the working group of the NICOPA project. Report on the implementation of the project.	November 2019
9.	Presentation of modernized, new curriculum for teachers.	Constantly
10.	Publication of information about the ongoing activities of the NICOPA project on the project website, in newspapers and magazines, as well as performance in television	Constantly

4.	Seminar for teachers on the results of the training of 3 teachers at the Berlin Technical University.	September 2019
5.	Preparation of documentation sets for PAL and VCR;	September 2019
6.	Presentation of the project NICOPA for the participants of the scientific-practical conference of students, undergraduates and graduate students of TAI.	September 2019 November 2019 December 2019
7.	To develop and approve a package of organizational documents for the creation of PASO at TAI.	October 2019
8.	Meeting of the working group of the NICOPA project. Report on the implementation of the project.	November 2019
9.	Presentation of modernized, new curriculum for teachers.	Constantly
10.	Publication of information about the ongoing activities of the NICOPA project on the project website, in newspapers and magazines, as well as performance in television programs.	Constantly

6.	Presentation of the project NICOPA for the participants of the scientific-practical conference of students, undergraduates and graduate students of TAI.	November 2019 December 2019
7.	To develop and approve a package of organizational documents for the creation of PASO at TAI.	October 2019
8.	Meeting of the working group of the NICOPA project. Report on the implementation of the project.	November 2019
9.	Presentation of modernized, new curriculum for teachers.	Constantly
10.	Publication of information about the ongoing activities of the NICOPA project on the project website, in newspapers and magazines, as well as performance in television	Constantly

Non-consortium organizations



Non-consortium organization that can be interested in the project

The list of non-consortium organization that can be interested in the project	The list of Potential employers	
Ministry of Education of Turkmenistan	Water design and research institute "Turkmensuwylymtaslama"	
Ministry of Agriculture and environment protection of Turkmenistan	Ministry of Education of Turkmenistan	
State committee of water management of Turkmenistan	Ministry of Agriculture and water economy of Turkmenistan	
Farms		



1. Coordination and approval of the plan of activities for the implementation of the project (February 11, 2019);

2. For the comprehensive work of the working group of the NICOPA project at the TAI, special cabinets were allocated - 254, 255 (February 15, 2019);

3. Participation of the delegation of the TAI in the launch meeting at the Technical University of Berlin (4-5 March 2019);





4. In the assembly hall a meeting was held with students (351) and teachers (54) TAI. At the meeting, students and teachers were acquainted with the goals and objectives of the NICOPA project (B. Kurbanov), and there was also an introductory presentation on precise agriculture (D. Durdyev) (April 8, 2019);



Coordinator of the project NICOPA – B. Kurbanov



Academic leader of the project NICOPA – D. Durdyyev



- 5. Development of questionnaires for the analysis of existing disciplines (questionnaire for teachers and students) (April 2019)
- **6. Development of the schedule of the survey** (May 6-8, 2019)
- 7. Conducting a survey of teachers and students TAI (May 23-29, 2019)
- 8. A skype meeting of project coordinators from Turkmenistan was held with project manager Arnold Sterenharz (ECM) (May 24, 2019)
- **9.** Analysis of the survey (A. Ataeva) (1-4 June 2019)
- 10. Teachers of the working group participated in scientific and applied conferences was hold at the institute and made presentations on the work carried out on the NICOPA project, as well as on the importance of precision agriculture in the modern world. Academic leader of the project D. Durdyev made a report in the scientific-practical conference precision agriculture the future of agriculture (March 27, 2019)
- 11. Coordination meetings are held monthly (office 255) on the work done on the NICOPA project at the Turkmen Agricultural Institute (March 9, 2019, March 20, 2019, April 6, 2019, May 10, 2019)





Questionnary for student (aud. 253)



Questionnary for teachers (aud. 330)

Report questionnary



Were selected special groups for the questionnaire:

- •The questionnaires were distributed to the teachers of the all departments total 60 teachers;
- •1-4 year students were given questionnaire total 744 students.

A questionnaire was taken in an anonym form and in an unsigned form. They were asked to replenish a questionnaire in free time. The same questionnaire was distributed to the teachers who had the desire. Both groups completed the questionnaire from 23 to 29 May. Form for filling the questionnaire: answer questions that were printed on the sheet.

On the questionnaire for students 20 questions, for teachers 20 questions were planned.

Table 8. Quality group



Name, Surname	Occupation	Organization	Contact info (email)
Babageldi Kurbanov	Head of the Department of Agricultural land reclamation	TAI	baba_kur_83@mail.ru baba.kur@gmail.com
Dovlet Durdyyev	Lecturer of the Department Tractors and Agricultural Machines	TAI	meh.durdyew@mail.ru
Shageldi Nurgeldiyev	Specialist of the educational part of the institute	TAI	shageldinurgeldiyev@gmail.com
Aynabat Atayeva	Lecturer of the Department Gardening and vegetable growing	TAI	aynabat-atayeva@mail.ru

Table 7. Quality Assurance Plan for the project "New and Innovative Courses for Precision Agriculture (NICOPA)" for 2018-2021

Deadlines

Activity

No



Responsible

212	Tictivity	Deadines	Responsible
1.	Organizing and conducting a seminar inviting stakeholders to determine the relevance and relevance for the region in the New and Innovative Courses for Precision Agriculture.	30.12.2018	Babageldi Kurbanov – Coordinator
2.	Formation of knowledge and competencies in Courses for Precision Agriculture and a list of disciplines.	30.04.2019	Babageldi Kurbanov, Dovlet Durdyyev
3.	Evaluation of the developed educational and methodical documentation for Courses for Precision Agriculture.	30.10.2020	Shageldi Nurgeldiyev, Aynabat Atayeva
4.	PASO performance evaluation.	December, annually	Babageldi Kurbanov, Dovlet Durdyyev
5.	Evaluation of the introduction of PAL and VCR equipment into the educational process.	30.12.2019	Shageldi Nurgeldiyev, Aynabat Atayeva
6.	Evaluation of the results of educational activities at Courses for Precision Agriculture in all specialties.	30.12.2020, 30.06.2021	Babageldi Kurbanov, Dovlet Durdyyev, Shageldi Nurgeldiyev







Thank you for you attention!

Babageldi Kurbanov, Head of the Department of Agricultural land reclamation,

baba kur 83@mail.ru

