

# NICOPA Project Final Report

New and Innovative  
Courses for Precision  
Agriculture



**NATIONAL RESEARCH UNIVERSITY “TASHKENT INSTITUTE OF  
IRRIGATION AND AGRICULTURAL MECHANIZATION ENGINEERS”  
(NRU “TIIAME”)**

**MR. ILHOM ABDURAHMANOV**  
Local Project Coordinator

Joint Project: Capacity Building in the Field  
of Higher Education ERASMUS+ 2018

Co-funded by the  
Erasmus+ Programme  
of the European Union



# Project activities & results

## WP1 Preparation

### Resolution on the project

O'ZBEKISTON RESPUBLIKASI  
OLIY VA O'RTA MAXSUS TA'LIM  
VAZIRLIGI

TOSHKENT IRRIGATION VA QISHLOQ  
XO'JALIGINI MEZANIZATIVASHLASH  
MUHANDISLARI INSTITUTI  
(TIQXMMI)



MINISTRY OF HIGHER AND SECONDARY  
SPECIALIZED EDUCATION OF THE  
REPUBLIC OF UZBEKISTAN

TASHKENT INSTITUTE OF IRRIGATION AND  
AGRICULTURAL MECHANIZATION  
ENGINEERS  
(TIIAME)

БҮЙРУҚ

14.12. 2018 й.

909 №

Тошкент ш.

Институтда Европа иттифоки томонидан ёълон килинган Эразмус+ дастурининг Олдий таълима салоҳитни ошириш йўналишида бўйича 597985-EPP-1-2018-1-KZ-EPPKA2-CBNE-JP "NICoPa: New and Innovative Courses for Precision Agriculture" (Аник (координатали) кишлек хўжалиги учун янги ва инновацион курслар" лойихасин амалга ошириш учун ичиш гурух тузни тұгрисида

Институтда Европа иттифоки томонидан Эразмус+ дастурининг Олдий таълима салоҳитни ошириш йўналишида ёълон килинган таъловса етакчи таълим мусасаси сифати кўлга кирилган 597985-EPP-1-2018-1-KZ-EPPKA2-CBNE-JP "NICoPa: Аник (координатали) кишлек хўжалиги учун янги ва инновацион курслар" лойихасин амалга ошириш муддат давомида (15.11.2018-14.11.2021) Европа Иттифоки молиявий кўмаги ёрдамида бажарилётган ишлар самарадорлининг иттифоки максадида:

#### БУЙРАМАН:

1. Институтда Европа иттифоки томонидан молиявий тирилаётган Эразмус+ дастурининг "NICoPa: Аник (координатали) кишлек хўжалиги учун янги ва инновацион курслар" лойихасин ичиш гурух 1-илювага асоссан тасдиқланиси.

2. Мазкур лойиха доирасида визифаларни амалга оширишида ичиш гурух аъзоларининг 2-илювада берилган лойиханинг ичиш пакетлари (working packages)га амал килишлари таъминланиси.

3. Лойиханинг институтдаги координатори этиб Халкаро ҳамкорлик бўлими бошчилини И.Абдурахманов тайинланиси.

4. Мазкур бўйруқ ижроносин таъминлаш Ўкув ишлар бўйича проректор Б.Мирзаев зинмасига юқлатилиши.

Асос: Ўзбекистон Республикаси Олий ва ўрта маҳсус таълим vazirligining 07.11.2018 йўлдаги №87-03-3805 сонли хати

Ректор

У.Умурзаков

TIQXMMI - 475 - 50 - 99

Институт ректорининг 2018 йил  
14 декабрдаги 909 №-сонли бўйргита 1-илюва

Институт ректорининг 2018 йил  
14 декабрдаги 909 №-сонли бўйргита 2-илюва

Институтда Европа иттифоки Эразмус+ дастурининг Олдий таълима салоҳитни ошириш йўналишида 585718-EPP-1-2017-1-HUEPPKA2-CBNE-JP 597985-EPP-1-2018-1-KZ-EPPKA2-CBNE-JP "NICoPa: Аник (координатали) кишлек хўжалиги учун янги ва инновацион курслар" лойихаси доирасида бажарилётган ишларни амалга ошириш бўйича ичиш гурух таркиби

№	Ф.И.Ш	Вазифаси
1.	У.Умурзаков	Лойиханинг бошкарув кенгашини раҳбари, институт ректори, лойиханинг ўз вактида ва сифатли бажарилешига жавобгар.
2.	Б.Мирзаев	Лойиханинг бошкарув кенгаши аъзоси, лойиханинг ўз вактида ва сифатли бажарилешига жавобгар.
3.	И.Абдурахманов	Лойиханинг бошкарув кенгаши аъзоси, лойиханинг институтдаги координатори, лойиханинг ўз вактида ва сифатли бажарилешига жавобгар.
4.	М.Реймов	Лойиханинг бошкарув кенгаши аъзоси, лойиханинг институтдаги бошкарувчиси, лойиханинг ўз вактида ва сифатли бажарилешига жавобгар.
5.	И.Хасанов	Лойиха хисобчи, молиявий масалалар бўйича масъул.
6.	А.Бабажанов	Лойиханинг ичиш гурухи аъзоси.
7.	А.Мукумов	Лойиханинг ичиш гурухи аъзоси.
8.	З.Хафизова	Лойиханинг ичиш гурухи аъзоси.
9.	С.Шарипов	Лойиханинг ичиш гурухи аъзоси.
10.	Р.Обиматов	Лойиханинг ичиш гурухи аъзоси.
11.	Х.Абдиватов	Лойиханинг ичиш гурухи аъзоси.
12.	Ш.Нарбаев	Лойиханинг ичиш гурухи аъзоси.
13.	А.Инамов	Лойиханинг ичиш гурухи аъзоси.
14.	З.Маматкулов	Лойиханинг ичиш гурухи аъзоси.
15.	А.Хамзалиев	Лойиханинг ичиш гурухи аъзоси.
16.	Ў.Мухторов	Лойиханинг ичиш гурухи аъзоси.
17.	Х.Хасанов	Лойиханинг ичиш гурухи аъзоси.
18.	И.Асланов	Лойиханинг ичиш гурухи аъзоси.
19.	З.Абдурахманов	Лойиха иш ўрганувчиси.
20.	Ж.Низэзов	Лойиха иш ўрганувчиси.

Ичиш пакетлари (working packages)	Ичиш пакетларининг кискача мазмуни
WP1	Тайёргарлик. Лойиха тематикасига алоқадор мавжуд бакалавриатура ва магистратура ўқув режаларини таҳлил килини, улардан лойиха доирасида янги таълим технологиялардан фойдаланган холда янгилаш учун фанларни таъланаб олиш ва бунинг учун ўқув стратегиясини ва кўрсатма шартномасини тузниш.
WP2	Инновацион таълим бериш/олишни ўз ичига олган янги ўқув дастури ва трансферни модулларни тайёрлаш, ўқув дастурини ишлаб чиқиш, уни институтда кабул килини ва аккредитациядан ўтиказиши. Лаборатория жиҳозлари сотиб олини ва ўрнатни. Янги ўқув дастури ва модуллар бўйича ўқитувчилар малақасини ошириш. Болония дастури таълаблари мавжуд ўқув дастурларини янгилаш, янгиланган дастур яратниши.
WP3	Сифат режасига биноан ички/таскин сифатни баҳолаш хисобларини камарлаб олгани сифатни таъминлаш стратегияси/режаси.
WP4	Тарқитни материаллар, тадбирлар, кўшма веб платформа, "NICOPA+" келинүвидан фойдаланни, лойиханинг тарқитини ва эксплуатацияни килини. Ҳамкорлар билан биргаликда Аник (координатали) кишлек хўжалиги хизмати оғиси (PASO) хўжжаларини тайёрлаши, уни яратни, жиҳозлар сониб олини ва ўрнатни. PASO учун ходимлар малақасини ошириш, минтакавий/ҳалкаро тармок ташкил этиши. Битирувлучлар учун янгиланган курсларини PASOда ташкил килини. Ҳалкаро бакалавриатура/магистратура ёзи матклабларни.
WP5	Лойиханинг бошкарни, жумладан лойиханинг ойлайн бошкарни, кўнлик лойиха администрацияси ва координацияси.

# Project activities & results

## WP1 Preparation

### Internal workplan

MINISTRY OF HIGHER AND SECONDARY SPECIALIZED EDUCATION OF THE REPUBLIC OF UZBEKISTAN

TASHKENT INSTITUTE OF IRRIGATION AND AGRICULTURAL MECHANIZATION ENGINEERS



#### INTERNAL WORK PLAN

of the Erasmus+ CBHE Project

“NICoPA: New and Innovative courses for Precision Agriculture”

for 2018-2021 years

Tashkent – 2018

Project activities including deadlines and distribution of responsibilities among work group members

Nr	Activities	Ref. №	Performers	Start	End
1	Develop internal plan of activities of the project.	1.1 - 5.2	I.Abdurahmanov	01.12.2018	15.12.2018
2	Make a list of valid subjects/courses for analysis and future updates	1.1	Sh.Nurbaev, M.Reimov	10.12.2018	20.12.2018
3	a) Develop questionnaires for analysis of existing curricula/disciplines (questionnaire for teachers, students, graduates, young professionals, alumni; + a questionnaire for interested in project non-academic partners: potential employers, local associations, representatives of industrial enterprises, other parties that can somehow relate to the topic of the project b) Develop a schedule to conduct surveys c) Conduct surveys of various target groups d) Analyze the answered questionnaires	1.1	I.Abdurahmanov, Z.Mamatkulov	20.12.2018	15.04.2019
4	- Develop an analytical report on the results of the analysis of existing curricula/disciplines. - Make a list of curricula that you plan to upgrade. - Develop a schedule for updates of the selected curricula.	1.1	Sh.Nurbaev, M.Reimov, Z.Mamatkulov	15.04.2019	30.04.2019
5	Agreement on instructional strategy and guidelines for BA/MSc curricula design including the use of new Educational Technologies	1.2	U.Umurzakov, B.Mirzaev, Sh.Nurbaev, I.Abdurahmanov	15.11.2018	30.04.2019
6	a) Examine and adopt the received materials and develop on this basis their own courses, curricula, modules. b) Target universities should develop digital	2.1	Sh.Nurbaev, I.Abdurahmanov, M.Reimov, Z.Mamatkulov, I.Aslanov, R.Oymatov, U.Mukhtorov	a)01.12.2018 b)01.10.2019	a)31.03.2020 b)31.10.2020

b) Start pilot operation of PASO			b)01.09.2020	
20 Refresh training courses for graduates in PASO	4.5	I.Abdurahmanov, Sh.Nurbaev	01.09.2020	31.07.2021
21 Organization of International BA/MSc Summer Schools	4.6	M.Reimov, A.Khamraliev, Z.Abdurahmanov, J.Niyozov	01.04.2020	31.04.2021
22 Management of the project including project management online, daily project administration and coordination	5.1	I.Abdurahmanov, M.Reimov	15.11.2018	14.11.2021
23 Coordination meetings	5.2	I.Abdurahmanov, M.Reimov	15.11.2018	14.11.2021
24 Monitoring and controlling of project activities: development of questionnaires for partner universities regarding project implementation	5.1	I.Abdurahmanov, M.Reimov	M5, M11, M17, M29, M35	M6, M12, M18, M30, M36
25 Ensure using SKYPE/ZOOM to held meetings of the project consortium team,	5.1	I.Abdurahmanov, M.Reimov	15.11.2018	14.11.2021

Abbr.: PAL - Precision agriculture lab  
VCR - Virtual Class Room  
PASO - Precision Agriculture Service Office

Coordinator of the project at TIIAME



I.Abdurahmanov

# Project activities & results

## WP1 Preparation

### Review curricula

In total **13 curricula** (7 EU and 6 UZ) have been **reviewed** and 8 TIIAME specialists have been involved in the review process.

The following current curricula for BA/MSc in target area in TIIAME has been reviewed and we made a plan for revising existing modules:

*5313400 – Geodesy and Geoinformatics (BA)*

*5410700 – Land Cadaster and Land Use (BA)*

*5450400 – Hydraulic Structures and Use of Pumping Stations (BA)*

*5A313401 – Geodesy and Geoinformatics (MSc)*

*5A410701 – Land Use and Management (MSc)*

*5A230105 – Economics of Agriculture (MSc)*

# Project activities & results

## WP2 Development

### New academic programs

New **MSc Program “5A430401 – Precision Agriculture”** was launched from 2019 and 3 MSc students were accepted to study for 2019-2020 academic years at TIIAME.

New **BSc Program “5311200 – Innovative technologies in Remote Sensing of Land Resources”** was launched from 2020 and 50 BSc students were accepted to study for 2020-2021 academic years at TIIAME. The new/updated courses have been included to the new curricula of this program.

# Project activities & results

## WP2 Development

### New and updated courses

It was agreed to **update** following **modules**:

- Geoinformation systems and technologies;
- Remote Sensing;

It was agreed to **develop** following **new modules**:

- Aerospace Image Internet Resource Information;
- Geodetic support of aerial photographs;
- Three-dimensional modeling in GIS;
- Computer graphics in cadastral works;
- Web-GIS;
- Precision Agriculture;
- Modern geodetic equipment;
- GIS in using Hydrotechnical Structure;
- GIS in Hydrotechnical Construction;
- Basics of digital cartography;
- Ecological cartography.

*23 teaching/administrative staff involved in the new/updated courses development.*

# Project activities & results

## WP2 Development

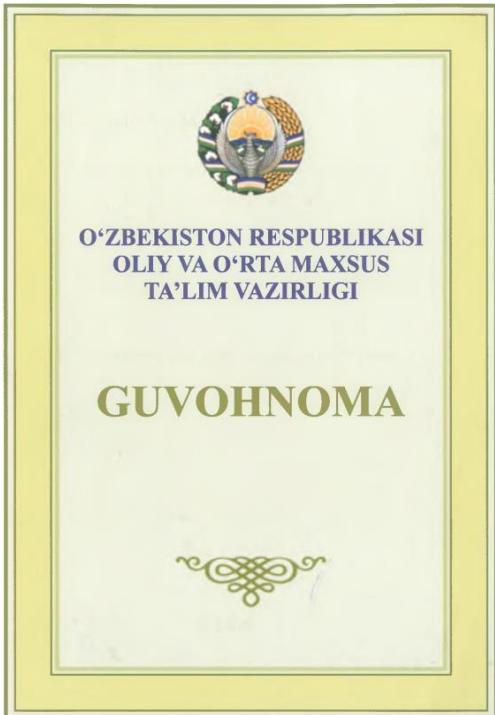
### New and updated courses

No	Courses/modules	ECTS	pages	Authors	No of students
1	Geoinformation systems and technologies	9	150	U.Mukhtorov, A.Inamov	50
2	Remote Sensing	13	109	Sh.Rakhmonov	50
3	Aerospace Image Internet Resource Information	4	220	R.Oymatov, S.Abdurakhmonov, M.Reimov	50
4	Geodetic support of aerial photographs	4	115	R.Abdiramanov	50
5	Three-dimensional modeling in GIS	4	193	B.Markus, U.Mukhtorov, Z.Mamatkulov, Z.Abdurahmonov, Sh.Sattorov	50
6	Computer graphics in cadastral works	4	276	R.Oymatov, K.Rakhmonov, Dj.Kubaev	50
7	Web-GIS	5	250	R.Oymatov, I.Aslanov	50
8	Precision Agriculture	4	60	R.Oymatov, I.Abdurahmanov, I.Aslanov	55
9	Modern geodetic equipment	5	238	S.Tashpulatov, U.Islomov, A.Inamov, A.Pardaboev	50
10	GIS in using Hydrotechnical Structure	5	27	M.Bakiev, Kh.Khasanov	50
11	GIS in Hydrotechnical Construction	6	22	M.Bakiev, Kh.Khasanov	50
12	Basics of digital cartography	5	133	S.Abdurakhmonov	50
13	Ecological cartography	5	233	J.Qoraboyev, I.Musaev, T.Qorabayeva	50
	<b>TOTAL</b>	<b>73</b>	<b>2026</b>		<b>655</b>

# Project activities & results

## WP2 Development

### Accreditation of new and updated courses



# Project activities & results

## WP2 Development

### New and updated courses

 **TIIAME**  
Tajik Institute of Irrigation and Agricultural Mechanization Engineers

 **NICOPA**

Co-funded by the Erasmus+ Programme of the European Union

Б.Маркус, Ҷ.Маматкулов, З.Абдурахмонов, Ш.Я.Сатторов

**Геоахборот тизимларида уч ўлчамили моделлаштириш**



 **TIIAME**  
Tajik Institute of Irrigation and Agricultural Mechanization Engineers

 **NICOPA**

Co-funded by the Erasmus+ Programme of the European Union

С.А.Томпилатов, Ҷ.П.Исломов, А.Н.Инамов, А.П.Пардаев

**ЗАМОНАВИЙ ГЕОДЕЗИК АСРОДАРЛАНДЫРЫШ**



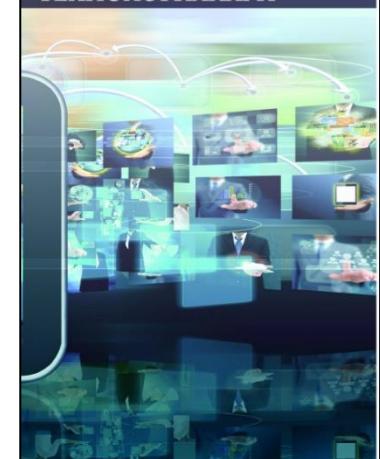
 **TIIAME**

 **NICOPA**

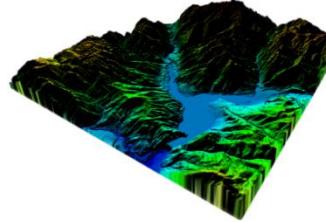
With the support of the Erasmus+ Programme of the European Union

С.А.Абдурахмонов, Ҷ.Мухторов, О.С.Абдисаматов, А.Ю.Жўраев, А.Н.Инамов

**ГЕОАХБОРОТ ТИЗИМ ВА ТЕХНОЛОГИЯЛАРИ**



**GIDROTEXNIKADA GEOAXBOROT TIZIMLARIDAN FOYDALANISH**  
*faniдан амалий машғуларни о'тказиш бо'y metodik ko'satma*



# Project activities & results

## WP2 Development

### Criteria for teacher selection for trainings

	NICOPA: NEW AND INNOVATIVE COURSES FOR PRECISION AGRICULTURE 597985-EPP-1-2018-1-KZ-EPKA2-CBHE-JP	ERIC
NICOPA Selection Criteria		
NICOPA Selection Criteria for teachers		
<b>Objective:</b> This document contains information about selection criteria for teachers to participate in trainings planned at EU universities.		
<b>Selection Committee:</b>		
1. Dr.Bahadir Mirzaev (Chair, Vice Rector for Academic Affairs, TIIAME) 2. Dr.Sharafatdin Narbaev (Vice Chair, Dean of the faculty of Land Management, TIIAME) 3. Dr.Sherzod Rakhmonov (Head of International Cooperation Department, TIIAME) 4. Mr.Illhom Abdurahmanov (member, PhD student, TIIAME)		
<b>Compulsory (scanned) Documents:</b>		
1. Photocopy of international passport (only main/photo page) 2. Academic and/or professional Curriculum Vitae (europass model) 3. English language certificate 4. Motivation Letter 5. One letter of recommendation supporting your application 6. Other Documentation (optional)		
<b>Selection Criteria:</b>		
The selection procedure is established according to the minimum requirements set by the European Commission. The selection procedure guarantees the transparency of the selection process and an equitable treatment of individual applications. The selection process is starting with shortlisting. The short list will be based on an interview by national (local) coordinator persons for initial "filtering". This initial filtering based on rating contributes to the selection procedure. Rating is done by national (local) coordinator and is based on this standard evaluation form.		
The Selection Committee will receive a summary of ratings and (filtered) proposals from the project administration, where we also will take care of all quotas as planned in the proposal. Each applicant will be interviewed. Based on the ratings and interviews the Selection Committee will provide a proposal for the project leader before places being offered on the mobility programme.		
<b>NICOPA Point Score</b>		
<b>Rating</b>	<b>Code Rating</b>	
80-100	Outstanding	
60-80	Highly competent	
NICOPA: NEW AND INNOVATIVE COURSES FOR PRECISION AGRICULTURE Joint Project: Capacity Building in the Field of Higher Education ERASMUS+ 597985-EPP-1-2018-1-KZ-EPKA2-CBHE-JP		

	NICOPA: NEW AND INNOVATIVE COURSES FOR PRECISION AGRICULTURE 597985-EPP-1-2018-1-KZ-EPKA2-CBHE-JP	ERIC
NICOPA Selection Criteria		
40- 60	Competent	
20- 40	Not yet competent	
0- 20	Not achieved	
<b>Applicant:</b>		
<b>Nº</b>	<b>Full Name</b>	
	<b>Criteria Items</b>	<b>Points max.</b>
1.	Level of English of instruction at host institution	20
2.	Average of grades in presented certificates	20
3.	Prior Learning in subjects related with trainings within the project	20
4.	Motivation letter	20
5.	Bonus points (max. 4 points each) - Publications - Conference presentations - Teaching Experience - First scholarship award - Other	20
<b>TOTAL Points (..... / 100)</b>		100
Evaluator is encouraged to conduct a personal/phone interview where this is deemed necessary to fairly assess the candidate's qualifications		
Additional Comments:		

# Project activities & results

## WP2 Development

### Retrain academic teachers by organization of Master Classes, workshops, trainings etc.

4 master classes have been organized and following teachers participated in at least 85 % classes:

- |                                |  |
|--------------------------------|--|
| 1. <i>Ilhom Abdurahmanov</i>   | 9. <i>Mokhigul Abdurakhimova</i>         |
| 2. <i>Rustam Oymatov</i>       | 10. <i>Barnokhon Saipova (Khalilova)</i> |
| 3. <i>Sarvar Abdurakhmonov</i> | 11. <i>Akbarjon Khamraliev</i>           |
| 4. <i>Zokhid Mamatkulov</i>    | 12. <i>Zoirjon Abdurakhmonov</i>         |
| 5. <i>Ilhomjon Aslanov</i>     | 13. <i>Utkir Islomov</i>                 |
| 6. <i>Uzbekhon Mukhtorov</i>   | 14. <i>Abdulla Juraev</i>                |
| 7. <i>Sharafatdin Narbaev</i>  | 15. <i>Aziz Inamov</i>                   |
| 8. <i>Khojiakbar Khasanov</i>  | 16. <i>Azamat Jumanov</i>                |

# Project activities & results

## WP2 Development

### Establishment of PASO, PAL and VCR

Precision Agriculture Service Office (PASO),

Precision Agriculture Laboratory (PAL) and

Virtual ClassRoom (VCR) established.

Opening ceremony – **12 October, 2021**

EQ for VCR, PASO (24 000 Euro) and for PAL (8 000 Euro) have been purchased and installed.

# Project activities & results

## WP2 Development

### Establishment of PASO, PAL and VCR



Precision Agriculture Service Office (PASO)



Virtual Classroom (VCR)

# Project activities & results

## WP2 Development

### Virtual Class Room



Co-funded by the  
Erasmus+ Programme  
of the European Union



ERASMUS +

HIGHER EDUCATION CAPACITY BUILDING

Erasmus+ Project

New and Innovative Courses for Precision Agriculture  
(NICOPA)

Summary on Equipment Purchase – VCR Set

TIIAME, Uzbekistan

Prepared by:  
Ilhom Abdulrahmanov  
Local Project Coordinator, TIIAME  
Email: [ilhom.issakovich@gmail.com](mailto:ilhom.issakovich@gmail.com)



New and Innovative Courses  
for Precision Agriculture

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Table 1. List of equipment

Item	Description	Quantity (pc) for 1 University	Unit Price (EUR)	Total Price per item (EUR)	Date	Supplier	Model	Serial Number
1		4	5	0=4 x 5				
#VCR1	Personal Computer All in One <i>Lenovo IdeaCentre 310A005 i3 10400T/ 8Gb/ 250Gb/ DVDRW/ Mouse/ KB/ 27"/ Win 10</i>	12	1 195	14 340				
#VCR2	Mobile Workstation <i>Lenovo Thinkpad P1 i7 9750H/ 16Gb/ 512Gb/ T1000 4Gb Quadro/ Win 10/15,6</i>	1	2 785	2 785				
#VCR3	Color MFD A3 <i>EPSON WorkForce WF-7710DWF</i>	1	614	614				
#VCR4	Monochrome MFD A4 <i>Canon i-SENSYS MF443dw</i>	1	490	490				
#VCR5	Personal Cloud Storage <i>Zyxel N4532e-2x10TB HDD</i>	2	1 210	2 420				
#VCR6	Digital Camera (Kit) <i>Canon EOS 4000D Kit</i>	1	428	428				
#VCR7	Smart Board <i>Smart board SB480</i>	1	650	650				
#VCR8	Projector <i>Epson EB-S80</i>	1	1 286	1 286				
#VCR9	Smart TV <i>Areal 55AU20M</i>	1	690	690				
#VCR10	UPS <i>AVT 1500VA Line Interactive E4615</i>	1	214	214				
#VCR11	24 port Gigabit Switch <i>TENDA TEG1024D</i>	1	83	83				
<b>Total Amount (Euro) excluding VAT</b>								
				<b>24 000</b>				

Summary on Equipment Purchase – VCR Set

2

Использование документации для определения вида и количества приобретаемого оборудования								
Тематика документации для определения вида и количества приобретаемого оборудования								
<b>ОБОРУДОВАНИЕ</b>								
<b>no сенсорное спектральное</b>								
<b>Модель № 256</b>								
<b>Фотоаппаратура для определения вида и количества приобретаемого оборудования</b>								
<b>31.05.2021 г.</b>								

Фотоаппаратура для определения вида и количества приобретаемого оборудования

Фотоаппаратура

4



Фотоаппаратура

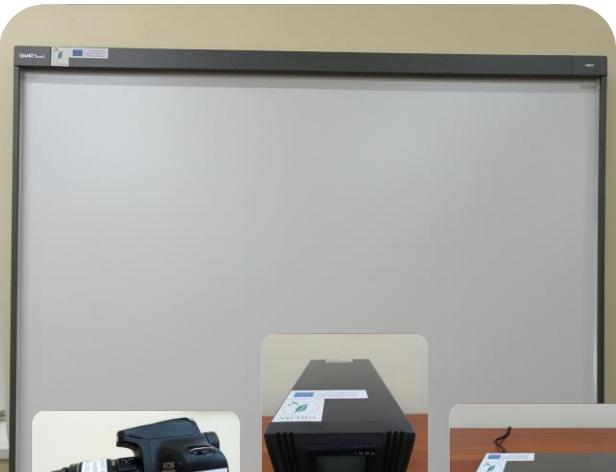
Фотоаппаратура

4

# Project activities & results

## WP2 Development

EQ purchased for VCR and PASO



# Project activities & results

## WP2 Development

### EQ purchase for Virtual Class Room

№	Description / Наименование	Q-ty Кол-во
1	Personal Computer All in One/ Персональный компьютер все в одном Lenovo IdeaCentre 27IMB05 i5 10400T/8Gb/256Gb/DVDRW/Mouse/KB/27"/Win 10	12
2	Mobile Workstation/ Мобильная рабочая станция Lenovo Thinkpad P1 i7 9750H/16Gb/512Gb/T1000 4Gb Quadro/Win 10/15,6	1
3	Color MFD A3/ Цветное МФУ А3 EPSON WorkForce WF-7710DWF	1
4	Monochrome MFD A4/ Монокромное МФУ А4 Canon i-SENSYS MF443dw	1
5	Personal Cloud Storage/ Персональное облачное хранилище Zyxel NAS326 +2x10Tb HDD	2
6	Digital Camera (Kit)/ Цифровая камера (комплект) Canon EOS 4000D Kit	1
7	Smart Board/ Смарт доска Smart board SB480	1
8	Projector/ Проектор Epson EB-580	1
9	Smart TV/ Смарт ТВ Artel 55AU20H	1
10	UPS/ ИБП AVT 1500VA Line Interactive EA615	1
11	24 port Gigabit Switch/ 24-портовый гигабитный свитч TENDA TEG1024D	1

# Project activities & results

## WP2 Development

### EQ purchase for Precision Agriculture Laboratory

№	Наименование товара
1	IMETOS® IMT280 базовая станция с осадкометром, датчиком температуры и влажности воздуха (гигроклипом), анемометром (механический), пиранометром
2	ECH874EXT Внешний интерфейс для подключения 1x датчика объемного содержания воды в почве производства Pessl Instruments или Meter Group, 4x тензиометрических датчиков Watermark + 1 x температура почвы с кабелем 5м.
3	SEN-SDI12 Внутренний интерфейс для подключения 2x профильных датчиков объемного содержания воды в почве типа Sentek или Aquacheck
4	IM5041D Универсальный датчик температуры почвы с сенсорной частью PI
5	PI54-D/5 Датчик объемного содержания воды в почве производства Pessl Instruments с кабелем 5м
6	MD510SM Тензиометрический датчик Watermark с кабелем 3,5м
7	TNS107 Тензиометр Irrrometer 90см, без манометра
8	SE1200S Профильный датчик объемного содержания воды в почве производства Sentek D&D Triscan 120 см: 12x температура, 12x влажность и 12x соленость почвы, с кабелем 5м

# Project activities & results

## WP3 Quality Plan

### Quality Plan

<b>MINISTRY OF HIGHER AND SECONDARY SPECIALIZED EDUCATION OF THE REPUBLIC OF UZBEKISTAN</b> <b>TASHKENT INSTITUTE OF IRRIGATION AND AGRICULTURAL MECHANIZATION ENGINEERS</b>			
 «AGREED» Vice Rector for Academic Affairs of TIIAME B.Mirzaev January 2019	 «APPROVED» Rector of TIIAME U.Umurzakov " 14 " January 2017		
<b>QUALITY ASSURANCE PLAN OF TIIAME</b> for the Erasmus+ CBHE Project <b>“NICoPA: New and Innovative courses for Precision Agriculture”</b> for 2018-2021 years			
No	Activity	Deadlines	Responsible people
1.	Establishment of Quality group	January, 2019	B.Mirzaev, I.Abdurahmanov
2.	Conducting a workshop on ESG & ECTS User's Guide documents	February, 2019	B.Mirzaev, I.Abdurahmanov
3.	Conducting a need analysis of university regarding curricula update/development	March, 2019	B.Mirzaev, I.Abdurahmanov
4.	Defining requirements of the labor market	April, 2019	Sh.Narbaev
5.	Formulating competences of specialists that will be valuable in the next 3-5 years	April, 2019	Sh.Narbaev, M.Reimov
6.	Conducting of surveys of target groups in order to learn about their opinion regarding curricula/courses/modules/modernization/development	April, 2019	Sh.Narbaev, M.Reimov, A.Khamraiev
7.	Development of indicators for quality assessment of implementation of each new/ modernized curricula or curricula package in the target field	August, 2019	I.Abdurahmanov, Sh.Narbaev
8.	Creating a list of 1-3 potential peer reviewers (organizations or persons)	September, 2019	I.Abdurahmanov
9.	Conducting negotiations with peer reviewers of when to send them materials for a peer review	September, 2019	I.Abdurahmanov

10.	Creating a list of curricula/courses/modules that should be modernized	October, 2019	Sh.Narbaev, M.Reimov
11.	Creating a list of new curricula/courses/modules that should be developed	October, 2019	Sh.Narbaev, M.Reimov
12.	Creating a plan of modernization and development of curricula/courses/modules	October, 2019	I.Abdurahmanov
13.	Ensuring of communication with the labor market, potential employers and other organizations during implementation of the tasks	regularly	I.Abdurahmanov, Sh.Narbaev, M.Reimov
14.	Regular conducting of meetings, negotiations regarding the tasks	regularly	B.Mirzaev, I.Abdurahmanov
15.	Studying of teaching material received from the European consortium partners, summarizing, studying and disseminating of the information received on the trainings in the European universities	October, 2019	Z.Mamatkulov I.Aslanov, Kh.Khasanov, U.Mukhtorov
16.	Studying of national/international educational standards, as well as recommendation of Bologna process	November, 2019	B.Mirzaev, I.Abdurahmanov
17.	Studying of the latest (up to 5 years old) results of scientific research of foreign scientists	November, 2019 – March, 2020	Z.Mamatkulov I.Aslanov, Kh.Khasanov, U.Mukhtorov
18.	Implementation of modernization and development of curricula/courses/modules with participation of teaching staff that took part in the trainings in European universities	September, 2020	B.Mirzaev, I.Abdurahmanov, Sh.Narbaev, M.Reimov
19.	Feedback questionnaires from students/academics/stakeholders	November, 2020	M.Reimov, A.Khamraiev
20.	Organization and implementation of peer review	December, 2020	I.Abdurahmanov, M.Reimov
21.	Providing self monitoring reports	in each 6 months	I.Abdurahmanov, M.Reimov
22.	Providing presentation based on the report	in each 6 months	I.Abdurahmanov, M.Reimov

Coordinator of the project at TIIAME



I.Abdurahmanov

### Quality Assurance Indicators

We have chosen the following quality indicators for the peer review template:

1. Balance of student's workload: theory, practical work (not less than 50%), individual work, internship in a company, testing system
2. Application of ECTS by developing new modules/courses/curricula or modernizing the old ones
3. Usage of information about the latest (up to 5 years old) results of scientific research of foreign scientists in teaching materials
4. Usage of the university online educational platform during the educational process
5. Ability of students to influence the educational content or process. For instance, ability of students to choose a topic of reporting or practical works, to attend elective modules/courses.
6. Correspondence to the national norms (standards) of education
7. Consideration of a new module by the university council of experts with the participation of potential employers (chair meeting, meeting of educational council)

# Project activities & results

## WP3 Quality Plan

### Quality Group

#	Name, Surname	Occupation	Organization	Contact info (email)
1.	Bakhadir Mirzaev	Vice rector for Academic Affairs	TIIAME	bahadir.mirzaev@bk.ru
2.	Ilhom Abdurahmanov	PhD student, Department of Land Use, Faculty of Land Management	TIIAME	ilhom.isakovich@gmail.com
3.	Mamanbek Reimov	PhD student, EcoGIS Center, Faculty of Hydromelioration	TIIAME	maman1990@mail.ru
4.	Sharafatdin Narbaev	Dean, Faculty of Land Management	TIIAME	narbaev_sh@mail.ru
5.	Uzbekhon Mukhtorov	Senior teacher, Department of Geodesy and Geoinformatics	TIIAME	muxtorov-84@mail.ru
6.	Ilhomjon Aslanov	Assistant teacher, EcoGIS Center, Faculty of Hydromelioration	TIIAME	ilhomaslanov@gmail.com
7.	Zokhid Mamatkulov	PhD student in Geoinformatics, Faculty of Land Management	TIIAME	zohid3095@gmail.com
8.	Khojiakbar Khasanov	Assistant teacher, Department of Hydraulic structures, Faculty of Hydromelioration	TIIAME	kh.kh.khasanov@gmail.com
9.	Akbar Khamraliev	PhD student in Geoinformatics, Faculty of Land Management	TIIAME	khamraliyev@mail.ru
10.	Elbek Mamadaliev	MSc student in Precision Agriculture	TIIAME	
11.	Abdusoli Suyunov	Professor, Head of Department of Geodesy and Cartography (peer-reviewer)	Samarkand State Architecture and Civil Engineering Institute	suyunov_s@rambler.ru
12.	Utkir Shermanov	Specialist, Department of Computerization and Introduction of Geoinformation Systems (peer-reviewer)	"Geoinformcadastre" State Unitar Ent. (SUE)	shermanov.utkir@gmail.com
13.	Bakhodir Khakimov	PhD student in Land Management, Cadaster and Monitoring (Alumni)	Scientific Institute "Uzdaverloyiha"	mr.baxodir@mail.ru

# Project activities & results

## WP4 Dissemination & Exploitation

### Dissemination and Exploitation Plan

ERASMUS PLUS  
HIGHER EDUCATION CAPACITY BUILDING



Co-funded by the  
Erasmus+ Programme of the European Union

Erasmus+ Project  
New and Innovative Courses for Precision Agriculture  
(NICOPA)

#### WP4 – Dissemination and Exploitation

NICOPA strategy - plan  
for Dissemination, Sustainability and exploitation

Prepared by: ECM Space Technologies GmbH

#### Document control data

Document ref.	NICOPA-WP4-ECM_V01	
Revision:	Original	
Date of issue:	01/03/2019	
Author's name	A. Sterenharz/ECM	Status: Released

#### New and Innovative Courses for Precision Agriculture

NICOPA strategy - plan  
for Dissemination, Sustainability and exploitation

Effective dissemination is essential in order to make sure that the project and their effect will be visible. The NICOPA consortium will be disseminating the results of the project to multiple audiences, via different channels, at different intervals, etc. The aim of this dissemination strategy is to maximize the impact, visibility and credibility of the project. The objectives of the strategy are as follows:

- Design, develop and regularly update the NICOPA website
- Share information about the project and publish its findings via both traditional media (e.g. press relation) and digital media (e.g. social media)
- Transfer knowledge to industry about changes in academic area - the creation of new training materials, educational resources and the new curricula
- Support the development of a strategy for the exploitation.

##### 1. Strategy of activities

Dissemination & exploitation activities will address the following target groups and be organized following:

- Event-based dissemination. The project will organize a minimum of 3 annual dissemination workshops to inform and engage with the national academic communities. The Final project Conference will address a broader audience bringing together additionally policy makers, NGOs, education authorities, other stakeholders important to the best practice proliferation in the countries.

- Web-based dissemination. The project website will serve as a major interface and community building platform. In addition to being a repository to all tangible outcomes (training and teaching materials, webinars, results of the Feasibility Study, Repository entry point, methodological materials, reference materials, etc.), it will enable community activities (blogs, social networks interface, FAQ, etc.). On top of that, all partners will use other available web-based dissemination channels (own websites, mailing lists, community resources). All target groups will be addressed.

- Traditional dissemination. The project will produce the set of traditional promotional materials, it will publish major results in media (general public) and professional journals (academic community). Additionally, the project will organize several briefing meetings with policy making stakeholders to enable a multiplier effect.

2. Exploitation planning and exploitation of the results:  
- Exploration planning. The project will plan the exploitation (including how to bear running costs) of such principles as the availability of developed methodological materials, the Report, the website, etc. for the period of 3-5 years after the project end.

- Exploitation nature: public nature - openly available for re-use  
- Involving into practical aspects of dissemination/exploitation: involving external stakeholders in Evaluation trial and in developing practical tutorials during workshops to ease external exploitation and uptake.

- The executive part of the Memorandum will include agreed and supported measures aimed at exploitation of the project results (concluded at the Final Conference).

- Activities after the end of the project: continuing further dissemination (as described above), developing ideas for future cooperation, evaluating achievements and impact, contacting relevant media, contacting policy-makers on request, cooperating with the European Commission by providing useful inputs to its dissemination and exploitation efforts.

#### 2. Components of the dissemination and sustainability plan of the project

##### 2.1 Target groups:

###### 2.1.1 Specific audience (SA):

- Academic community: students, researchers, professors or other people involved in activities related to the project's topic and interested in following its development and outcomes;
- stakeholders, potential employers of graduates; experts or practitioners in the field (graduate engineers) and other interested parties;
- decision-makers at local, regional, national level;

###### 2.1.2 Generic audience (GA):

- People who may not have professional interests in the project, but that in terms of visibility result to be very important for the project.

###### 2.2 Channels:

- Traditional channels: local, regional, national press and media;
- Modern social networks, such as: Newsletter Facebook page, Twitter profile, Instagram; Research gate etc.

###### 3. Activities:

3.1 In order to regularly update information on the project web-site to assign a "blogger" from each university

3.2 Development of a publication plan by each of the universities (1 publication every 3 months) (SA)

3.3 Publication can be in local or national media channels (newspapers, information leaflets, brochures, other print media, TV etc.); on the Website of the university; social media networks (for instance, Facebook, Instagram, Twitter, etc.); every publication should contain a link to the project website [www.nicopa.eu](http://www.nicopa.eu); every publication (scan of it if it's printed or link to it in the Internet where this publication is situated) should be sent to [a.sterinkow@ecm-space.de](mailto:a.sterinkow@ecm-space.de)

3.4 Schedule of local sustainability activities and dissemination of the project results (one event every 3 months) each year of the project; the schedule should be developed by the regional coordinator; activities can be: local meetings of the partner universities, conferences, etc.

3.5 Development of a list of related universities and non-academic partners involved in the activities of the project; organizations interested in the project.

3.6 Development of a schedule of meetings for non-academic partners, such as other universities, organizations that might be interested in the project

3.7 Preparation of press releases of each of the meetings mentioned in 3.4 and 3.6.

### Dissemination Plan for 2018-2019 years

No	Dissemination event	Dissemination method	Period
1	Coordination meeting with Uzbek partner universities, NUU, Tashkent, Uzbekistan	Event-based	Nov., 2018
2	Project announcement on website of TIIAME, Tashkent, Uzbekistan	Web-based	Jan., 2019
3	Kick-off Meeting, TUB, Berlin, Germany	Event/web-based	March, 2019
4	Erasmus+ DSingIS Awareness building seminar, SamSACEI, Samarkand	Event/web-based	April, 2019
5	Republican scientific-practical conference on "Innovative approaches to land management and protection: problems and creative solutions", TIIAME, Tashkent, Uzbekistan	Event-based, web-based	May, 2019
6	Erasmus+ DSingIS Awareness building seminar, KSU, Nukus, Uzbekistan	Event/web-based	May, 2019
7	International Assembly 6th Plenary Meeting of Eurasia-Pacific Uninet, Vienna, Austria	Event/web-based	May, 2019
8	Result of training, TUB, Berlin, Germany	Web-based	Sep., 2019
9	Rectorate meeting, TIIAME, Tashkent, Uzbekistan	Event-based	Sep., 2019

# Project activities & results

## WP4 Dissemination & Exploitation

### Dissemination Plan for 2018-2019 years (cont.)

No	Dissemination event	Dissemination method	Period
10	GI Conference, SamSACEI, Samarkand, Uzbekistan	Event-based, web-based, traditional	Oct., 2019
11	Presentation about project and its achievements, seminar for the students, TIIAME, Tashkent, Uzbekistan	Event-based, web-based	Nov., 2019
12	Scientific committee meeting, TIIAME, Tashkent, Uzbekistan	Event-based	Nov., 2019
13	International GIS day, TIIAME, Tashkent, Uzbekistan	Event-based, web-based, traditional	Nov., 2019
14	Information about project achievements on Scientific and technical journal "Sustainable agriculture"	Traditional	Dec., 2019
15	Information about project related events, achievements, materials etc. on the web of: <ul style="list-style-type: none"><li>- Erasmus+ DSinGIS project (<a href="http://geoinformatics.uz/dsingis/">http://geoinformatics.uz/dsingis/</a>, <a href="http://dsingis.eu">http://dsingis.eu</a>);</li><li>- TIIAME (<a href="http://tiiame.uz">http://tiiame.uz</a>);</li><li>- Social media and channels (<a href="http://facebook.com">http://facebook.com</a>, <a href="http://telegram.org">http://telegram.org</a>);</li><li>- mass media (<a href="http://kun.uz">http://kun.uz</a>, <a href="http://uza.uz">http://uza.uz</a>, <a href="http://uzbekistan24.uz">http://uzbekistan24.uz</a>, <a href="http://daryo.uz">http://daryo.uz</a>)</li></ul>	Web-based	Regularly

# Project activities & results

## WP4 Dissemination & Exploitation

### Dissemination Plan for 2020 year

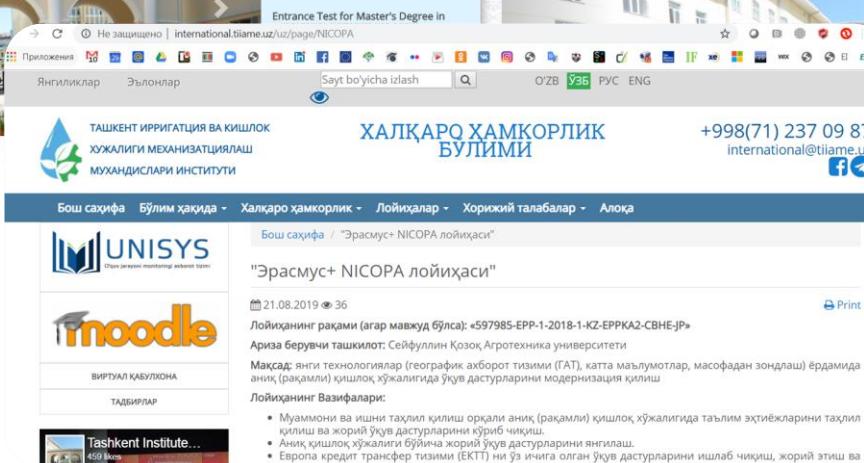
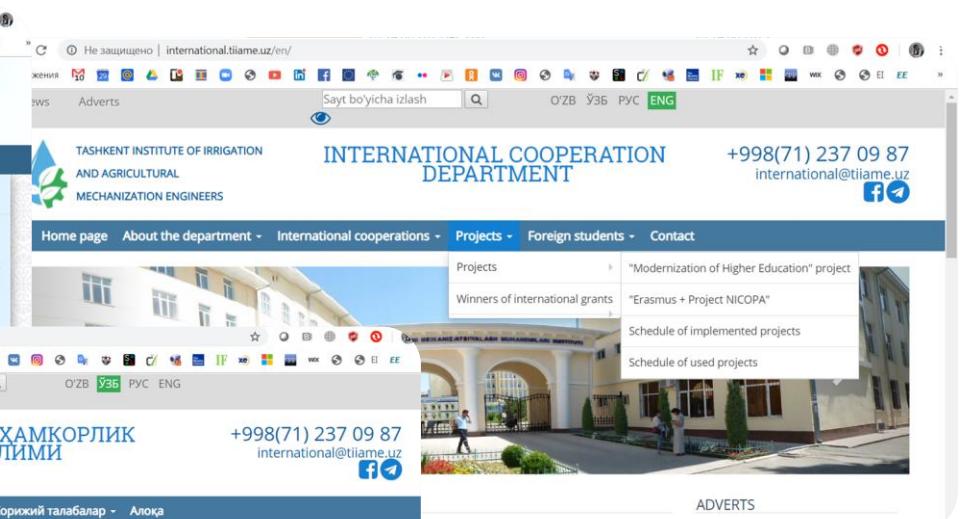
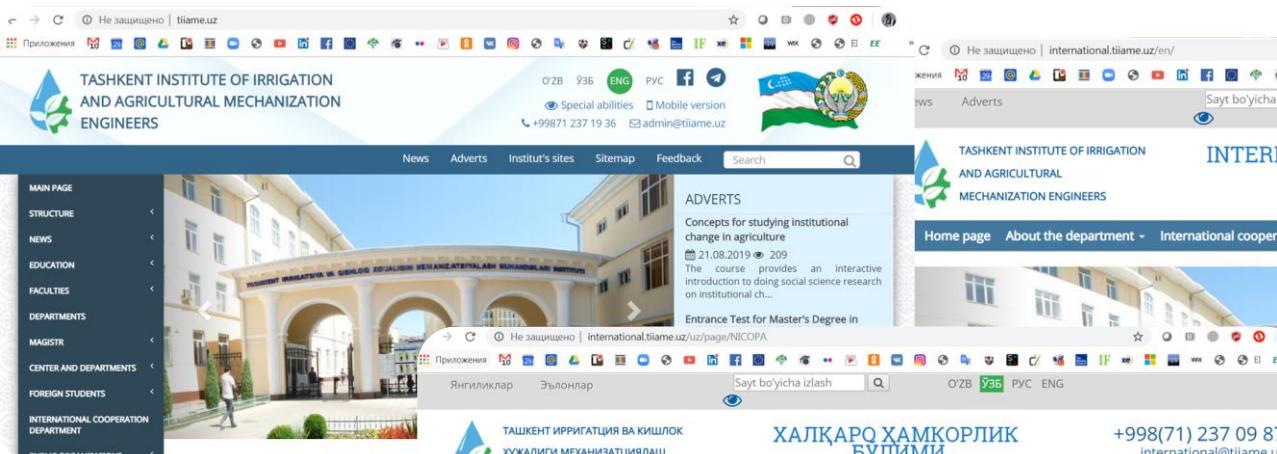
No	Dissemination event	Dissemination method	Period
1	Coordination meeting with Uzbek partner universities, TUIT, Tashkent, Uzbekistan	Event-based	March
2	International Earth Day, TIIAME, Tashkent, Uzbekistan	Event-based, web-based	April
3	Annual Republican XIX practical-scientific conference of young scientists, MSc and BSc students on topic "Modern problems of agriculture and water resources", TIIAME, Tashkent, Uzbekistan	Event-based, web-based	May
4	International GIS in Central Asia Conference – GISCA 2020	Event-based, web-based	June
	InterCarto.InterGIS 2020, DSinGIS GI 2020 Conference, TIIAME, Tashkent, Uzbekistan		
5	Result of Summer School, Czech University of Life Sciences Prague, Czech Republic	Web-based	July
6	Presentation about project and its achievements, seminar for the students, TIIAME, Tashkent, Uzbekistan	Event-based, web-based	September
7	Result of training, Agricultural University of Plovdiv, Bulgaria	Event-based, web-based	October
8	Erasmus+ Info Day	Event-based, web-based	October
9	International GIS day, TIIAME, Tashkent, Uzbekistan	Event-based, web-based, traditional	November
10	Information about project achievements on Scientific and technical journal “Sustainable agriculture”	Traditional	December
11	Information about project related events, achievements, materials etc. on the web of: - Erasmus+ DSinGIS project ( <a href="http://geoinformatics.uz/dsingis/">http://geoinformatics.uz/dsingis/</a> , <a href="http://dsingis.eu">http://dsingis.eu</a> ); - TIIAME ( <a href="http://tiiame.uz">http://tiiame.uz</a> ); - Social media and channels ( <a href="http://facebook.com">http://facebook.com</a> , <a href="http://telegram.org">http://telegram.org</a> ); - mass media ( <a href="http://kun.uz">http://kun.uz</a> , <a href="http://uza.uz">http://uza.uz</a> , <a href="http://uzbekistan24.uz">http://uzbekistan24.uz</a> , <a href="http://daryo.uz">http://daryo.uz</a> )	Web-based	Regularly

### Dissemination Plan for 2021-2022 year

No	Dissemination event	Dissemination method	Period
1	Results of MasterClasses held on January-March, 2021	Event-based, web-based	March
2	Presentation about project and its achievements, seminar for the students, TIIAME, Tashkent, Uzbekistan	Event-based, web-based	March
3	International Earth Day, TIIAME, Tashkent, Uzbekistan	Event-based, web-based	April
4	Annual Republican XX practical-scientific conference of young scientists, MSc and BSc students on topic "Modern problems of agriculture and water resources", TIIAME, Tashkent, Uzbekistan	Event-based, web-based	May
5	International GIS in Central Asia Conference – GISCA 2021, Online, Multi-Hub, Bishkek, Tashkent, Dushanbe	Event-based, web-based	May-June
6	Erasmus+ Info Day	Event-based, web-based	October
7	International Conference, International GIS day, TIIAME, Tashkent, Uzbekistan	Event-based, web-based, traditional	November
8	Information about project achievements on Scientific and technical journal “Sustainable agriculture” Information about project related events, achievements, materials etc. on the web of: <ul style="list-style-type: none"> <li>- Erasmus+ DSinGIS project (<a href="http://geoinformatics.uz/dsingis/">http://geoinformatics.uz/dsingis/</a>, <a href="http://dsingis.eu">http://dsingis.eu</a>);</li> <li>- TIIAME (<a href="http://tiiame.uz">http://tiiame.uz</a>);</li> <li>- Social media and channels (<a href="http://facebook.com">http://facebook.com</a>, <a href="http://telegram.org">http://telegram.org</a>);</li> <li>- mass media (<a href="http://kun.uz">http://kun.uz</a>, <a href="http://uza.uz">http://uza.uz</a>, <a href="http://uzbekistan24.uz">http://uzbekistan24.uz</a>, <a href="http://daryo.uz">http://daryo.uz</a>)</li> </ul>	Traditional	December
9		Web-based	Regularly

# Project activities & results

## WP4 Dissemination & Exploitation



A link to TIIAME website, where we posted information about the participation in the project and a link to the project webpage: <http://international.tiiame.uz/oz/page/NICOPA>

# Project activities & results

## WP4 Dissemination & Exploitation



Regional Meeting with UZ Partner Universities was held at NUU on November 20, 2018, Tashkent, Uzbekistan.

# Project activities & results

## WP4 Dissemination & Exploitation



Kick off meeting of the Erasmus+ NICOPA project was held at TUB on March 3-4, 2019, Berlin, Germany.

# Project activities & results

## WP4 Dissemination & Exploitation



Field monitoring meeting of the Erasmus+ NICOPA project was held at NUU on May 2, 2019, Tashkent, Uzbekistan.

# Project activities & results

## WP4 Dissemination & Exploitation



Presentation of the Project NICoPA by Mr.M.Reimov during Dissemination event of Erasmus+ DSinGIS: Doctoral Studies in Geoinformation Sciences" was held at Karakalpak State University on May 4, 2019, Nukus, Karakalpakstan, Uzbekistan.

# Project activities & results

## WP4 Dissemination & Exploitation



Presentation of the Project NICoPA by Mr.M.Reimov during conference dedicated to "22 April - International Earth Day" on April 21, 2019 at TIIAME, Tashkent, Uzbekistan.

# Project activities & results

## WP4 Dissemination & Exploitation



Presentation of the Project NICoPA by I.Abdurahmanov during the dissemination event on “The tasks carried out within the framework of the Erasmus+ DSinGIS project” was held at Samarkand State Architecture and Civil Engineering Institute named after Mirzo Ulugbek on April 9, 2019, Samarkand, Uzbekistan.

# Project activities & results

## WP4 Dissemination & Exploitation



Presentation of the Project NICoPA by I.Abdurahmanov during the 6<sup>th</sup> Plenary Meeting of Eurasia-Pacific Uninet on May 17, 2019, Vienna, Austria.

# Project activities & results

## WP4 Dissemination & Exploitation



Discussion of the Field monitoring meeting results of the Project NICoPA on August 4, 2019, NUU, Tashkent, Uzbekistan.

# Project activities & results

## WP4 Dissemination & Exploitation



Training within the Erasmus+ NICOPA project was held at TUB on August 17-31, 2019, Berlin, Germany.

# Project activities & results

## WP4 Dissemination & Exploitation



Presentation Erasmus+ NICOPA project on the Exhibition during the Erasmus+ Info day held at Tashkent State Technical University on October 4, 2019, Tashkent, Uzbekistan.

# Project activities & results

## WP4 Dissemination & Exploitation



Regional Meeting with UZ Partner Universities was held at TUIT on November, 2019, Tashkent, Uzbekistan.

# Project activities & results

## WP4 Dissemination & Exploitation

### The 8<sup>th</sup> Scientific committee meeting of TIIAME, November 28, 2019

#### PRESS RELEASE

##### 5<sup>th</sup> Academic council's meeting

November 28, 2019, TIIAME, Tashkent, Uzbekistan

##### Agenda of the meeting

- Analysis of the implementation of decrees, resolutions, orders of the President of the Republic of Uzbekistan, decisions of the Cabinet of Ministers, orders and decisions of the Board of the Ministry of Higher and Secondary Special Education, issues raised in appeals of individuals and legal entities and decisions of the Academic Council.
- Report on the spiritual and educational, moral and educational work carried out at the Institute in the 2018-2019 academic year and the planned spiritual and educational work for the 2019-2020 academic year, as well as information of the working group.
- Information on the conduct of elections in accordance with the "Regulations on the procedure for hiring teachers in higher education institutions".
- Information on the review of documents of pedagogical staff applying for a degree and recommendation for a degree
- Report on the educational and scientific work carried out at the departments of the faculty "Hydromelioration" and the report on the action plan for their further development and information of the working group.
- Various issues:
  - Project Erasmus+ NICoPA, aims and activities.

##### Participants

About 60 participants including 53 permanent members of the Scientific Committee other invited people took part in the meeting.

##### Contacts

Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIIAME)

str.Kary Niyazy, 39, Tashkent 100000, Uzbekistan

Email: [admin@tiiame.uz](mailto:admin@tiiame.uz)

Phone: +998712371909, Fax: +998712373879



Тошкент иригация ва кишлек хўжалигинин механизацияли мухандислари институти

Илмий Конғаш аъзолари йўнаганининг 2019-2020 ўкув йилидаги

5 - Илмий Конғаш йўнаганин  
МАЖЛIS БАЕНИ

2019 йил 28 ноябрь

Тошкент ш.

Катнашдилар: Илмий Конғашнинг 53 аъзоси ва тақлиф этилганлар (рўйхат илова  
килинади).

##### 6. ТУРДИ МАСАЛАЛАР

Роанс Б.Мирзаев – Кун тартибидаги б-масалада бўйича, юни турли масалалар тўгрисида  
мазлумот бериш учун сўз Илмий конғиоти Юлчизов Дауронбек Гуламовича, марҳамат.

##### 6.20. ЭШТИЛДИ:

Роанс Б.Мирзаев – Кун тартибидаги б-масалада бўйича бирча масалалар кўриб бўлниди. Энди  
навбатдан ташаккир бўнга масалада институтда Erasmus+ "DSinGIS" ва "NICOPA" халкаро  
лойихалар бўйича эришилган натижалар тўгрисида хисобот бериш учун сўз,  
“Геоинформатика” йўнаганинда 1-босқич таъчиқ докторантни Абдураҳмонов Илхом Исаковичга,  
марҳамат.

П.Абдураҳмонов – Институтда Erasmus+ "DSinGIS" ва "NICOPA" халкаро лойихалар  
бўйича эришилган натижалар тўгрисида хисобот берди. (Хисобот матнни иловга килинади).

Роанс Б.Мирзаев – Кўртилаган масалада юзандан кимда қандай саволлар бор? Марҳамат.  
А.Раджабов - Институтда лойиха доирасида ташкил этилаётган “GISCA 2020” Scopus  
базасига кирилтган халкаро конференциясида маколаларни топшириш талабларини  
кареди олсан бўлади, маколаларни рус тилида хам топшириш бўладими?

П.Абдураҳмонов – 2020 йил июн ойидаги институт томонидан Erasmus+ DSinGIS  
войнисида доирасида Австралия-Марказий Осиё GAT Маркази (ACA-GIScience) хамда  
Венгриядаги Ошиба Университетининг Alba Regia Техника факультети билан биргаликда  
ташвишшилаштираётган “GISCA 2020” Scopus базасига кирилтган халкаро  
конференциясида маколаларни топшириш талаби институтнинг веб-сайтига  
жойлаштирилган. Маколалар фахтина инглиз тилида кабул килинади.

Роанс Б.Мирзаев – Маърузачиларга яна саволлар борми? Бонса саволлар бўлмаса,  
карор кисмени тасдиқлаб беришларнинг сўрайман. Қаршилар – йўқ, бетаграфлар – йўқ.  
Роҳмат.

##### 6.20. КАРОР КИЛИНДИ:

1. “Геоинформатика” йўнаганинда 1-босқич таъчиқ докторантни И.Абдураҳмононинг  
Институтда Erasmus+ "DSinGIS" ва "NICOPA" халкаро лойихаларда бўйича эришилган  
натижалар тўгрисида берган хисоботи ахборот учун кабул килинини.

Институт Илмий Конғашини ролини  
заруратида оиди  
У.Умурзаков  
  
Институт Илмий Конғашини котиби  
Д.Юлчизов

# Project activities & results

## WP4 Dissemination & Exploitation



Presentation about the Project NICoPA done by Ilhom Abdurahmanov during the introduction meeting with the staff and students at the Obuda University on February 18, 2020

# Project activities & results

## WP4 Dissemination & Exploitation

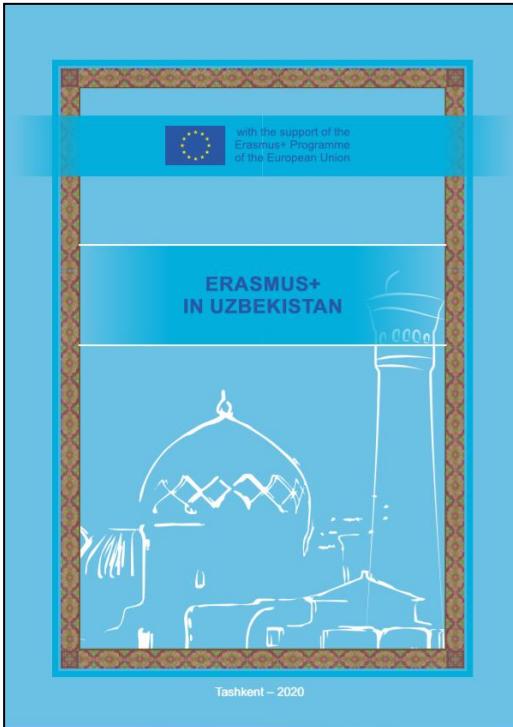


Coordination meeting with Uzbek partner universities, TUIT, Tashkent, Uzbekistan, 04 March, 2020

# Project activities & results

## WP4 Dissemination & Exploitation

- Paper with the title “Project Management, Curriculum and Achievements of the NICoPA project” in the proceedings “Erasmus+ in Uzbekistan”: <http://www.erasmusplus.uz/images/shared/file/ERASMUS+ IN UZB 2020 print.pdf> (page#119)



Then Anvar Nizamov, module leader in Team University, spoke on “Training and development as a part of Human resource management”, and Anvar Shirinov gave a lecture on “Recent changes in labor legislation in Uzbekistan”.

Topics were discussed by speakers and participants of the seminar.

The seminar was organized at a high level and was widely disseminated through social networks and the media (<https://buxdu.uz/index.php/en/activity-en/international-cooperations/active-project/2757-talent-project>, <https://youm.uz/IW3bRuvVA>).

In conclusion, the project results will serve to satisfy public and civil organizations with qualified HR managers soon. In this regard, local organizations are trying to prepare their HR managers according to the program formulated by the TALENT project team.

### Project Management, Curriculum and Achievements of the NICoPA project

*Arnold Sterenharz<sup>1</sup>, Elena Engorn<sup>1</sup>  
Abdumanap Nosirov<sup>2\*</sup>, Komil Tashev<sup>2</sup>, Temurbek Kuchkorov<sup>2</sup>, Ilhom  
Abdurahmanov<sup>2</sup>*

<sup>1</sup> Technische Universität Berlin (TUB), Berlin, Germany,  
<sup>2</sup>Tashkent University of Information Technologies (TUIT), Tashkent,  
Uzbekistan,

<sup>2</sup>National University of Uzbekistan (NUU), Tashkent, Uzbekistan,  
Tashkent Institute of Irrigation and Agricultural Mechanization Engineers,  
Tashkent, Uzbekistan

\*Corresponding author: ilhom.isakovich@gmail.com

**Abstract:** The aim of the Erasmus+ project “NICoPA: New and Innovative Course for Precision Agriculture” is to modernize curricula in precision agriculture using new technologies such as Geographic Information System (GIS), Big Data and Remote Sensing. Project is addressed to improve the quality of higher education and enhance its relevance for the labor market and society, the level of competencies and skills in HEIs by developing new and innovative education programs, support the modernization and internationalization of the HE in precision agriculture in the targeted Universities in Kazakhstan, Uzbekistan and Turkmenistan through innovation of two cycles curricula. The information about the project management, curriculum and output activities done within the project NICoPA are given in this paper.

Based on the obtained skills of NICoPA project and experience of EU universities, the following new BSc and MSc programs have been established and they have started admission of students from the 2020/2021 academic year:

- Geoinformation systems and technologies, MSc Program, Tashkent university of information technologies named after Muhammad al-Khwarizmi;
- Innovative technologies in Remote Sensing of Land Resources, BSc Program, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers.

Prospective BSc and MSc students will study on modern curriculum which is developed in collaboration with highly experienced European partner universities (Technical University of Berlin, Agricultural University Plovdiv, Czech University of Life Sciences Prague). Specialization modules that are Geoinformation systems, Remote sensing technologies and applications, SENTINEL-1-2-3 imagery processing, Computer vision, Web technologies for geo-portal, geo-services and geo-analytical systems, Precision agriculture basics, Artificial intelligence in geoinformation systems, WebGIS, Digital Photogrammetry, 3D Modelling in GIS, Space Geodesy, Geospatial Data Visualization, Spatial Data Analysis, Decoding Spatial Images and other subjects are included in the curriculum.

According to the statistics of the Ministry of Higher and Secondary Specialized Education of the Republic of Uzbekistan: 19 applicants with a bachelor degree submitted their documents to continue the study in MSc program in Geoinformation systems and technologies, and 3 of them have been accepted to study in this program at TUIT; more than 300 applicants submitted their documents to study in BSc program in Innovative technologies in Remote Sensing of Land Resources, and 29 of them have been accepted to study in this program at TIIAME. It is planned opening the new PAL (Precision Agriculture Lab) laboratory and VCR (Virtual ClassRoom) for BSc and MSc students to study modules and conduct their researches effectively using modern hardware and software tools.

To complete BSc program in Innovative technologies in Remote Sensing of Land Resources students should score 240 ECTS, and to get MSc degree in Geoinformation systems and technologies, they should score 120 ECTS at all. Credits are divided into the three modules that are general (21%), major (48%) and elective (31%) subjects in MSc program.

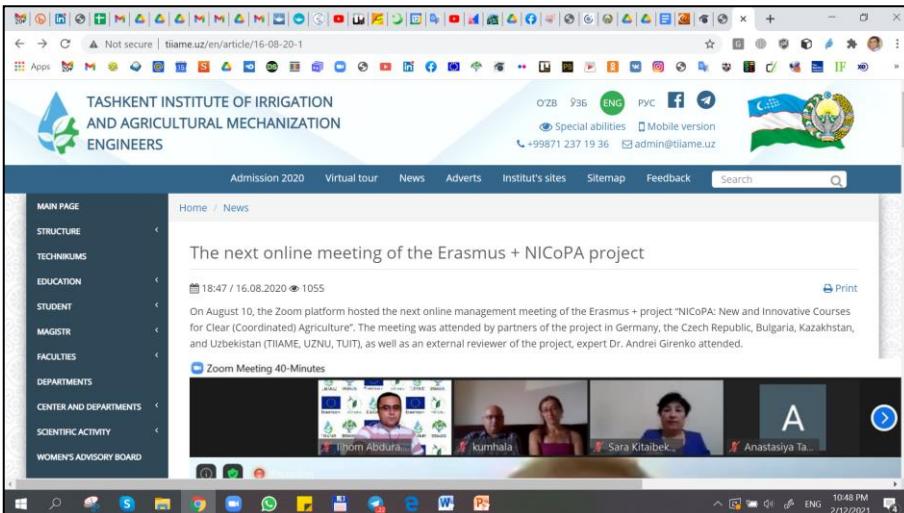
### References

1. Erasmus+ CBHE Project “DSinGIS: Doctoral Studies in Geoinformation Sciences” (<http://www.dsingis.eu>).
2. Erasmus+ CBHE Project “Environmental Protection In Central Asia (EPCA): Disaster Risk Management With Spatial Methods”, <http://www.eu-ePCA.eu/>.
3. Erasmus+ CBHE Project “NICoPA: New and Innovative courses for Precision Agriculture”, <http://www.nicopa.eu>.

# Project activities & results

## WP4 Dissemination & Exploitation

<http://tiiame.uz/en/article/16-08-20-1>



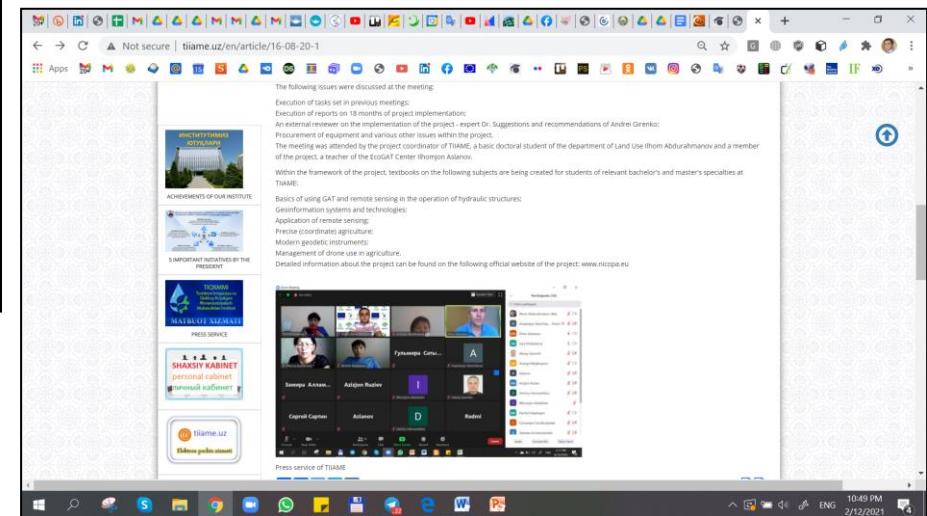
The next online meeting of the Erasmus + Nicopa project

18:47 / 16.08.2020 1055

On August 10, the Zoom platform hosted the next online management meeting of the Erasmus + project "Nicopa: New and Innovative Courses for Clear (Coordinated) Agriculture". The meeting was attended by partners of the project in Germany, the Czech Republic, Bulgaria, Kazakhstan, and Uzbekistan (TIIAME, UZNU, TUIT), as well as an external reviewer of the project, expert Dr. Andrei Girennik attended.

Zoom Meeting 40-Minutes

Ilhom Abdurahmonov, kumhalal, Sara Kitaibek, Anastasiya Tashkina



The following issues were discussed at the meeting:

- Execution of tasks set in previous meetings;
- Execution of reports on 18 months of project implementation;
- An evaluation of the results obtained in the framework of the project; expert Dr. Suggestions and recommendations of Andrei Girennik;
- Procurement of equipment and various other issues within the project;

The meeting was attended by the project coordinator of TIIAME, a basic doctoral student of the department of Land Use Ilhom Abdurahmanov and a member of the project, a teacher of the EcogAT Center Ihsomjon Alisov.

Within the framework of the project, textbooks on the following subjects are being created for students of relevant bachelor's and master's specialties at TIIAME:

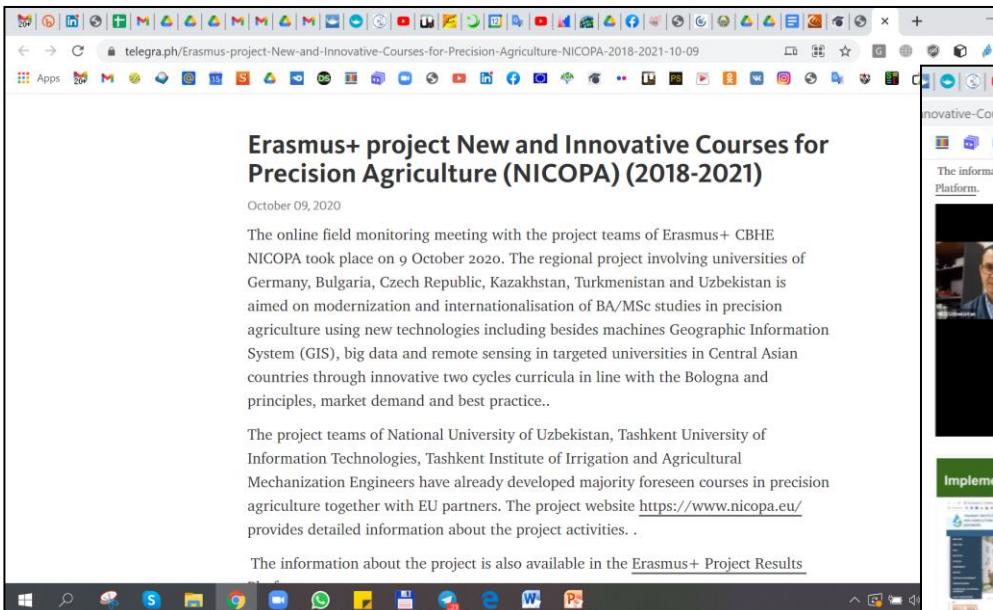
- Basics of using GAT and remote sensing in the operation of hydraulic structures;
- Geoinformation systems and technologies;
- Application of modern technologies in agriculture;
- Precise (coordinated) agriculture;
- Modern geodetic instruments;
- Management of drone use in agriculture.

Detailed information about the project can be found on the following official website of the project: [www.nicopa.eu](http://www.nicopa.eu)

# Project activities & results

## WP4 Dissemination & Exploitation

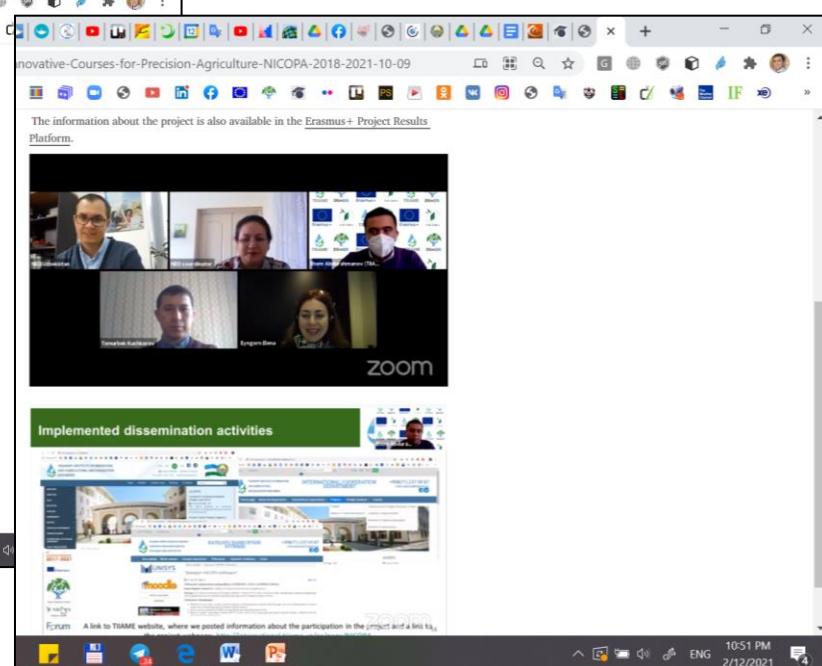
<https://telegra.ph/Erasmus-project-New-and-Innovative-Courses-for-Precision-Agriculture-NICOPA-2018-2021-10-09>



The online field monitoring meeting with the project teams of Erasmus+ CBHE NICOPA took place on 9 October 2020. The regional project involving universities of Germany, Bulgaria, Czech Republic, Kazakhstan, Turkmenistan and Uzbekistan is aimed on modernization and internationalisation of BA/MSC studies in precision agriculture using new technologies including besides machines Geographic Information System (GIS), big data and remote sensing in targeted universities in Central Asian countries through innovative two cycles curricula in line with the Bologna and principles, market demand and best practice..

The project teams of National University of Uzbekistan, Tashkent University of Information Technologies, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers have already developed majority foreseen courses in precision agriculture together with EU partners. The project website <https://www.nicopa.eu/> provides detailed information about the project activities .

The information about the project is also available in the Erasmus+ Project Results



The information about the project is also available in the [Erasmus+ Project Results Platform](#).

**Implemented dissemination activities**

A link to TIIAME website, where we posted information about the participation in the project and activities.

# Project activities & results

## WP4 Dissemination & Exploitation

### 'GIS IN CENTRAL ASIA' CONFERENCE – GISCA 2020, "Applied Geoinformatics for Sustainable Development", Online, June 1-2, 2020

#### PRESS RELEASE

'GIS IN CENTRAL ASIA' CONFERENCE – GISCA 2020  
"Applied Geoinformatics for Sustainable Development"

Online, June 1-2, 2020

#### GISCA Conferences

Geographic Information Science and Technologies have evolved into a key instrument for managing our societies, environments and infrastructures, as well as individuals' daily lives. Continued success of this development depends on cooperation across disciplines, open information policies and a highly educated workforce.

The GISCA series of conferences aims at building a Central Asian network of GIS professionals supporting the sustained development of this region into an environmentally friendly, secure and prosperous society. It serves as a platform for communication, collaboration and learning in Geographic Information Science, GIS and related sciences and technologies. GISCA was launched by the Austria-Central Asia Centre for GIScience in 2005.

The main objectives of this English language conference are to bring together geospatially oriented academics, researchers and practitioners in the Central Asian countries and encourage international cooperation and knowledge exchange in GIS education.

#### GISCA 2020

In 2020, GISCA is focused on the theme "Applied Geoinformatics for Sustainable Development". Geographic Information Science as a conceptual foundation, Geoinformatics as the methodology and GIS as software technologies are powerful instruments for linking information across different sources by location. This is exactly what is needed to successfully manage our environments and natural resources, our economies and ultimately our societies.

GISCA 2020 is being organized by the Austria-Central Asia Centre for GIScience (ACA\*GIScience) jointly with the Erasmus+ DSinGIS project led by the Alba Regia Technical Faculty, Óbuda University, Hungary and the Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIIAME).

GISCA 2020 is supported by Trimble International, GeoTwo and the Austrian Academy of Sciences. The conference originally was planned to be held in Tashkent, Uzbekistan, but due to current circumstances has been scheduled entirely online as a virtual conference on June 1-2, 2020.

The GISCA conference series and its publications are managed by ACA\*GIScience supported by Eurasia-Pacific Uninet and the Austrian Academy of Sciences' Commission for GIScience.

#### Key topics of the GISCA 2020

Key themes (additional themes and sessions are welcome) of the conference are:  
• GIS for regional Sustainable development



- Development of Spatial Data Infrastructure
- GIS for management in the field of environmental protection
- GIS for the prevention and elimination of emergency situations
- GIS for water resources management
- GIS in agriculture
- New trends and technologies in geodesy, cadastre and land management
- Professional and further education in the field of geoinformatics
- GIS in Hydrotechnical Construction and Melioration
- GIS in Mechanization and Automatization of Agriculture and Water Resources.

#### Participants

Participants: Erasmus+ DSinGIS and NICOPA Project Partners (staff and students), BSc, MSc and PhD students in GIS related specialties, GIS related organisations and companies.

#### Organizers

- Austria-Central Asia Centre for GIScience (ACA\*GIScience);
- Erasmus+ DSinGIS project;
- Universität Salzburg, Austria;
- Alba Regia Technical Faculty, Óbuda University, Hungary;
- Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIIAME).

#### Contacts

Contact to TIIAME – Local organizers (Uzbekistan)  
Conference secretary: **Mr. Ilhom Abdurahmanov**, [gisca2020@aca-giscience.org](mailto:gisca2020@aca-giscience.org)

Tel.: +998712371909, Fax: +998712373879

Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIIAME)  
Kory Niyoziy Str. 39, Tashkent 100000, UZBEKISTAN

Contact to ACA\*GIScience (Kyrgyzstan):

**Dr. Akybek Chymyrav**, [akybek.chymyrav@aca-giscience.org](mailto:akybek.chymyrav@aca-giscience.org)

Tel.: +996-312-545602, Fax: +996-312-545136

Kyrgyz State University of Construction, Transport and Architecture (KSUCTA)  
Maldybaev Str. 34 "b", Bishkek 720020, Kyrgyzstan

Contact to GISCA coordinator (Austria):

**Academician Prof. Josef Strobl**, [Josef.Strobl@sbg.ac.at](mailto:Josef.Strobl@sbg.ac.at)

Department of Geoinformatics, University of Salzburg &  
GIScience Commission of the Austrian Academy of Sciences

# Project activities & results

## WP4 Dissemination & Exploitation

### IX annual International Scientific and Practical Conference, "Forest ecosystems in the conditions of climate change", Online, September 15-16, 2020

#### PRESS RELEASE

##### IX annual International Scientific and Practical Conference

##### "Forest ecosystems in the conditions of climate change"

Online, September 15-16, 2020

#### About the Conference

Volga State University of Technology is organizing the IX annual Scientific and Practical Conference, which will be held remotely on the Zoom platform. During the event, topical issues of scientific research and practice, monitoring and remote assessment of forest management, international projects and technologies in the field of forest ecosystems in a changing climate will be discussed. The conference will bring researchers to address the issues of reforestation, monitoring and remote sensing of forest management, to explore and discuss opportunities and strengths related to forest ecosystems in the conditions of climate change. Several individual sessions of the event will be informed by several keynote speakers with extensive expertise in the field. Contributions are welcome on any aspect of modern forest science, including focused empirical, theoretical and practical contributions to forest management in the conditions of climate change. The conference is held in the framework of two international projects SUFOGIS (Erasmus+) and GEMOECO (BRICS).

#### Key topics of the Conference

Themes of presentations:

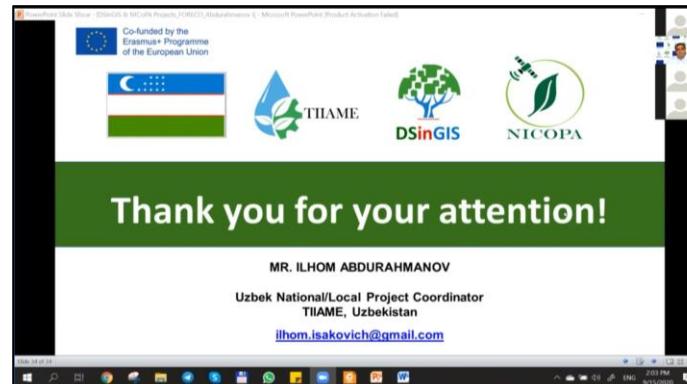
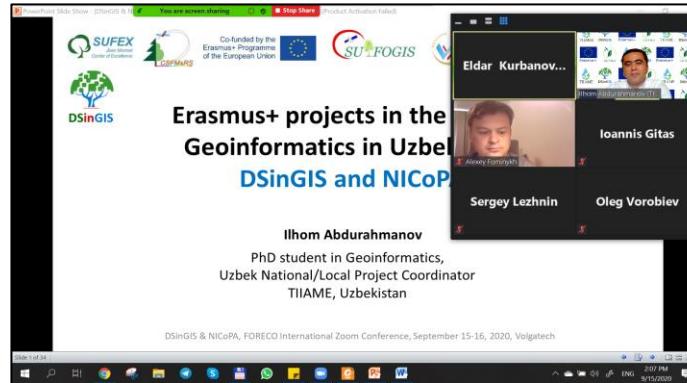
1. Biological productivity of forests.
2. Assessment of ecosystem disturbances.
3. Technologies for artificial reforestation.
4. The ecological role of forests.
5. Forest inventory and planning.
6. GIS and remote monitoring of ecosystems.
7. Forest conservation and protection.

#### Conference Publication

The conference proceedings are considered for publication in the annual Compendium "Forest Ecosystems under Climate Change: Biological Productivity and Remote Monitoring". Manuscripts are also welcomed for submissions to the Special Issue of Journal of Remote Sensing "Remote Sensing of Burnt Area Monitoring".

#### Organizers

Jean Monnet Center of Excellence, Center for Sustainable Forest Management and Remote Sensing.



**INTERNATIONAL ZOOM CONFERENCE**

**"Forest ecosystems in the conditions of climate change: biological productivity and remote sensing"**

**15-16 September 2020**

**Programme**

**15 September**

8:00 - 9:40 Plenary session 1: Official opening of the conference. Welcome from Volgotech.  
CET (Central European Time) Please use this link to schedule your time: <https://time.is/CET>

**Chair:** Abraham Thomas (Council for Geoscience, South Africa)

7:50 - 8:00 Opening and welcome.

8:00 - 8:25 Extraction and modeling of main trunk of individual *Pinus densata* based on point cloud data  
Jiapeng Zhang, Jinhong Wang, Guangjie Liu (Yunnan Normal University, China)

8:25 - 8:50 Regional-Scale Soil Organic Matter Estimation Based on a Geographic Detector Model using Landsat Data, Pingtan Island, Fujian, China  
Junyan Fang, Xiaomei Li, Jingning Sha, Jiali Shang, Taifeng Dong, Ying-Chih Su, Na He, Yun Wu (Fujian Normal University)

8:50 - 9:15 Mapping of land use / land cover of KOSH region for the years 2019 & 2020 using Sentinel-2 data  
Abraham Thomas (Council for Geoscience, South Africa)

9:15 - 9:40 Estimation of Land surface temperature and drought indices for the KOSH region during summer and spring seasons of year 2019  
Noherino Didimash, Abraham Thomas (Council for Geoscience, South Africa)

9:40 - 10:00 Break

10:00 - 12:30 Plenary session 2.

**Chair:** Eldar Kurbanov (Volgotech)

Forest Phenological Trends in the Middle and High Latitude of the Northern Hemisphere  
Using GIMMS NDVI3g Phenology Data  
Huang Jingke, Zhejiang University (China)

Ecological Vulnerability Assessment Based on SRP Model - Taking Pingtan in Fujian Province as an Example  
Jingming Sha (China)

On-the-fly land cover mapping using machine learning with multispectral satellite imagery on Google Earth Engine  
Stefanos Papadimitriou, AUTH (Greece)

Combining remote sensing and national forest inventory data for large scale forest structure assessment  
Christof Pacher, BOKU (Austria)

Erasmus+ projects in the field of Geoinformatics in Uzbekistan: DSinGIS and NICoPA  
Ilhom Abdurahmanov, TIIAME (Uzbekistan)

Questions, discussion

# Project activities & results

## WP4 Dissemination & Exploitation

### Online field monitoring meeting with NEO UZ, October 9, 2020

Co-funded by the Erasmus+ Programme of the European Union

ERASMUS+ Capacity Building in the Field of Higher Education (CBHE)

**NICOPA PROJECT**  
«New and Innovative Courses for Precision Agriculture» (NICOPA)  
597985-EPP-1-2018-1-KZ-EPPKA2-CBHE-JP

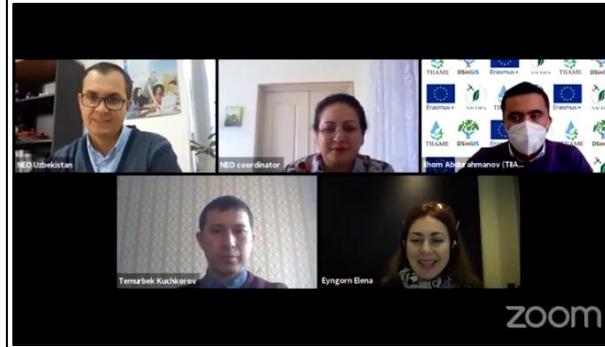
Advisory monitoring meeting (Online)

9 October 2020 at 14.30 (Tashkent time)

Online communication details: <https://us02web.zoom.us/j/81960206603>

**MEETING AGENDA**

14:30-14:40	Opening speech	Raima Shirinova, Vice-rector for International Relations of NUU
14:40-14:50	Objectives of the Advisory Monitoring visit	Aziza Abdurakhmanova, NEO coordinator Kudratxon Bakhadirov, NEO expert
14:50-15:20	Activities performed of NICOPA project in TIIAME	Ilhom Abdurahmanov, Institutional coordinator of NICOPA project
15:20-15:50	Activities performed of NICOPA project in TUIT	Temurbek Kuchkorov, Institutional coordinator of NICOPA project
15:50-16:20	Activities performed of NICOPA project in NUU and, in general, in Uzbekistan	Abdumanap Nasirov, National coordinator of NICOPA project
16:20-16:35	On the progress of work on the NICOPA project in partner universities of Uzbekistan	Anastasiya Tatarintseva - Project Manager, EXOLAUNCH GmbH, Berlin, Germany, Sara Kitaibekova - Project coordinator, S. Seifullin KATU, Kazakhstan
16:35-17:00	Discussion	All participants
17:00-17:10	Conclusions and preliminary recommendations of the monitoring	Aziza Abdurakhmanova, NEO coordinator Kudratxon Bakhadirov, NEO expert



**Implemented dissemination activities**

A link to TIIAME website, where we posted information about the participation in the project and a link to the project webpage: <http://international.tiiame.uz/page/NICOPA>

Co-funded by the Erasmus+ Programme of the European Union

ERASMUS+ Capacity Building in the Field of Higher Education (CBHE)

**NICOPA PROJECT**  
«New and Innovative Courses for Precision Agriculture» (NICOPA)  
597985-EPP-1-2018-1-KZ-EPPKA2-CBHE-JP

Advisory monitoring meeting (Online)  
9 October 2020 at 14.30 (Tashkent time)

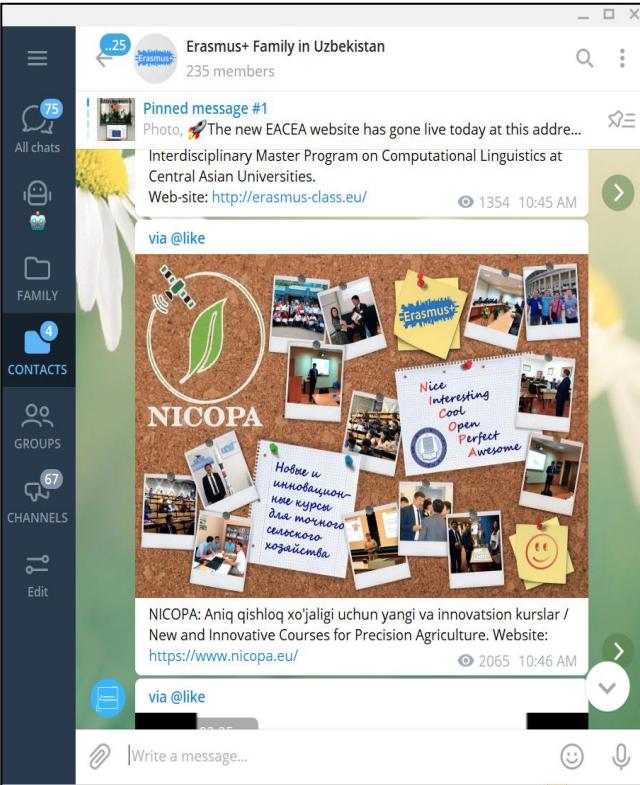
**List of participants**

Organisation	Name, surname, position, email of authorized representatives
National University of Uzbekistan	Raima Shirinova, Vice-rector for International Relations of NUU <a href="mailto:r.shirinova@nuu.uz">r.shirinova@nuu.uz</a> Abdumanap Nasirov, Associate professor, National coordinator, <a href="mailto:a.nasirov1962@mail.ru">a.nasirov1962@mail.ru</a> Ilhomjon Abdullaev, Senior Lecturer, Local Manager, <a href="mailto:ilhomjon.abdullaev@gmail.com">ilhomjon.abdullaev@gmail.com</a> Pavel Parchinskij, Associate professor, project member, <a href="mailto:pavelphys@mail.ru">pavelphys@mail.ru</a> Azizjon Ruziev, Senior Lecturer, project member, <a href="mailto:azizjon.ruziev84@mail.com">azizjon.ruziev84@mail.com</a> Andrey Nebsay, Blogger of the project, <a href="mailto:nebsay-andrey@yandex.ru">nebsay-andrey@yandex.ru</a>
Tashkent University of Information Technologies	Temurbek Kuchkorov, Associate professor, Local coordinator <a href="mailto:timurkutu@gmail.com">timurkutu@gmail.com</a> Zamira Allamurotova, Lecturer, project member, <a href="mailto:zamira_14@mail.ru">zamira_14@mail.ru</a> Mexridin Raximov, Associate professor, project member, <a href="mailto:raximov022@gmail.com">raximov022@gmail.com</a> Nozima Atadjanova, Teacher assistant, project member, <a href="mailto:nozimatajadanova@gmail.com">nozimatajadanova@gmail.com</a>
Tashkent Institute of Irrigation and Agricultural Mechanization Engineers	Ilhom Abdurahmanov, Researcher, Local Coordinator, <a href="mailto:ilhom_isakovich@gmail.com">ilhom_isakovich@gmail.com</a> Mamabek Reimov, Researcher, Local Manager, <a href="mailto:maman1990@mail.ru">maman1990@mail.ru</a> Zokhid Mamatkulov, Researcher, project member, <a href="mailto:zokhid3095@gmail.com">zokhid3095@gmail.com</a> Ilhomjon Aslanov, Assistant Professor, project member, <a href="mailto:ilhomjonaslanov@gmail.com">ilhomjonaslanov@gmail.com</a>
EXOLAUNCH GmbH	Anastasiya Tatarintseva, Project Manager <a href="mailto:anastasiya@exolaunch.com">anastasiya@exolaunch.com</a>
S. Seifullin KATU, Kazakhstan	Sara Kitaibekova, Project coordinator, <a href="mailto:saraorzbek@mail.ru">saraorzbek@mail.ru</a>
National Erasmus+ Office (NEO) in Uzbekistan	Aziza Abdurakhmanova, NEO coordinator, <a href="mailto:coordinator@erasmusplus.uz">coordinator@erasmusplus.uz</a> Kudratxon Bakhadirov, NEO expert, <a href="mailto:expert@erasmusplus.uz">expert@erasmusplus.uz</a> Gulshoda Karibaeva, NEO project manager, <a href="mailto:neo@erasmusplus.uz">neo@erasmusplus.uz</a>

# Project activities & results

## WP4 Dissemination & Exploitation

Erasmus+ Info Week, online, on Telegram group, October 12-17, 2020



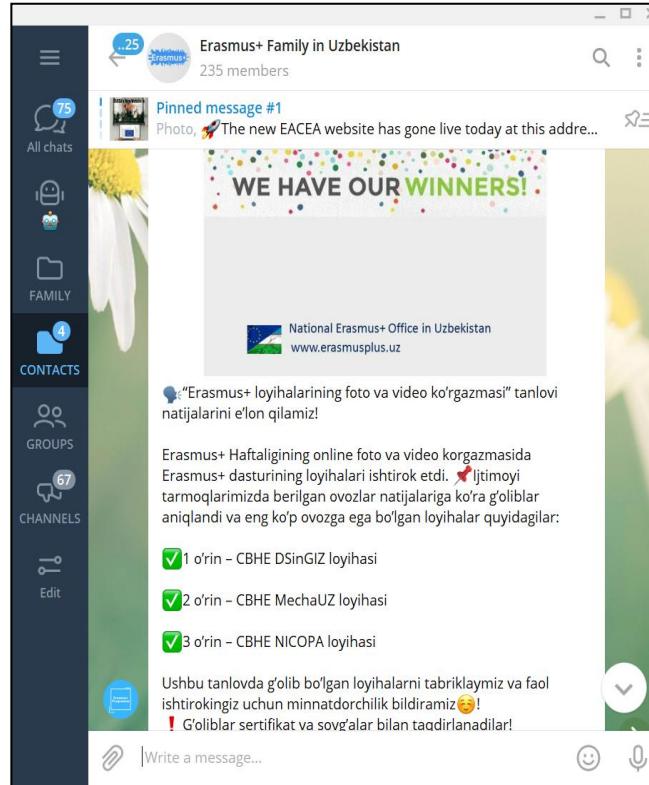
Erasmus+ Family in Uzbekistan  
235 members

Pinned message #1  
Photo, 📸 The new EACEA website has gone live today at this addre...  
Interdisciplinary Master Program on Computational Linguistics at Central Asian Universities.  
Web-site: <http://erasmus-class.eu/>

via @like

NICOPA: Aniq qishloq xo'jaligi uchun yangi va innovatsion kurslar / New and Innovative Courses for Precision Agriculture. Website: <https://www.nicopa.eu/>

Write a message...



Erasmus+ Family in Uzbekistan  
235 members

Pinned message #1  
Photo, 📸 The new EACEA website has gone live today at this addre...  
**WE HAVE OUR WINNERS!**

National Erasmus+ Office in Uzbekistan  
[www.erasmusplus.uz](http://www.erasmusplus.uz)

“Erasmus+ loyihalarining foto va video ko'rgazmasi” tanlovi natijalarini e'on qilamiz!

Erasmus+ Haftaligining online foto va video korgazmasida Erasmus+ dasturining loyihalari ishtiroy etdi. ⚡ Ijtimoiy tarmoqlarimizda berilgan ovozlar natijalariga ko'ra g'oliblar aniqlandi va eng ko'p ovozga ega bo'lgan loyihalar quyidagilar:

- ✓ 1 o'rinn - CBHE DSinGIZ loyihasi
- ✓ 2 o'rinn - CBHE MechaUZ loyihasi
- ✓ 3 o'rinn - CBHE NICOPA loyihasi

Ushbu tanlovda g'olib bo'lgan loyihalarni tabriklaymiz va faol ishtirokingiz uchun minnatdorchilik bildiramiz! 😊!  
! G'oliblar sertifikat va sovg'alar bilan taqdirlanadilar!

Write a message...



# Project activities & results

## WP4 Dissemination & Exploitation

### ANNUAL INTERNATIONAL SCIENTIFIC CONFERENCE ON GEOINFORMATICS – GI 2021 “Supporting sustainable development by GIST”, Online/onsite, January 27-29, 2021



PowerPoint Slide Show - [NIcOPA Project\_GI2021\_Abdurahmanov II] - Microsoft PowerPoint (Product Activation Failed)

ANNUAL INTERNATIONAL SCIENTIFIC CONFERENCE ON GEOINFORMATICS – GI 2021  
27-29 January 2021  
ONLINE/ONSITE

“Supporting sustainable development by GIST”

NICOPA: New and Innovative Courses for Precision Agriculture

Ilhom ABDURAHMANOV  
DSinGIS/NICOPA National/Local Project Coordinator

Co-funded by the Erasmus+ Programme of the European Union

NIcOPA

Erasmus+ DSinGIS

Óbuda University

UNIVERSITY of SALZBURG

PowerPoint Slide Show - [NIcOPA Project\_GI2021\_Abdurahmanov II] - Microsoft PowerPoint (Product Activation Failed)

Results

GENERAL INTRODUCTION OF MODERN AGRICULTURE AND BUSINESS

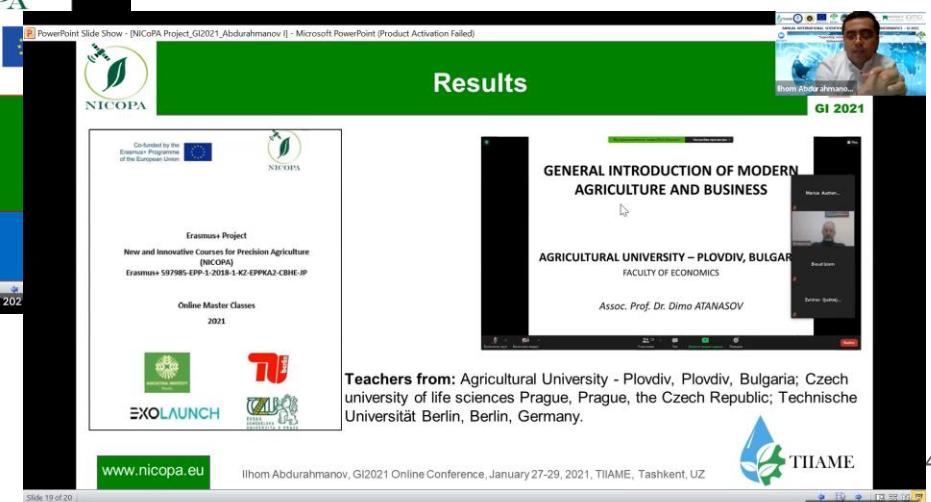
AGRICULTURAL UNIVERSITY – PLOVDIV, BULGARIA

Faculty of Economics

Assoc. Prof. Dr. Dima ATANASOV

Teachers from: Agricultural University - Plovdiv, Plovdiv, Bulgaria; Czech university of life sciences Prague, Prague, the Czech Republic; Technische Universität Berlin, Berlin, Germany.

www.nicopa.eu



PowerPoint Slide Show - [NIcOPA Project\_GI2021\_Abdurahmanov II] - Microsoft PowerPoint (Product Activation Failed)

Results

GENERAL INTRODUCTION OF MODERN AGRICULTURE AND BUSINESS

AGRICULTURAL UNIVERSITY – PLOVDIV, BULGARIA

Faculty of Economics

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Teachers from: Agricultural University - Plovdiv, Plovdiv, Bulgaria; Czech university of life sciences Prague, Prague, the Czech Republic; Technische Universität Berlin, Berlin, Germany.

www.nicopa.eu

Ilhom Abdurahmanov, GI2021 Online Conference, January 27-29, 2021, TIIAME, Tashkent, UZ

TIIAME

48

# Project activities & results

## WP4 Dissemination & Exploitation

Online lecture on Glscience - Teaching and Learning for the MSc students of the University of Vienna, Austria by Sabine Hennig, 14 April, 2021



### The NICoPA Project

#### Theme for cooperation

Modernization of curriculum by developing and innovative courses and methodologies using ECTS, the three cycle system and the recognition of degrees.

#### Project duration:

3 years

#### Project type:

Joint project, cross-regional

#### Budget size (Tempus Grant)

999.847,- EUR



#### Selection results of Call 2018 EAC/A05/2017

874 applications received  
147 (16,82%) proposals recommended for funding

#### Target countries / priorities

\*This application addresses priorities in curricula reform: KAZAKHSTAN, TURKMENISTAN, UZBEKISTAN

\*Agricultural sector



#### Consortium size: 21 organisations



### Partners



#### EU partners

Technische Universität Berlin  
The Agricultural University Plovdiv  
Czech University of Life Sciences  
ECM Space Technology GmbH

[www.tu-berlin.de](http://www.tu-berlin.de)  
[www.au-plovdiv.bg](http://www.au-plovdiv.bg)  
[www.czlu.cz](http://www.czlu.cz)  
[www.ecm-space.de](http://www.ecm-space.de)

Germany  
Bulgaria  
Czech Republic  
Germany

Berlin  
Plovdiv  
Prague  
Berlin

#### Target universities/partner countries

S.Seifullin Kazakh Agro Technical University	<a href="http://www.kazatu.kz">www.kazatu.kz</a>	Kazakhstan	Astana
Shokan Ualikhanov Kokshetau State University	<a href="http://www.kgu.kz">www.kgu.kz</a>	Kazakhstan	Kokshetau
North Kazakhstan State University Named After Manash Kozybayev	<a href="http://www.nkzu.kz">www.nkzu.kz</a>	Kazakhstan	Petropavlovsk
Turkmen Agricultural University Named after S.A. Niyazov		Turkmenistan	Ashgabat
The Turkmen state architecture and construction institute		Turkmenistan	Ashgabat
Turkmen Agricultural Institute		Turkmenistan	Dashoguz
National University of Uzbekistan	<a href="http://www.nuu.uz">www.nuu.uz</a>	Uzbekistan	Tashkent
Tashkent University of Information Technologies	<a href="http://www.tuit.uz">www.tuit.uz</a>	Uzbekistan	Tashkent
Tashkent Institute of Irrigation and Agricultural Mechanization Engineers	<a href="http://www.tiame.uz">www.tiame.uz</a>	Uzbekistan	Tashkent

### GIS in Central Asia – GISCA 2022 and Geoinformatics – GI 2022

ANNUAL INTERNATIONAL SCIENTIFIC CONFERENCES on

"Designing the geospatial ecosystem", and

INTERNATIONAL SYMPOSIUM on

"Principal areas of land reform strategy: problems and solutions",

NRU "TIIAME", ONLINE/ONSITE, 23-24 May, 2022

- more than 400 participants;
- including 75 foreigners;
- number of research papers submitted – 114;
- number of research papers accepted for publication- 60;
- will be published in the Journal indexed in the Scopus international bibliographic and abstract database in November, 2022;
- 10 memorandum of understandings were signed between the partners.

# Project activities & results

## WP4 Dissemination & Exploitation

### GIS in Central Asia – GISCA 2022 and Geoinformatics – GI 2022



# Project activities & results

## WP4 Dissemination & Exploitation

### GIS in Central Asia – GISCA 2022 and Geoinformatics – GI 2022



# Project activities & results

## WP4 Dissemination & Exploitation



**GI 22**  
**PROGRAM**

**GIS in Central Asia – GISCA 2022  
and Geoinformatics – GI 2022**

**ANNUAL INTERNATIONAL SCIENTIFIC CONFERENCES**  
**on "Designing the geospatial ecosystem"**

**INTERNATIONAL SYMPOSIUM**  
**on "Principal areas of land reform strategy: problems and solutions"**

**23-24 May, 2022**  
National Research University "Tashkent Institute of Irrigation and Agricultural Mechanization Engineers" (NRU "TIIAME"), Tashkent, Uzbekistan.

**ONLINE/ONSITE**

**Address:** Academic Council Hall, NRU "TIIAME", str.Kari Niyazi, 39, Tashkent

**Conference languages:** English, Uzbek, Russian (with simultaneous translation)

**Conference platform (for online participants):**  
Zoom <https://us06web.zoom.us/j/8148418875>  
ID: 814 8451 8875, password: 122454

**With the support of the European Union and the Erasmus+ Programmes of the European Union**



# Project activities & results

## WP4 Dissemination & Exploitation



### ERASME+ "NICOPA: ANIQ (KOORDINATALD) QISHLOQ XO'JALIGI UCHUN YANGI VA INNOVATSION KURSLAR" LOYIHLASI NATIJALARINI

<https://www.nicopa.eu>



#### LOYIHA DORASIDA OCHIGAN YANGI BAKALAVR TA'LIM YO'NALISHI

NICOPA: Aniq (koordinatald) qishloq xo'jaligi uchun yangi va innovatsion kurslar loyihasi dorasida. Toshkent irrigatuya va qishloq xo'jaligini mehnatziyalash muhandislar institutu yangi "5311200-Yerni masofaviy zondishlida innovatsion texnologiyalar" bakalavror ta'limg'oy nafasi tashkil etlib, o'quv jarayoniga priy qilindi.

#### LOYIHA DORASIDA YARATILGAN O'QUV MATERIAILLARI



1. Geodaxborot tizimida uch o'lchamli modeldarishish.
2. Kadastir uchidagi kompyuteri grafiqa.
3. Aeronautika texnologiyalarining interaktiv resursi ma'lumotlari.
4. Aerofotosurattingan geodezik tizimidan foydalanish.
5. GidroteknikaTexnologika geodaxborot tizimidan foydalanish.

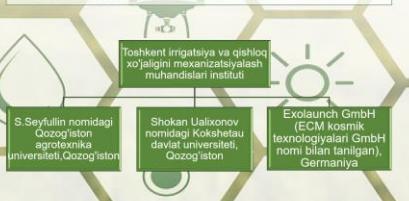
6. Geodaxborot tizimi va texnologiyalari.
7. Zamonaviy geodezik asobbar.
8. 3D-scaning va kartografiya asoslar.
9. Ekologika Kartografiya.
10. Veb-GAT.

#### HAMKORLIK SHARTNOMALARI

Ilmiy faydaligi amalga oshirish hamda ishlab chiqarish bilan integratsiyani uyg'unlashtirish maqсадидан loyha dorasida quyidagi 6 ta nodavlat-notijorlar tashkilotlari bilan shartnomalar imzolandi:

1. "Azimut GEO" MCNJ.
2. "GEO EXPERTS" MCNJ.
3. "GEOINFORM PROJECT" MCNJ.
4. "Development Experts" MCNJ.
5. "Innovatsiyalar va ilmiy badajotlar klasteri" NNT.
6. "GEOINFORM ENGINEERS GROUP" MCNJ.

Shuningdek, loyha davrida loyihangani quyidagi hamkorlar bilan ikki tomonlioma xalqaro hamkorlik shartnomalarini imzoldi:



## Project posters



### ERASME+ "NICOPA: ANIQ (KOORDINATALD) QISHLOQ XO'JALIGI UCHUN YANGI VA INNOVATSION KURSLAR" LOYIHLASI

<https://www.nicopa.eu>



#### LOYIHA HAQIDA QISQACHA MA'LUMOT

Yo'nališi: Erasme+ Oly ta'linda salohiyati oshirish, "Key Action 2"

Raqami: 597985-EPP-1-2018-1-KZ-EPKA2-CBHE-JP

Nomi: NICOPA: Aniq (koordinatald) qishloq xo'jaligi uchun yangi va innovatsion kurslar

Qisqarmasi: NICOPA

Budjeti: 999 847 yevro

Bajarish muddati: 15.11.2018-14.11.2022

#### INNOVATION TA'LIM MUHITI

- aniq (koordinatald) qishloq xo'jaligi laboratoriysi va raqamli o'quv xonasini tashkil etish;
- o'shma WEB platforma yaratish;
- aniq (koordinatald) qishloq xo'jaligi laboratoriysi va raqamli o'quv xonasida mahorat darslari va pilot kurslarni olib borish;
- professor-oqtuvchilari yangi o'quv dasturlari bo'yicha o'qitish;
- manfaatador tomonlari ko'magda aniq (koordinatald) qishloq xo'jaligi xizmat ofisiňi (PASO) tashkil etish.

#### O'QUV KURSLARI

- maqsadi sohadagi joriy o'quv dasturini yanglash;
- 9 ta yangi assosiy o'quv kurslari ishlab chiqish;
- 3 ta ko'chma modul yaratish.

#### LOYIHA HAMKORLARI

- 1. S.Seyfullin nomidagi Qozog'iston agroteknika universiteti, Qozog'iston
- 2.Berlin texnika universiteti, Germanya
- 3.Plovdiv qishloq xo'jaligi universiteti, Bolgariya
- 4.Pragadagi Chexiya agroteknika universiteti, Chexiya
- 5.Exolaunch GmbH (ECM kosmik texnologiyalari GmbH nomi bilan tanilgan), Germanya

- 6.Shohan Ualixonov nomidagi Kokshetau davlat universiteti, Qozog'iston
- 7.Manash Ozoiboyev nomidagi Shimoliy Qozog'iston davlat universiteti, Qozog'iston
- 8.B.A.Niyozov nomidagi Shrimoliy Qozog'iston davlat universiteti, Qozog'iston
- 9.Turkmaniston qishloq xo'jaligi instituti, Turkmaniston
- 10.Turkmaniston qishloq xo'jaligi instituti, Turkmaniston

- 11.Ozbekiston Milliy universiteti, O'zbekiston
- 12.Toshkent axborot texnologiyalari universiteti, O'zbekiston
- 13.Uzbekiston irrigatuya va qishloq xo'jaligini mehnatziyalash muhandislar instituti, O'zbekiston

- 14.Talim va fan vazirligi, Qozog'iston
- 15.Talim sifatini nazorat qilish davlat inspeksiyasi, O'zbekiston



# Project activities & results

## WP4 Dissemination & Exploitation

Other publication materials:

<http://www.erasmusplus.uz/news/161.htm>

<http://www.erasmusplus.uz/Information-about-the-projects/Erasmus-plus/4-call/index.htm>

<http://tiiame.uz/oz/article/deuch>

<http://uzbekistan24.uz/uzk/yangiliklar/11/8904/>

<https://kun.uz/news/2019/03/09/ozbekiston-otm-germaniya-universitetlari-bilan-hamkorlikni-kuchaytirmoqda>

<https://daryo.uz/2019/03/07/ozbekiston-milliy-universiteti-nicopa-aniq-qishloq-xojaligida-yangi-va-innovatsion-kurslar-loyihasi-uchrashuvilda-qatnashdi/>

<http://aza.uz/oz/society/berlinda-zmu-mutakhassislari-ishtirokida-isti-bolli-loyi-a-a-06-03-2019>

<http://geoinformatics.uz/dsingis/2019/04/10/awareness2/>

<http://geoinformatics.uz/dsingis/2019/05/05/awareness3/>

<http://tiiame.uz/article/31-09-19-1>

[https://aza.uz/uz/posts/geofazoviy-ekotizimni-loyihalash-mavzusida-xalqaro-ilmiy-konferenciya-tashkil-etildi\\_374865](https://aza.uz/uz/posts/geofazoviy-ekotizimni-loyihalash-mavzusida-xalqaro-ilmiy-konferenciya-tashkil-etildi_374865)

<https://tiiame.uz/en/content/prestigious-international-conference>

# Project activities & results

## WP5 Management

### NICoPA+ Agreements

- ✓ 6 (six) NICoPA+ agreements have been signed so far with the following non-academic stakeholders:
- “Azimut GEO” LLC;
- “GEO EXPERTS” LLC;
- “GRAND-PERFECT-PROJECT” LLC;
- “Development Experts” LLC;
- “Innovations and Scientific Research Cluster”;
- “GEOINFORM ENGINEERS GROUP” LLC.

<p><b>СОГЛАШЕНИЕ "NICOPA University-Enterprise"</b> № 2020 - 02/12</p> <p><b>Соглашение</b> “NICOPA University – Enterprise”</p> <p><b>“Новые и инновационные программы по точному сельскому хозяйству”</b></p> <p><b>Стороны Соглашения</b></p> <p>Настоящее Соглашение заключено между Университетом - участником консорциума проекта «NICOPA», именуемым в дальнейшем “Университет”, с одной стороны</p> <p>Ташкентский институт инженеров ирригации и механизации сельского хозяйства (ТИИМСХ), Республика Узбекистан, 100000, г. Ташкент, ул. Коры Ниёзий 39</p> <p>и неакадемической организацией</p> <p><b>“Кластер инноваций и научных исследований по устойчивому развитию”</b>, Республика Узбекистан, 100000, г. Ташкент, ул. Коры Ниёзий 39</p>	<p><b>Cooperation Agreement</b> “NICOPA University-Enterprise”</p> <p><b>Cooperation Agreement</b> “NICOPA University – Enterprise”</p> <p><b>“New and Innovative Courses for Precision Agriculture”</b></p> <p><b>Parties to the Agreement</b></p> <p>This is a cooperation Agreement among the consortium members of “NICOPA”, hereinafter referred to as “University” on the one hand</p> <p><b>Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIIAME),</b> str. Kary Niyazy, 39, Tashkent 100000, Uzbekistan</p> <p>and a non-academic organization</p> <p><b>“Innovations and Scientific Research Cluster”</b>, str. Kori Niyoziy, 39, Tashkent 100000, Republic of Uzbekistan</p>	<p><b>Cooperation Agreement</b> “NICOPA University-Enterprise”</p> <p><b>Cooperation Agreement</b> “NICOPA University – Enterprise”</p> <p><b>“New and Innovative Courses for Precision Agriculture”</b></p> <p><b>Parties to the Agreement</b></p> <p>This is a cooperation Agreement among the consortium members of “NICOPA”, hereinafter referred to as “University” on the one hand</p> <p><b>Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIIAME),</b> Kary Niyazy, 39, Tashkent 100000, Uzbekistan</p> <p>and a non-academic organization</p> <p><b>“Development Experts” LLC,</b> Yunusabad-12, 11/27, Tashkent 100000, Uzbekistan</p>	<p><b>Cooperation Agreement</b> “NICOPA University-Enterprise”</p> <p><b>Cooperation Agreement</b> “NICOPA University – Enterprise”</p> <p><b>“New and Innovative Courses for Precision Agriculture”</b></p> <p><b>Parties to the Agreement</b></p> <p>This is a cooperation Agreement among the consortium members of “NICOPA”, hereinafter referred to as “University” on the one hand</p> <p><b>Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIIAME),</b> Kary Niyazy, 39, Tashkent 100000, Uzbekistan</p> <p>and a non-academic organization</p> <p><b>“GEOINFORM ENGINEERS GROUP” LLC,</b> Yashnabod, Street Parkent, 6, Tashkent, Uzbekistan</p>
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<p><b>СОГЛАШЕНИЕ "NICOPA University-Enterprise"</b> № 2019 - 02/12</p> <p><b>Соглашение</b> “NICOPA University – Enterprise”</p> <p><b>“Новые и инновационные программы по точному сельскому хозяйству”</b></p> <p><b>Стороны Соглашения</b></p> <p>Настоящее Соглашение заключено между Университетом - участником консорциума проекта «NICOPA», именуемым в дальнейшем “Университет”, с одной стороны</p> <p>Ташкентский институт инженеров ирригации и механизации сельского хозяйства (ТИИМСХ), Республика Узбекистан, 100000, г. Ташкент, ул. Коры Ниёзий 39</p> <p>и неакадемической организацией</p> <p><b>“GEO EXPERTS” ООО,</b> Республика Узбекистан, 100000, г. Ташкент, ул. Шарк, квартал-1, 1/3</p>	<p><b>Cooperation Agreement</b> “NICOPA University-Enterprise”</p> <p><b>Cooperation Agreement</b> “NICOPA University – Enterprise”</p> <p><b>“New and Innovative Courses for Precision Agriculture”</b></p> <p><b>Parties to the Agreement</b></p> <p>This is a cooperation Agreement among the consortium members of “NICOPA”, hereinafter referred to as “University” on the one hand</p> <p><b>Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIIAME),</b> str. Kary Niyazy, 39, Tashkent 100000, Uzbekistan</p> <p>and a non-academic organization</p> <p><b>“GEO EXPERTS” LLC,</b> str. Sharq, block-1, 1/3, Tashkent 100000, Uzbekistan</p>	<p><b>Cooperation Agreement</b> “NICOPA University-Enterprise”</p> <p><b>Cooperation Agreement</b> “NICOPA University – Enterprise”</p> <p><b>“New and Innovative Courses for Precision Agriculture”</b></p> <p><b>Parties to the Agreement</b></p> <p>This is a cooperation Agreement among the consortium members of “NICOPA”, hereinafter referred to as “University” on the one hand</p> <p><b>Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIIAME),</b> str. Kary Niyazy, 39, Tashkent 100000, Uzbekistan</p> <p>and a non-academic organization</p> <p><b>“Azimut GEO” LLC,</b> str. 2-Darkhontepa, 7, Tashkent 100000, Uzbekistan</p>	<p><b>Cooperation Agreement</b> “NICOPA University-Enterprise”</p> <p><b>Cooperation Agreement</b> “NICOPA University – Enterprise”</p> <p><b>“New and Innovative Courses for Precision Agriculture”</b></p> <p><b>Parties to the Agreement</b></p> <p>This is a cooperation Agreement among the consortium members of “NICOPA”, hereinafter referred to as “University” on the one hand</p> <p><b>Tashkent Institute of Irrigation and Agricultural Mechanization Engineers (TIIAME),</b> str. Kary Niyazy, 39, Tashkent 100000, Uzbekistan</p> <p>and a non-academic organization</p> <p><b>“GRAND-PERFECT-PROJECT” LLC,</b> str. Farnux, 4/22, Tashkent 100000, Uzbekistan</p>
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# Project activities & results

## WP5 Management

**4 bilateral agreements with the following consortium members were signed:**

- *Sh. Ualikhanov Kokshetau State University, Kazakhstan;*
- *S. Seifullin Kazakh Agrotechnical University, Kazakhstan;*
- *Engineering Consulting and Management for Space Technologies GmbH;*
- *Agricultural University of Plovdiv, Bulgaria.*

# Project activities & results

## WP5 Management

### The Regulation of the PASO

ТАШКЕНТСКИЙ ИНСТИТУТ ИНЖЕНЕРОВ ИРРИГАЦИИ И МЕХАНИЗАЦИИ  
СЕЛЬСКОГО ХОЗЯЙСТВА



ПОЛОЖЕНИЕ  
ОБ ОФИСЕ ПО ПОДДЕРЖКЕ И РАСПРОСТРАНЕНИЮ УСЛУГ И ЗНАНИЙ ПО  
ТОЧНОМУ СЕЛЬСКОМУ ХОЗЯЙСТВУ  
«PRECISION AGRICULTURE SERVICE OFFICE» (PASO)

REGULATION ABOUT OFFICE ON SUPPORT AND DISTRIBUTION SERVICES  
AND KNOWLEDGE OF PRECISION AGRICULTURE (PASO)

Разработано в рамках реализации проекта Erasmus+ 597985-EPP-1-2018-1-KZ-EPPK2-  
СИНЕ-ЈР «New and Innovative Courses for Precision Agriculture (NICoPA)»

Ташкент – 2019

**1. ОБЩИЕ ПОЛОЖЕНИЯ**  
1.1. Настоящее Положение является внутренним нормативным документом Ташкентского института инженеров ирригации и механизации сельского хозяйства (далее Институт) и определяет цели, задачи, функции и деятельность Офиса услуг и знаний по точному сельскому хозяйству «Precision Agriculture Service Office» (PASO).

Положение разработано в рамках реализации Европейского проекта “New and Innovative Courses for Precision Agriculture (NICoPA)” по программе «ERASMUS+ Programme – Capacity Building in Higher Education» (Project +597985-EPP-1-2018-1-KZ-EPPK2-СИНЕ-ЈР).

1.2. PASO является структурным подразделением кафедры «Геодезия и геоинформатика» факультета «Управление земельными ресурсами» Института.

PASO в своей деятельности руководствуется:

- Законами Республики Узбекистан;
- Положением кафедры «Геодезия и геоинформатика»;
- Настоящим положением;

1.3. PASO проводит работы, связанные с глубоким освоением учебных материалов и знаний, создаваемых в рамках проекта и обновлением содержания учебных дисциплин в области точного сельского хозяйства в соответствии с последними достижениями в данной сфере.

1.4. Руководитель офиса:

- руководит всей деятельностью PASO;
- несет персональную ответственность за своевременное и качественное выполнение возложенных на офис задач и функций;
- участвует в перспективном и текущем планировании деятельности офиса.

Руководитель офиса имеет право подписи документов по вопросам деятельности офиса, входящих в его компетенцию.

1.5. Местоположение Офиса PASO: 100000, г. Ташкент, ул. Кары Ниязи, 39.

#### 2. СТРАТЕГИЧЕСКАЯ ЗАДАЧА PASO

Создать условия для развития результатов проекта после его завершения и способствовать поступлению финансовых средств для поддержания и развития созданной проектом лабораторной базы.

#### 3. ОСНОВНЫЕ ЗАДАЧИ PASO

3.1. Маркетинг потребностей в области повышения эффективности сельского хозяйства (повышение урожайности) и снижение вредного воздействия агротехнологий на окружающую среду и разработка соответствующих услуг и сервисов для различных заинтересованных целевых групп.

3.2. Разработка и внедрение учебных курсов и/или повышения квалификации различных целевых групп.

3.3. Маркетинг образовательных услуг.

3.4. Сервис для фермерских ассоциаций и изучение требований работодателей.

3.5. Изучение соответствия компетенций/навыков выпускников требованиям работодателей, информационная поддержка.

3.6. Периодическое проведение аудита Института на существующих учебных курсах с целью замены/обновления устаревших учебных программ и разработка новых.

3.7. Изучение потребностей промышленных предприятий в сервисном обучении персонала.

3.8. Поиск заинтересованных организаций и спонсоров.

3.9. Модернизация устаревшего сельскохозяйственного оборудования – для оснащения старой техники датчиками, системами навигации для улучшения работы.

#### 4. ОСНОВНЫЕ ФУНКЦИИ PASO

В соответствии с возложенными на него задачами PASO осуществляет следующие функции:

4.1. Сотрудничество с высшими образовательными учреждениями, специализирующими в подготовке кадров в области сельского хозяйства, изучение и решение реальных задач этой сферы и внедрение в учебный процесс полученных результатов.

4.2. Разработка и проведение мероприятий по подготовке и повышению квалификации в предметной (академической) области факультета.

4.3. Организация тренингов, семинаров, конференций.

4.4. Повышение информированности целевых групп путем освещения о результатах работ в средствах массовой информации.

4.5. Выявление и освещение технических новшеств, научных открытий и изобретений, передового опыта, способствующих улучшению по подготовке и повышению квалификации для сотрудников PASO.

4.6. Анализ, поиск, привлечение источников финансирования деятельности.

4.7. Осуществление в соответствии с законодательством Республики Узбекистан работы по комплектованию, хранению, учету и использованию архивных документов, образовавшихся в ходе деятельности PASO.

4.8. Организация инженерно-технических работ по запросу/заказу заинтересованных лиц/организаций.

4.9. Возложение на PASO функций, не относящихся к компетенции PASO, не допускается.

#### 5. ПРАВА PASO

5.1. Создавать экспертные и рабочие группы по вопросам улучшения и контроля курсов обучения и/или повышения квалификации различных целевых групп.

5.2. Работать в пределах своей компетенции в установленном порядке переговоры со сторонними организациями, подписывать договоры.

5.3. Использовать средства, выделяемые на финансирование развития учебных программ университета по подготовке специалистов, переквалификации и повышении квалификации кадров.

5.4. Вносить предложения по вопросам, входящим в компетенцию PASO, в виде проектов.

5.5. Запрашивать и получать от руководства Института, кафедр и других структурных подразделений информацию, необходимую для выполнения возложенных на него задач и функций.

#### 6. ОТВЕТСТВЕННОСТЬ РУКОВОДИТЕЛЯ PASO

6.1. Всю полноту ответственности за качество и своевременность выполнения возложенных настоящим Положением на PASO задач и функций несет Руководитель PASO.

6.2. Степень ответственности других работников устанавливается должностными инструкциями.

6.3. Руководитель и другие сотрудники PASO несут персональную ответственность за соответствие оформленных ими документов и операций с корреспонденцией законодательству Республики Узбекистан.

6.4. Ведение документов, предусмотренной действующей нормативно-правовой базой.

Разработано на основе Положения PASO Concept (www.nicopale.ru) членами рабочей группы проекта NICOPA: Абдурахманов И.И., Реймов М.П., Ж.Низэев.

Координатор проекта

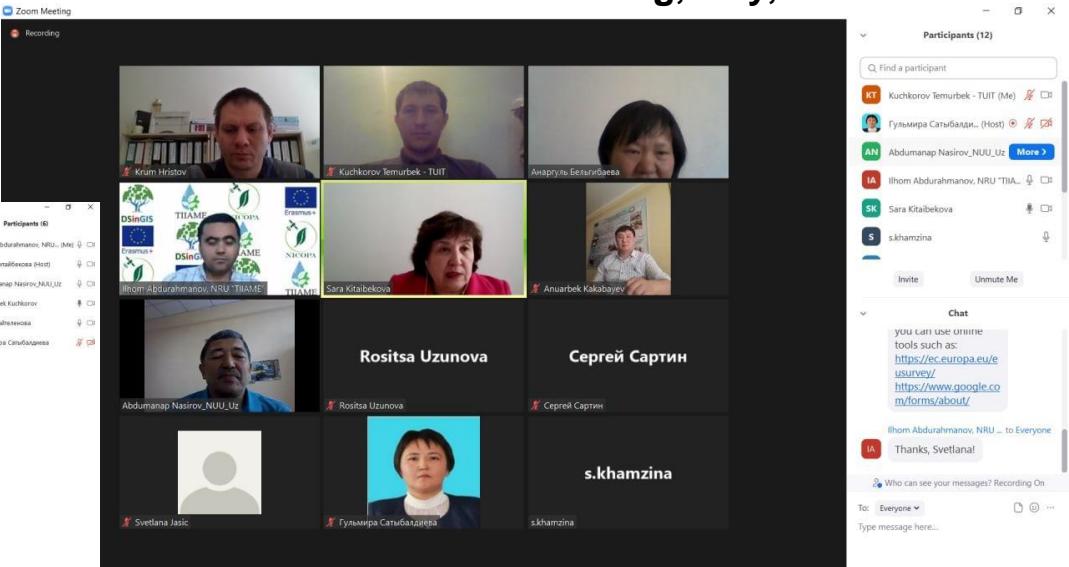
Абдурахманов И.И.

# Project activities & results

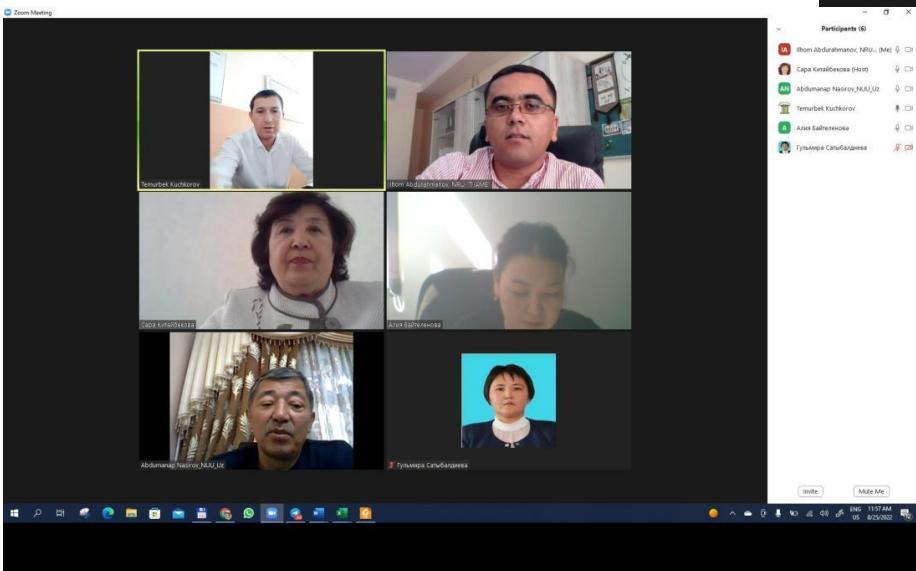
## WP5 Management

### Coordination meetings

Coordination meeting, May, 2022



Final conference discussion, August, 2022





# Thank you for your attention!



Co-funded by the  
Erasmus+ Programme  
of the European Union

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