



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



THE PROJECT RESULTS' SUSTAINABILITY PLAN (D.5.3)

elaborated in the frame of the project
"New Master's Degree Curricula for Sustainable Bioeconomy
in Uzbekistan" (BioEcUz)
No 619294-EPP-1-2020-1-LV-EPPKA2-CBHE-JP

*The document is elaborated with financial support of the European Union Erasmus+ Programme.
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I. INTRODUCTION

The sustainability plan has been elaborated within the project **"New Master's Degree Curricula for Sustainable Bioeconomy in Uzbekistan"** (abbreviation used further - BioEcUz), funded by the European Union Erasmus+ Programme and being in implementation of the consortium of Uzbekistan's and European Union universities, as well public and private sector partners. The project takes place from 15 January 2021 to 14 January 2024.

The sustainability plan aims at identifying:

- a) the results to be sustained,
- b) the actions and resources required to ensure sustainability,
- c) the responsible organisations or persons as well as external stakeholders, which should be involved, such as higher education institutions (HEIs), teaching staff, state stakeholders, business organisations, etc.,
- d) the timeframe and deadlines for the realisation of the predefined measures.

Concrete short-term and long-term measures to ensure the sustainability of the project outcomes are defined.

The sustainability plan provides an overview of the accomplished results and the indicators, used to measure the achievements. The plan includes conclusions on how the results meet the identified needs of the involved Uzbekistan's HEIs. These needs were assessed in 2019, and in in-depth analysis carried and completed in 2021. The consortium partners, as well as the associated partners have been actively participating in the elaboration of the sustainability plan, which ensures the ownership and accountability for the results.

OBJECTIVES OF THE BIOECUZ PROJECT:

Overall aim:

To contribute to the development of sustainable and inclusive socio-economic growth in Uzbekistan.

Specific objectives:

- SO.1 To develop new, innovative bioeconomy related master level curricula.
- SO.2 To improve the level of competences and skills in three Uzbekistan's HEIs to create and deliver content supporting and encouraging country's sustainable and inclusive socio-economic growth.
- SO.3 To enhance involved HEIs internationalisation and innovation capacities.
- SO.4 To share EU good practices in development and implementation of bioeconomy approach, thus supporting Uzbekistan in its intentions to deploy local bioeconomy sectors.

CONSORTIUM PARTNERS:

Universities and public bodies of Uzbekistan:

- Tashkent State Agrarian University
- Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, National Research University
- Bukhara State University
- Samarkand Branch of Tashkent State Agrarian University
- Ministry of Agriculture of the Republic of Uzbekistan

Universities in the European Union countries:

- Latvia University of Life Sciences and Technology, Latvia
- Vytautas Magnus University, Lithuania
- Jyväskylä University of Applied Sciences, Finland

Associated partners:

- Ministry of Higher and Secondary Specialised Education of the Republic of Uzbekistan
- Association of Agribusiness of Uzbekistan
- Council of Farmers, Farmers and Owners of Household Lands of Uzbekistan

The sustainability plan has been elaborated jointly by the members of the project consortium. The associated partners have been involved in discussion measures and indicators to be used.

II. RESULTS OF THE PROJECT

The sustainability plan is aiming to ensure sustainability of the results created and achieved within the project "New Master's Degree Curricula for Sustainable Bioeconomy in Uzbekistan" for at least 5 years period (till end of the year 2028).

In the table below is provided information on deliverables/outcomes as short term results to be produced according to the BioEcUz project plan. They are grouped by Work Packages. The long-term results to be sustained have been defined based on the immediate results.

Work package (WP)	Deliverables/outcomes (D)	Indicators of progress (IP)
WP1. Detailed needs analysis	D1.1. Report – in depths study elaborated.	IP1.1. In-depths analysis report elaborated, its contents are applicable for development of new master level curricula – master study programme (MSP).
WP2. Elaboration of the new MSP in the field of bioeconomy	D2.1. New bioeconomy related MSP (120 ECTS) elaborated and approved by the respective Uzbekistan's institutions (4 higher education institutions)	IP2.1. New MSP developed; study plan approved at 4 respective Uzbekistan's universities (by the rectors). IP2.2. The Ministry of Higher and Secondary Specialised Education has approved qualification requirements. IP2.3. Specialty "Bioeconomy" included in the Uzbekistan's national classificatory of the professions. IP2.4. 24 quotas are assigned (6 per involved Uzbekistan's HEI). IP2.5. 24 students matriculated.
	D2.2. Set of MSP documentation and materials elaborated and provided.	IP2.6. MSP documentation and study materials elaborated and available to all involved consortium partners. IP2.7. MSP study materials are updated by Uzbekistan's universities on regular base.
WP3. Increase of involved Uzbekistan's universities teaching and technical capacity	D3.1. 6 study visits held, 24 Uzbekistan's HEIs teachers participated (in teach visit)	IP3.1. At least 6 study visits were organized, at least 24 teachers participated. IP3.2. Knowledge and skills obtained during study visits, is applicable at teaching process and ensure high quality of contents and methods.
	D3.2. Teaching capacity of the academic staff increased, at least 24 teachers trained	IP3.3. Capacity of at least 24 teachers increased, their professional benefits and satisfaction with acquired knowledge, skills and experience. IP3.4. Performance of trained teachers has been valued by students and external stakeholders as "highly professional and knowledgeable".
	D3.3. Teaching capacities improved – video conference classes developed in the involved Uzbekistan's universities.	IP3.5. Equipment and licenses necessary for ensuring its functionality delivered, equipment installed. IP3.6. Involved teachers and students satisfied with technical facilities. Functionality of the acquired equipment upgraded regularly.
WP 4. Implementation of the MSP	D4.1. Pilot studies provided, at least 24 students participated.	IP4.1. Number of students matriculated and trained, their success (grades) and satisfaction with contents, teaching methods.
	D4.2. 3 open master classes provided.	IP4.2. Master classes organized, planned number of stakeholders participated, new joint initiatives started among the stakeholders.

WP 5. MSP and the project quality assurance and measurement tools	D5.1. MSP quality assurance methodology (QAM) elaborated and integrated in the involved Uzbekistan's universities quality assurance systems.	IP5.1. MSP Quality assurance methodology elaborated and integrated in the involved Uzbekistan's universities quality assurance systems. QAM application helps to assess and ensure MSP quality.
	D5.2. The results sustainability plan elaborated.	IP5.2. The results sustainability plan elaborated, results to be sustained defined, appropriate actions have been taken by respective partners.
WP 6. Publicity, dissemination and exploitation	D6.2. 2 bioeconomy forums, at least 100 participants (in total) organized.	IP6.1. Forums organized, new partnerships among bioeconomy stakeholders started and ongoing.
Results associated to all WPs	D7.1. Internationalisation and innovation capacity of the involved Uzbekistan's HEIs improved.	IP7.1. New joint initiatives in the field of education and research started and ongoing among Uzbekistan's and EU universities (mobility of students and academic staff, new projects, inter alias innovation projects). IP7.2. Number of EU partners' academic staff involved in provision of lectures.

III. Main long-term results and measures to ensure sustainability of the BioEcUz project results

Main foreseen project results (as indicated in the Grant Agreement) are as following:

- New, innovative bioeconomy related master level curricula (120 ECTS) elaborated and licenced.
- Competences, knowledge and skills of the academic staff in 4 Uzbekistan's HEIs improved.
- Internationalisation and innovation capacity of the involved 4 Uzbekistan's HEIs improved.
- Base for development of the bioeconomy ecosystem development established.

To ensure sustainability of the project results, the following **main measures** are planned:

1. Management of the newly elaborated master level bioeconomy curricula in order to ensure and promote:

- regular implementation of the curricula - annual national budget covered quotas as well contract based students;
- visibility and recognition of the curricula by potential students, relevant industries, and national authorities;
- registration of the new curricula by four involved HEIs in accordance with the Uzbekistan's national requirements for introduction of new curricula.

2. Academic staff' performing capacity keeping and improvement:

- trainings and increase of competence level in the respective fields of science;
- trainings and increase of skills in teaching methodologies;
- mobilities among involved Uzbekistan's universities.

3. Maintaining created technical capacity of the involved Uzbekistan's universities in order to ensure remote teaching and learning options, thus potentially increasing:

- number of students, especially from remote regions of Uzbekistan;
- number of foreign lecturers giving lectures;
- number of attracted Uzbek origin lecturers residing abroad;
- possibility to take part in worldwide bioeconomy related events.

4. Internationalisation of the involved Uzbekistan's universities by provision of mobilities, exchanges of academic staff and students, joint bioeconomy related events and projects:

- mobilities among Uzbekistan's and EU partner universities. students, academic staff, administrative staff .

5. Development of bioeconomy ecosystem by organisation of regular scientific-practical conferences, forums, round tables, seminars with participation of academic staff, students, entrepreneurs, civil servants and experts being part of the bioeconomy ecosystem.

More detailed plan is provided in the following section of the document.

IV. Sustainability plan

The sustainability plan spans over a period up to the end of 2028 (for 5 years counting from the end date of the BioEcUz project).

No.	Results to be sustained and measures planned	Acting parties and organisations involved	Period of completion
R.1	Elaborated bioeconomy master study programme (bioeconomy curricula)		
M1.1	Fulfilment of regulatory requirements, set by the Ministry of Higher and Secondary Specialised Education for the master level curricula	Involved Uzbekistan's universities	Annually
M1.2	Annual negotiations with the Ministry of Higher and Secondary Specialised Education with regard to quotas to be provided for state paid students and number of contractual students	Involved Uzbekistan's universities, MoA	Annually
M1.3	Annual, timely planned and organised marketing activities of the bioeconomy curricula	Involved Uzbekistan's universities, MoA	Annually
M1.4	Promotion of the bioeconomy curricula among bioeconomy industries	Involved Uzbekistan's universities, MoA	Annually
M1.5	Regular review and assessment of the bioeconomy curricula, updating contents and adoption of new teaching methods, development and implementation of guides for all types of activities, e.g. classes, workshops, master classes	Involved Uzbekistan's universities	Annually
M1.6	To ensure funding for regular annual maintenance and upgrading of the equipment purchased for the teaching/learning needs	Involved Uzbekistan's universities administration	Annually
R.2	Developed competences, knowledge and skills of the involved Uzbekistan's universities academic staff to ensure implementation of the bioeconomy curricula		
M2.1	Short training courses, workshops for exchange of knowledge and experience of involved Uzbekistan's universities teachers in order to continue regular improvement of their professional competence, knowledge and skills	Involved Uzbekistan's universities teaching staff, within their universities and among universities, administration	Regularly, at least 1-2 times per year
M2.2	Long-term courses and trainings for exchange of the knowledge and experience among the involved Uzbekistan's universities and universities and bioeconomy industries	Involved Uzbekistan's universities teaching staff, administration Uzbekistan's bioeconomy industries' experts	Regularly, at least 1-2 times per year
M2.3	National level mobilities of academic staff and students	Involved Uzbekistan's universities	Each person at least once per year

M2.4	Encourage participation of academic staff in courses, seminars organized by other bioeconomy stakeholders in Uzbekistan by introducing financial incentives (additional fees, bonuses, paid courses)	Involved Uzbekistan's universities administration	Regularly, at least 1-2 times per year
M2.5	Encourage training of academic staff in English	Involved Uzbekistan's universities administration	Regularly
R.3	Internationalisation and innovation capacity of the involved Uzbekistan's universities		
M3.1	International mobilities of Uzbekistan's and EU partner universities' academic and administrative staff, and students	Involved Uzbekistan's and EU universities	Each teacher at least once per year
M3.2	Encourage participation of academic staff in courses, seminars organized by other bioeconomy stakeholders around the world by using public funding	Involved Uzbekistan's universities administration, academic staff	Regularly
M3.3	Elaborate bioeconomy related projects to be implemented in international partnerships	Involved Uzbekistan's universities administration, academic staff	Regularly
R.4	Created base for development of Uzbekistan's bioeconomy ecosystem		
M4.1	Communicate bioeconomy to the national authorities: · Organize for relevant ministries and their staff informative campaigns and sessions on the fundamentals and benefits of bioeconomy · Arrange short-term courses on bioeconomy for employees of relevant government bodies, thus boosting their awareness, interest and desire to cooperate · Invite and include employees of relevant government bodies in universities' task forces working on teaching content and research in the corresponding field of bioeconomy · Encourage the inclusion of bioeconomy in national development strategy and relevant action plans	Involved Uzbekistan's universities, MoA, business associations	Regularly
M4.2	Communicate bioeconomy to the relevant sectors of economics: · Organize for industries and their staff informative campaigns and sessions on the fundamentals and benefits of bioeconomy · Invite and include employees of relevant industries in universities' task forces working on teaching content and research in the corresponding field of bioeconomy	Involved Uzbekistan's universities, MoA, business associations	Regularly
M4.3	Organise bioeconomy related scientific-practical conferences, forums, round tables, seminars and other events	Involved Uzbekistan's universities, MoA, business associations	Annually
M4.4	Developing the Uzbek bioeconomy platform (network) in the fields of food production and processing	Involved Uzbekistan's universities, MoA, business associations	Starting from 2023 and ongoing