The project "Development of Higher Education Content Aimed to Support Industries for Sustainable Production of Qualitative Agri-food" (AgroDev)

No 619039-EPP-1-2020-1-LV-EPPKA2-CBHE-JP

EXTERNAL EVALUATION FINAL REPORT

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ABBREVIATIONS USED IN THE REPORT

Abbreviation	***Full name***
AgroDev	The European Union (EU) Erasmus+ Programme funded project "Development of Higher Education Content Aimed to Support Industries for Sustainable Production of Qualitative Agri-food"
CA	Central Asia
Erasmus+ KA2	Erasmus+ Key Action 2: Cooperation among organisations and institutions
HE	Higher Education
CBHE	Capacity Building for Higher Education
EU	European Union
G.A.P.	Good agriculture practice
HACCP	Hazard analyses and critical control points
HWI	Hilfswerk International (Austria)
ISO	International standardisation organisation
KG	Kyrgyzstan
KNAU	Kyrgyz National Agrarian University (Kyrgyzstan)
LBTU	Latvia University of Life Sciences and Technologies (Latvia)
LNU	Linnaeus University (Sweden)
NSU	Naryn State University (Kyrgyzstan)
QAAP	Methodology for the assurance and assessment of quality of modernised higher education study programmes
SBTSEU	Samarkand branch of Tashkent State University of Economics (Uzbekistan)
TSAU	Tashkent State Agrarian University (Uzbekistan)
UAK	University of Agriculture in Krakow (Poland)
UZ	Uzbekistan
TOR	Terms of Reference (ToR) for the services for independent expert for final external evaluation of progress of the EU Erasmus+ Programme funded project "Development of Higher Education Content Aimed to Support Industries for Sustainable Production of Qualitative Agri-food" (AgroDev) No. 619039-EPP-1-2020-1-LV-EPPKA2-CBHE-JP.
WP	Work packages – a group of related tasks within the project.

CONTENTS

EXECUTIVE SUMMARY

In December 2023 – January 2024 an ex-post evaluation was implemented of the European Union Erasmus+ Key Action 2 (Capacity Building for Higher Education) funded project "Development of Higher Education Content Aimed to Support Industries for Sustainable Production of Qualitative Agri-food" (AgroDev, hereinafter – "The Project"), project number 619039-EPP-1-2020-1-LV-EPPKA2-CBHE-JP.

The Project was implemented in the time period from January 2021 - January 2024. The overall aim of the project is to contribute to modernising agro-industry related higher education thus promoting implementation and effective management of sustainable agro-food production systems in Kyrgyzstan and Uzbekistan.

The overall aim of the project was achieved by review and modernisation of relevant higher education curriculum in four Central Asia (CA) universities, thus promoting availability of knowledgeable and skilful specialists for agro-food production industry:

- In Uzbekistan: Tashkent State Agrarian University and Samarkand branch of Tashkent State University of Economics;
- In Kyrgyzstan: Kyrgyz National Agrarian University and Naryn State University.

The project coordinator is the Latvia University of Life Sciences and Technologies.

The Latvian University of Life Sciences and Technologies, the Polish University of Agriculture in Krakow, the Swedish Linnaeus University, and the Austrian non-profit Hilfswerk International, all of which have long-term experience in Central Asia, provided knowledge, skills, and expertise in the project implementation.

All project activities were implemented in a close collaboration with Hilfswerk International (HWI) - one of Austria's leading non-profit, non-party and cross-denominational organizations with a long-term work experience in Central Asia with a special emphasis on implementation of agro-business development projects and wide collaboration network with public and private organisations, universities and other stakeholders.

In order to ensure that needs of the agro-industry enterprises are well addressed, and future professionals have capacity to offer adequate and effective solutions, several key stakeholders were involved in the project.

- In Uzbekistan: The Centre of Agro-Innovation of the Council of Farmers, Agrobusiness Association of Uzbekistan;
- In Kyrgyzstan: Association for the Development of the Agro-Industrial Complex, Association of Dairy Livestock Companies "Kyrgyz Sut".

Besides the objectives - *to modernize agro-food production related study programmes*, and - *to promote availability of knowledgeable and skilful specialists for agro-food production industry*, the project strived to develop and strengthen capacity of academic staff, to improve study environment and to strengthen links and cooperation among:

a) involved CA and EU universities, as well as

b) among CA universities agro-food production industry.

Thereby this report includes a summary of all main tasks implemented and results achieved, with emphasis on their long-term impact.

During the project evaluation process a desk review of the project documentation was implemented as well as virtual meetings with the project partners and beneficiaries took place. All requested documentation, as well as full access to the project google drive was provided by the project coordinator.
In December 2023, a virtual mission was conducted to perform an ex-post evaluation, aimed to provide an overall view of the project's impact, effectiveness and lessons learned was implemented.
Five evaluation sessions with project partners were implemented:

- On 22nd December an evaluation session with Hilfswerk International was implemented (WhatsApp /video).
- On 22nd December 2023 a ZOOM evaluation session with KNAU and NSU representatives (List of participants - Annex 1and Annex 2 to this report). The main emphasis of session was analyses on the project impact to higher education and agro-business development in Kyrgyzstan.

- On 28th December 2023 with SBTSEU and TSAU representatives was implemented (List of participants - Annex 3 and Annex 4 to this report). The main emphasis of session was analyses on the project impact to higher education and agro-business development in Uzbekistan.

Throughout the entire evaluation process, the primary focus was directed towards the conversion of the project's outputs into outcomes by the Project partners, the sustainability and practical application of these outcomes for the Project beneficiaries. Taking into consideration, that the main result of the Project is development and implementation of 6 bachelor level study programmes, the main focus of this report is on WP 2 – "Elaboration of needs based tailor-made study content and teaching materials".

According to opinion of the evaluator, all project activities were implemented, and the results achieved as initially planned and contractually agreed. In numerous cases significant overachievements and added value can be reported. The initially planned aim and objectives of the project were realistic and feasible, corresponding to development needs of involved Central Asia universities and agro-business stakeholders.

According to opinion of the evaluator, the Project may be considered as a best practice project due to the main following reasons:

- The main reason of project to be considered as a best practice project is **sustainability** of its main results – the 6 study programmes modernised are well integrated in the permanent work of universities and are clearly responding to their development needs and the national policy of agro-business education development in the countries concerned;
- The project may be considered as a best practice sample due to its **effectiveness and efficiency** – a sustainable results were achieved within a relatively moderate EU grant in amount of 899 012,00 €;
- The project may be considered as a best practice sample in the field of **collaboration and partnership** between the higher education sector and an international NGO – Hilfswerk Austria, working in Central Asia;
- Significant **overachievements** of the initially planned results and activities could be reported (a summary provided in Table 1 of this report);
- Besides the deliverables developed and activities implemented, the project team has developed several well elaborated documents, ensuring the evaluation of capacity building measures, results, quality and impact, dissemination and exploitation strategy, methodology for the assurance and assessment of quality of higher education study programmes modernised to train specialists with competences for managing the processes of implementing and maintaining food production standards and systems.
- The project has significantly contributed to development of project **management, collaboration and cooperation skills of the project partners – CA Universities** involved.
- The overall project management implemented by the project coordinator – the LBTU was highly appreciated by the CA partners. Both the project results achieved, and opinion of partners may confirm, that **the project planning and management methods and approached used were highly effective** and could be disseminated to other EU organisations and institutions, going to be involved in HE collaboration projects with Kyrgyzstan and Uzbekistan.
- In addition to the above mentioned it may be necessary to highlight that the EU partners – HE institutions involved in the partnership have significantly **increased their competence and capacity to operate in challenging multicultural environment** and due to extensive research work implemented in the initial stage of the project may provide **deep expertise on situation in the agro-business sector development in the countries concerned.** Hilfswerk Austria has increased its capacity and competence in collaboration with HE sectors both in the CA and EU countries. Thereby **the European partners could be a valuable source of expertise for implementation of other EU funded projects, covering similar themes and content in CA countries**.

In order to ensure effective overall EU and international level dissemination of a best practice, evaluator strongly recommends to ensure publication of detailed description of project results in the Erasmus+ project results Database.

SUMMARY OF PROJECT ACHIEVEMENTS

The following table provides an overall summary and quantitative indicators of the Project achievements.

Table 1

WP	Planned	Implemented
WP1. *Detailed needs analysis and inventory of relevant curricula in involved Central Asia universities*	The joint report – overview of finding, recommendations on what must be done in order to improve higher education content. 2 national workshops held, at least 60 stakeholders participated.	• Joint report with respective recommendations developed. • 2 national and 1 regional workshops held, 117 stakeholders participated, of them 41 external stakeholders: · P2 NSU – 31, out of them 23 external · P3 KNAU – 35, out of them 5 external · P4 SBTSEU – 39, out of them 9 external · P5 TSAU – 12, out of them 4 external
WP2. *Elaboration of needs based tailor-made study content and teaching materials*	6 study programmes modernised. Study materials elaborated.	The following bachelor level study programmes were modernised, and the respective study materials elaborated (in brackets the number of modernised ECTS is provided for each curriculum): • P2 Naryn State University - "Technology of production and processing of agricultural products" (25.5) • P3 Kyrgyz National Agrarian University - "Zootechnics" (23) • P3 Kyrgyz National Agrarian University - "Technology of production and processing of agricultural products" (13) • P3 Kyrgyz National Agrarian University - "Agronomical science" (8) • P4 Samarkand Branch of Tashkent State Agrarian University - "Agribusiness and investment activities" (34.5) • P5 Tashkent State Agrarian University - "Technology of storage and processing of agricultural products" (17)

WP3. *Increase of Central Asia HEIs teaching and technical capacity*	5 study visits held, at least 24 CA universities teachers participated, training of teachers provided, at least 48 teachers' professional competencies increased. 4 sets of laboratory equipment (70 units) and 4 sets of study literature (about 30 books each) delivered to CA HEIs.	• 5 study visits organised with the total number of 119 participants (38 persons by name) – academic staff of the involved CA universities participated. • Training of academic staff done; professional competencies increased: · In teaching methodologies and pedagogic skills – 48 participants. · In study course subjects – 69 participants. · Farm-based training – 68 participants. • 24 master classes provided (13 in UZ, 11 in KG) with a total number of 274 participants, of them 54 external stakeholders. • 4 sets of laboratory equipment (64 devices in total) purchased, delivered and put in use. • 4 sets of study literature (106 books in total) purchased, delivered and put in use.
WP4. *Development of curricula and the project quality assurance tools*	Modernised study programmes' quality assurance methodology. Project quality evaluation plan. Results sustainability plan.	• Modernised study programmes' quality assurance methodology elaborated and adopted at all involved CA universities. • Project quality evaluation plan elaborated and based on the plan project quality monitored and ensured. • Results Sustainability Plan developed.
WP5. *Piloting of the modernised study courses*	Pilot studies provided for 6 groups, at least 220 students participated.	• Pilot studies in total volume of 121 ECTS for 6 groups implemented. • 231 bachelor level students participated in the pilot studies. • Additionally, 43 master level students participated in pilot studies in Samarkand.
WP6. Publicity, dissemination, and exploitation	2 national and 1 international event with participation of academic-business-public stakeholders organised, at least 120 participants participated. 12 TV and radio broadcasts, 32 publications, 1 website	• 2 national workshops organized, total number of CA participants – 116, of them 41 external stakeholders: · P2 NSU – 19, out of them 13 external · P3 KNAU – 29, out of them 16 external · P4 SBTSEU – 29, out of them 3 external · P5 TSAU – 39, out of them 9 external • Joint academic-industry-public authorities' international forum organized, 108 participants, 12 students prepared and presented scientific works. • Website elaborated and regularly updated, 80 articles published on the website (40 in English, 40 in Russian), main deliverables published. • 169 communication and dissemination measures held - of them 25 a**rticles in media and scientific journals, 115** publications in own and external informative channels.

EVALUATION METHODOLOGY AND APPROACH

SCOPE OF EVALUATION

The scope of evaluation was determined by the Terms of Reference (ToR) for the services for independent expert for final external evaluation of progress of the EU Erasmus+ Programme funded project "Development of Higher Education Content Aimed to Support Industries for Sustainable Production of Qualitative Agri-food" (AgroDev) No. 619039-EPP-1-2020-1-LV-EPPKA2-CBHE-JP. It included the following tasks, described below:

To evaluate the AgroDev project: progress and results achieved, deliverables produced, their quality and relevance to the needs of target groups and to the conditions set in the Grant Agreement, signed on behalf of the Consortium among Latvia University of Life Sciences and Technologies and European Education and Culture Executive Agency. Specific tasks:

- To acquaint with the Grant Agreement and its annexes, the mid-term report submitted to the EACEA in December 2022;
- To choose and to discuss evaluation methodology and main evaluation questions with the Contracting Authority;
- To held at least one remote interview with the AgroDev project Central Asia's partners and one remote interview with Hilfswerk International (5 at the total);
- To assess the results achieved to the date when evaluation starts and their relevance;
- To evaluate deliverables (outcomes and outputs) and their quality;
- To elaborate and provide external evaluation report, including conclusions on the project results, their applicability, and quality.

EVALUATION METHODOLOGY AND CRITERIA APPLIED

Evaluation of the Project was carried out in two interrelated stages.

During the first stage, according to the TOR requirements the evaluator implemented a desk-based review of an extensive collection of project materials developed. Secondly, virtual interviews with all relevant beneficiary recipients in Uzbekistan and Kyrgyzstan were implemented. Coordinators and team members were able to share their experiences of the project's implementation, impact, concept, planning and reporting arrangements. These interviews were structured around a list of evaluation questions compiled around the standard OECD-DAC criteria for assessing development effectiveness (Relevance, Efficiency, Effectiveness, Impact and Sustainability), as well as actual implementation of the initially planned activities, milestones and outcomes/outputs/results/deliverables was checked. Finally based on the outcome of the evaluation questions and feedback each of the 5 DAC evaluation criteria was given a score between 1 and 4. For all components, the mission has analysed the theory of change and compared the theory with the project work plan to ensure consistency.

The following table summarises the evaluation findings, using a numerical scale to rate the different DAC criteria in relation to each project component. According to opinion of the evaluator, the overall Project achievements may be considered as very good/excellent.

OECD DAC CRITERIA USED IN THE EVALUATION PROCESS

Table 2

Mark	Quantitative	Qualitative	Explanation
A	4	Very good	The situation is considered very satisfactory, well above the average and potential reference as a good practice. The recommendations focus on the need to adopt these good practices in other operations.
B	3	Good	The situation is considered satisfactory but can be improved. The recommendations are useful but not vital for the operation.
C	2	Fair	Some points need to be reviewed; otherwise, the overall performance of operation. The necessary improvements do not require however a major revision of operational strategy
D	1	Poor	There are serios failures which, if not corrected could lead to failure of the operation. Major adjustments and revision of strategy needed.

SUMMARY TABLE OF EVALUATION FINDINGS ACCORDING TO DAC CRITERIA

Table 3

Criteria	Score
Relevance	A
Effectiveness	A
Efficiency	A
Impact	A
Sustainability	A

It can be seen from the table above that the Project scored well across all five criteria. According to materials evaluated and meetings implemented during the evaluation process, there is reason to claim, that the Project results have been highly appreciated by the partners and their staff and thereby is no doubt that the EU intervention has had a beneficial impact and a measurable contribution on the ability of partner institutions from Uzbekistan and Kyrgyzstan to modernize higher education by improving their approach towards a more sustainable and inclusive system of education via modernisation of six bachelor level study programmes in the universities concerned. Cooperation with agro-industry and agricultural enterprises has been strengthened and, as long as there is the necessary will among them, we can reasonably expect this binomial to gain further strength in the future.

As already mentioned, in order to appraise the overall project, the evaluator has used the standard OECD-DAC Development Effectiveness framework (comprising Relevance, Efficiency, Effectiveness, Impact and Sustainability) at the individual level of the project components, as well as at the Programme level for an overarching assessment. To facilitate this process, specific component indicators and their respective verification methods have been utilized. The following list of evaluation queries has been used in this context:

Relevance

1. To what extent has the project intervention contributed to the support of the Erasmus+ CBHE Programme?
2. How well does the project design align with and respond to the institutional context in which the Project operates? What is the level of decision-making autonomy within partner organizations?
3. What has been the role of the management unit in contributing to the project's success?
4. To what extent have cross-cutting issues such as gender balance and equal opportunities been addressed?

Efficiency

5. What measures have been implemented to promote efficient project administration and execution, and how effective have these measures been, particularly in terms of financial management?

6. How have the activities organized by the partners influenced the efficiency of the project?
7. Have all the resources provided by the donor been adequately utilized?

Effectiveness
8. To what extent have the project components achieved, or are expected to achieve, their planned outcomes? Specifically, what impact, if any, has the project had on the modernization of higher education and the promotion of practical-oriented education?
9. What early lessons have been learned that could enhance the project's effectiveness, as well as future interventions within the Erasmus+ CBHE Programme?

Impact
10. How has the project influenced, or is expected to influence, the performance of partner organizations?
11. What potential impact does the project have on institutional and individual capacities?

Sustainability
12. To what degree can the project be sustained both financially and institutionally? How strong is the ownership of the project among stakeholders?
13. How adequate is the capacity development to maintain the project's achievements?
14. How deeply ingrained is the partnership and collaboration among partner members?

CONTENT OF ONLINE EVALUATION MEETINGS WITH THE PROJECT PARTNERS FROM UZBEKISTAN AND KYRGYZSTAN

The agenda of evaluation meetings with the project partners from Kyrgyzstan and Uzbekistan is presented below. Similar agenda was used for the meeting with representatives of P8 HWI - Hilfswerk Austria international Representation in Tajikistan. Information about the meetings implemented is available on the website of P3 KNAU https://agrodev.knau.kg/en/2024/01/31/external-evaluation-of-the-project-development-of-higher-education-content-aimed-to-support-industries-for-sustainable-production-of-qualitative-agri-food-agrodev-by-mr-linards-de/

Agenda of online evaluation meetings

Theme	Duration
Introduction, goals and objectives of the evaluation meeting, introduction of participants	Up to 10 minutes
1. General assessment of the relevance of the topic and the goals of the project. Opinion of the participants about the main achievements of the project.	Up to 15 minutes
2. Project performance assessment: a. Cooperation and interaction with the Project Coordinator (LBTU) – overall project coordination and management, internal reporting procedures (WP7), interaction and administrative/organisational collaboration. b. Cooperation and interaction with other project partners: - CA universities in Uzbekistan (during evaluation meeting with project partners from Kyrgyzstan on 22nd December 2023) Samarkand branch of Tashkent State University of Economics and Tashkent State Agrarian University - CA universities in Kyrgyzstan (during evaluation meeting with project partners from Uzbekistan on 28th December 2023) - Kyrgyz National Agrarian University and Naryn State University), - collaboration with universities in Latvia, Poland and Sweden, Hilfswerk International, the role of associated Partners - NGOs of the agricultural sector from Uzbekistan and	20-25 minutes

Kyrgyzstan (The Centre of Agro-Innovation of the Council of Farmers, Agrobusiness Association of Uzbekistan) c. Needs analysis and assessment of the development of modular programs, new teaching methods and teaching materials (WP1, WP2) d. Evaluation of study visits in Poland, Sweden and Latvia, activities to improve the qualifications of teachers, master classes by lecturers from universities in EU countries, acquisition and use of equipment (WP3) e. Evaluation of the development and piloting of new training courses (WP4, WP5) f. Project communication activities and dissemination of results (WP6)	
3. Project results (with emphasis on the courses developed and modernized, lab equipment and other deliverables), their sustainability, continuation after the project. Interaction with responsible national government agencies and representatives of the agricultural sector. Opinion on samples of best practice.	Up to 20 minutes
4. Suggestions for further cooperation and lessons for the future - what were the main difficulties during the implementation of the project and what should be taken into consideration in the future.	Up to 15 minutes
Summary, closing and thanks to the participants.	Up to 15 minutes

EVALUATION SUMMARY OF INITIALLY PLANNED RESULTS AND THE ACTUAL ACHIEVEMENTS

SOURCES OF EVIDENCE ON IMPLEMENTATION OF THE PROJECT WORK PACKAGES (WP)

Table 4

WP	Sources of evidence	Evaluator's opinion on the level of achievement
WP 1.	Opinion of partners during the meetings, provided reports, minutes and publications, developed materials and lists of participants, presentations and photos from the training events, media publications.	Full compliance/ significant overachievements
WP 2.	Opinion of partners during the meetings, provided reports, minutes and publications, developed materials and lists of participants, presentations and photos from the training events, media publications.	Full compliance
WP 3.	Opinion of partners during the meetings, provided reports, minutes and publications, developed materials and lists of participants, presentations and photos from the training events, media publications.	Full compliance
WP 4.	Opinion of partners during the meetings, provided reports, minutes and publications, developed materials and lists of participants, presentations and photos from the training events, media publications.	Full compliance
WP 5.	Opinion of partners during the meetings, provided reports, minutes and publications, developed materials and lists of participants, presentations and photos from the training events, media publications.	Full compliance/ overachievements
WP6.	Opinion of partners during the meetings, provided reports, minutes and publications, developed materials and lists of participants, presentations and photos from the training events, media publications.	Full compliance/ significant overachievements

AIMS, OBJECTIVES, PROJECT ACTIVITIES AND RESULTS EVALUATED

The objective of the project is to update the content of the HE for the purpose of supporting the development of these national agri-food production systems where the farm-enterprise will implement internationally accepted good agricultural practice (GAP) principles and agri-business sustainable management approaches. This will improve the efficiency and competitiveness of the agro - industry (primary production, pre-processing), thus promoting business development, ensuring quality food and clean environment for the people, and indirectly supporting regional and rural development.

The agro-food area was selected based on initiative of CA based organisations, representing regions' farm enterprises, who have identified and presented one of the main challenges of agri-business and the whole agri-food industry – lack of knowledge and skills necessary for introduction and maintenance of GAP and sustainable management approaches. They are involved as associated partners: 1. Association of Fruit and Vegetable Enterprises of Kyrgyz Republic; 2. The Centre of Agro-Innovation of the Council of Farmers.

The overall aim of the project is to modernise agro-industry related higher education thus promoting implementation and effective management of sustainable agro-food production systems in Kyrgyzstan and Uzbekistan.

Specific objectives are set considering overall aim and need to create study environment which pillars are: 1) a qualitative study content, developed using the latest scientifically justified knowledge, 2) highly knowledgeable and skilful academic staff, following the latest scientific developments and using effective pedagogic methods, 3) productive and mutually complementary collaboration with relevant industries, where knowledge flows both directions, 4) a qualitative study environment, ensuring access to laboratories and study literature, 5) assessment of study performance and permanent development of performance, and 6) openness to the collaboration across borders.

In the project application the target groups from the Central Asia countries involved are described, in particular, their needs, problems addressed by the aim and objectives.

PROJECT ACTIVITIES, WORK PACKAGES, METHODOLOGY, MILESTONES, MAIN OUTCOMES/OUTPUTS, INDICATORS OF RESULTS AND PROGRESS

As stated in the project application, it was planned to modernise 6 bachelor study programmes as well as to increase capacity of academic staff increased in 2 CA universities within the project. Thereby the modernisation of study programmes concerned may be considered as the core element of the overall project work. Tasks are grouped into 7 WPs, thus structuring tasks in logical groups, and complementing each other.

IMPLEMENTATION OF THE PROJECT WOK PACKAGES AND INITIALLY PLANNED TASKS

Table 5

Work package and particular tasks planned	Implementation status at the stage of evaluation
WP1 Detailed needs analysis and inventory of relevant curricula in involved Central Asia universities	Completed
T1.1. Assessment of selected curricula	Completed
T1.2. Survey for assessment of industrial stakeholders	Completed
T1.3. Elaboration of joint report-overview	Completed
T1.4. Reading and evaluation of the joint report – overview by all partners	Completed
T1.5. National academic-industry-public authorities' workshops	Completed
WP2 Elaboration of needs based tailor-made study content and teaching materials	Completed

T2.1. Formulation of new content scope, methodological objectives, syllabuses, teaching plans	Completed
T2.2. Content development workshops	Completed
T2.3. Development of syllabuses and teaching plans	Completed
T2.4. Development of teaching materials	Completed
T2.5. Joint workshop on progress regarding development of content and teaching materials	Completed
WP3 Increase of Central Asia HEIs teaching and technical capacity	Completed
T3.1. Study visits of involved Central Asia HEIs teaching staff at EU partner HEIs	Completed
T3.2. Training of CA HEIs teaching staff in study course subjects	Completed
T3.3. Training of CA HEIs teaching staff in teaching methodologies	Completed
T3.4. Master classes provided by EU academic staff with wide representation of at CA HEIs academic staff, students, external experts	Completed
T3.5. Field (farm based) training for teaching staff	Completed
T3.6. Purchase of equipment and study literature	Completed
WP4 Development of curricula and the project quality assurance tools	Completed
T4.1. Elaboration of the quality assessment methodology and adoption at the involved CA HEIs	Completed
T4.2. Permanent evaluation during pilot studies	Completed
T4.3. Elaboration of the project quality evaluation plan	Completed
T4.4. The project quality assessment	Completed
T4.5. Elaboration and updating of the results sustainability plan	Completed
WP5 Piloting of the modernised study courses	Completed
T5.1. Pilot teaching	Completed
T5.2. Joint workshop - exchange of experiences	Completed
T5.3. Revision and updating of the content and materials	Completed
WP6 Publicity, dissemination, and exploitation	Completed
T6.1. Design, development, and maintenance of the project's website	Completed
T6.2. TV and radio broadcasts in KG, UZ	Completed
T6.3. Publications in social media, websites, and newspapers in KG, UZ	Completed
T6.4. Design and print of dissemination materials	Completed
T6.5. National academic-industry-public authorities' seminars	Completed
T6.6. Joint academic and industries forum	Completed
WP7 Management and coordination	Completed.

THE PROJECT MILESTONES AND THEIR IMPLEMENTATION STATUS

Table 6

WP	Milestones	Implementation status at the stage of evaluation
WP1.	M1.1. Questionnaire and survey prepared for the assessment.	Achieved
	M1.2. The joint report elaborated.	Achieved
WP2.	M2.1 Curricula modernisation plan for each involved CA university elaborated.	Achieved
	M2.2 Modernisation plan harmonised within each involved CA university.	Achieved
	M2.3 Content and materials elaborated. M2.4 Accreditation measures provided.	Achieved
WP3.	M3.1 Study visits prepared.	Achieved
	M3.2 CA universities teaching staff trained in thematic of subjects and teaching pedagogics.	Achieved
	M3.3 Procurement of the equipment prepared.	Achieved
	M4.4 Equipment and books acquired and delivered.	Achieved
WP4.	M4.1 Quality assurance methodology for modernised study programmes elaborated.	Achieved
	M4.2 Quality assessment and monitoring plan approved at relevant units of involved CA universities.	Achieved
	M4.3 Evaluation of pilot studies process and results done. M4.4 The project quality assessed.	Achieved
	M4.5. Draft of the sustainability plan elaborated and reviewed by all partners.	Achieved
WP5.	M5.1 Pilot studies schedule prepared for each involved CA university.	Achieved
	M5.2 HEIs have prepared reports to be presented at joint workshop.	Achieved
WP6.	M6.1 Dissemination and exploitation strategy re-discussed and approved at kick off meeting.	Achieved
	M6.2 Website developed and activated. M6.3 Forum prepared.	Achieved
WP7.	M7.1 Kick off meeting.	Achieved
	M7.2 PMT meetings.	Achieved
	M7.3 Auditor's opinion issued.	Not necessary, according to ERASMUS requirements

MAIN OUTCOMES / OUTPUTS AND THEIR IMPLEMENTATION STATUS

Table 7

WP	Main outcomes and outputs planned	Implementation status at the stage of evaluation
WP1.	The joint report – overview of finding, recommendations on what must be done in order to improve higher education content. 2 national workshops held, at least 60 stakeholders participated.	Implemented
WP2.	6 study programmes modernised. Study materials elaborated.	Implemented
WP3.	5 study visits held, at least 24 CA universities teachers participated, training of teachers provided, at least 48 teachers' professional competencies increased. 4 sets of laboratory equipment (70 units) and 4 sets of study literature (about 30 books each) delivered to CA HEIs.	Implemented
WP4.	Modernised study programmes' quality assurance methodology. Project quality evaluation plan. Results sustainability plan.	Implemented
WP5.	Pilot studies provided for 6 groups, at least 220 students participated.	Implemented
WP6.	2 national and 1 international event with participation of academic-business-public stakeholders organised, at least 120 participants participated. 12 TV and radio broadcasts, 32 publications, 1 website.	Implemented
WP7.	2 reports.	Intermediate report elaborated and submitted. The final report under development.

INDICATORS OF RESULTS AND PROJECT PROGRESS, THEIR AVAILABILITY AT THE STAGE OF EVALUATION

Table 8

Indicators planned	Availability
Number of planned and modernised curricula.	Documentation and other materials of evidence available and provided
Number of study visits organised, teachers participated, impact on teachers' capacity and new joint initiatives among CA and EU HEIs.	Documentation and other materials of evidence available and provided
Number of teachers trained, their professional benefits, impact on teachers' capacity and study quality.	Documentation and other materials of evidence available and provided
Number of students trained, students' evaluation of study content, teaching methods used, available study resources (literature, laboratories).	Documentation and other materials of evidence available and provided
Number of HEIs, where studies assurance tool is introduced, assessment in provided.	Documentation and other materials of evidence available and provided
Number of laboratory equipment and books acquired, feedback of teachers and students on their impact on study process quality.	Documentation and other materials of evidence available and provided
Number of tripartite events organised, number of target groups' representatives participated, recommendations received.	Documentation and other materials of evidence available and provided
Number of dissemination and exploitation measures held, number of target groups' representatives addressed.	Documentation and other materials of evidence available and provided
Long term impact measurement indicator - appreciation of the studies in the modernised curricula (opinion of students – graduates and farm-enterprises).	Documentation and other materials of evidence available and provided

EVALUATION OF THE PROJECTS RELEVANCE, EFFECTIVENESS, EFFICIENCY, IMPACT AND SUSTAINABILITY

INTRODUCTION

The main purpose of the final ex-post evaluation of the Project is to assess the level of implementation and intervention within the partner organizations, the achievement of goals and specific objectives while following the general rules and standards set by the Erasmus+ Programme. Thereby the evaluation results may be used to:

- to provide recommendations to the partners and the funding authority regarding best practices and lessons learned observed;
- to assess the project results achieved and their sustainability;
- to provide all partners involved as well as the European Commission with sufficient visibility on the consortium and its practices that support a culture of quality.

In describing the assignment, the project description identifies the overall aim and five specific objectives. The **overall aim of the Project** is to modernise agro-industry related higher education thus promoting implementation and effective management of sustainable agro-food production systems in Kyrgyzstan and Uzbekistan.
The 6 **specific objectives** of the project are set considering overall aim to create study environment which pillars are as following:

1) qualitative study content, developed using the latest scientifically justified knowledge;
2) highly knowledgeable and skilful academic staff, following the latest scientific developments and using effective pedagogic methods;
3) productive and mutually complementary collaboration with relevant industries, where knowledge flows both directions;
4) qualitative study environment, ensuring access to laboratories and study literature;
5) assessment of study performance and permanent development of performance, and 6) openness to the collaboration across borders.

The project aims to modernise higher education content for promotion of development of national agro-food production systems, where farm-enterprises will apply internationally recognised good agricultural practices (GAP) and agro-business sustainable management principles and approaches, in this way increasing agro-industry (primary production and pre-processing) effectiveness and competitiveness, thus supporting business development, ensuring qualitative food and clean environment to inhabitants, and indirectly promoting regional and rural development.

According to opinion of the evaluator, the main work directions of the project may be considered as following:

1. To modernize 6 agro-food production related study programmes in 4 Central Asia universities – KNAU and NSU in Kyrgyzstan, and SBTSEU and TSAU in Uzbekistan, including provision of teaching, learning and methodological materials, literature and laboratory equipment.
2. To promote availability of knowledgeable and skilful specialists for agro-food production industry.
3. To develop capacity of academic staff.
4. To improve overall study environment.
5. To strengthen links among universities and agro-food production industry.
6. To enhance networking among Central Asia's and EU's higher education institutions.

The agro-food area was selected based on initiative of CA based organisations, representing regions' farm enterprises, who have identified and presented one of the main challenges of agri-business and the whole agri-food industry - lack of knowledge and skills necessary for introduction and maintenance of GAP and sustainable management approaches.

In terms of innovativeness and added value, the project was highly satisfactory. Moreover, the outcomes of the project have been significant, and they have addressed both local HEI's and the country's needs very effectively. The project also offers ample opportunities for learning, further supporting its relevance.

As a horizontal component of all aspects, related to the project evaluation – relevance, effectiveness, efficiency, impact as well as a significant contribution towards ensuring sustainability, a significant role of the project coordinator - LBTU should be mentioned. A democratic and at the same time highly effective approach of the overall project management by the coordinator was highlighted during the online meetings with the CA partners. The set of extensive, detailed and well prepared documentation developed during the project implementation period (like "The project results' sustainability plan, the document for the assurance and assessment of quality of higher education study programmes and others) prepared and available during the project implementation period, significant overachievements of the initially planned project results as well as the expressed satisfaction of CA partners with project management methods could clearly demonstrate an obvious evidence that the LBTU team carried out continuous and effective monitoring and management of the project implementation throughout the project life time, effectively providing all the necessary consultations to the project CA partners. Thereby it could be concluded that the project coordinator has demonstrated significant operational competence in a challenging multi-cultural environment of Kyrgyzstan and Uzbekistan, and has a deep understanding of the legal framework, decision making process, HE work specifics and communication culture in the countries concerned. It also should be noted, that there are significant differences in the above-mentioned elements of the project implementation environment in both countries, however the coordinator always succeeded to find the most effective approaches. According to opinion of the evaluator, the successful experience of LBTU should be disseminated to other EU universities and organisations, involved or going to be involved in thematically similar projects and initiatives in CA (via invitation of the LBTU representatives to respective seminars, conferences), as well as in consultations on development of future collaboration strategies in the HE sectors between the EU and CA countries.

RELEVANCE

According to the current definition of the criteria provided at the OECD/DAC (2006) website, relevance refers to the extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies. Retrospectively, the question of relevance may also become a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances. In our case, we are interested to find out to what extent are the objectives of the Programme supported?

One of the initial aspects to analyse is the alignment of the delivered activities and outputs with the priorities of both: the target countries – Uzbekistan and Kyrgyzstan, and the EU Erasmus+ CBHE Programme.
Additionally, it may be considered necessary to evaluate whether the project's management effectively delivered the expected outcomes and outputs and whether it adhered to cross-cutting issues such as gender balance and equal opportunities. In this regard according to opinion of evaluator, the **project has contributed significantly to higher education reforms in Uzbekistan and Kyrgyzstan via modernisation of 6 bachelor level study programmes, thereby promoting agro-business industries development, job creation, and the sustainable use of natural resources**.

In the following sections the relevance of the pilot teaching quality of students, academic staff capacity building in teaching methods and pedagogic skills as well as academic staff capacity building in study courses subjects, Master classes, study visits and field training of the academic staff implemented are described.

EVALUATION OF THE PILOT TEACHING QUALITY

The pilot teaching of students was done in the involved Uzbekistan's universities in the autumn semester, and in the involved Kyrgyzstan's universities in the spring semester of the study year 2022/2023. A teaching plan was elaborated for each respective university according to the modernised subjects and harmonising teaching periods with the regular study process. EU partner universities academic staff provided teaching in-class and

remotely. Proportion between in-class and remote lectures is provided in the table below. Pilot teaching quality evaluation was done after the end of each study course by students and assigned CA partner universities teachers.

Table 9

CA university, where pilot teaching has been provided	Total number of modernised and taught credits	In-class teaching, % of total modernised and taught credits	Remote teaching, % of total modernised and taught credits	Number of students taught in the modernised curricula	Number of students as planned in the Grant agreement
P2 Naryn State University	25,5	72	28	**24**	**20**
P3 Kyrgyz National Agrarian University	44	92	8	**104**	**100**
P4 Samarkand branch of Tashkent State University of Economics	34,5	100	0	**61 + 43**	**50**
P5 Tashkent State Agrarian University	17	88	12	**42**	**50**
TOTAL	**121**	**x**	**x**	**231 + 43**	**220**

Evaluation templates were elaborated for this purpose and filled by the students and academic staff after each respective study course at each respective CA university. Results and impact were evaluated also during the joint workshop, by using interactive approaches and the Delphi method, and a plan jointly prepared by EU partners.

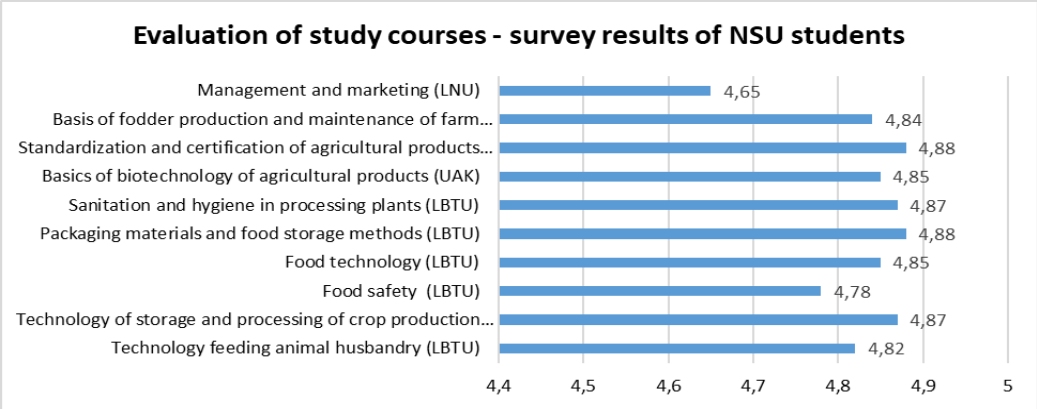
As highlighted by the involved academic staff and students at CA universities, the integration of new learning tools and their application was of great value during the pilot learning process. Students were taught how to use new databases (e.g*., Global GAP, Codex Alimentarius, organic farming, Halal, eAmbrosia*) and how to analyse the information available and apply it while writing study papers, providing practical works and conducting research. Another important tool was thematic audio/video materials – either found online or produced by academic staff.

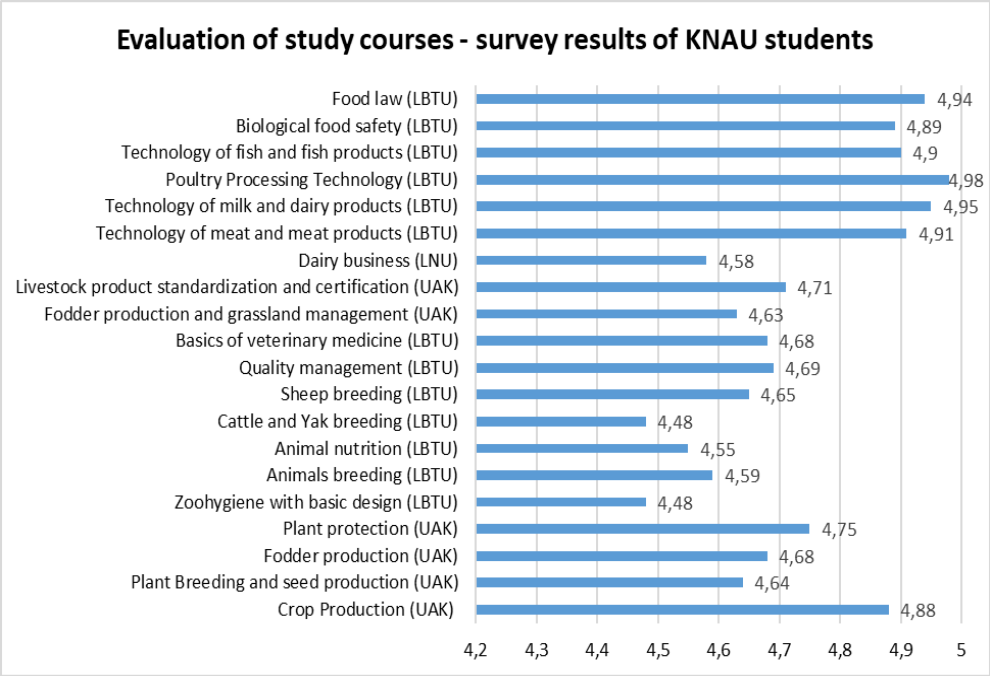
All above described helped to achieve better learning outcomes: students' deeper understanding of thematic and improved analytical skills. Availability of the contemporary study literature (acquired within the Project) was also highlighted as a significant tool, ensuring access to the latest knowledge in the field. Creation of learning laboratories have extended possibilities for students to carry out scientific research work in a higher quality and to produce quotable publications on the results obtained.

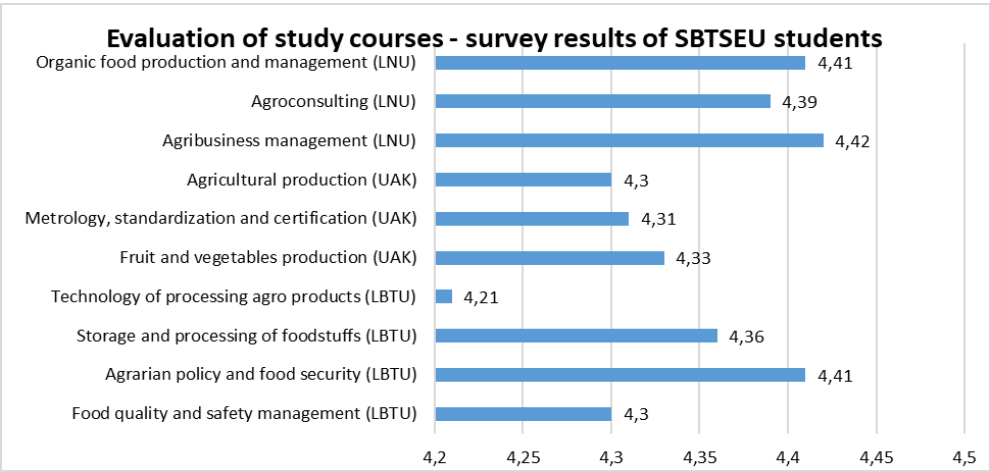
Based on the pilot teaching, the academic staff and students assessed provided new content topicality and relevance as well as teaching process quality. CA academic staff emphasized the relevance of the evaluation tools adopted for different study courses/study levels. For the bachelor level students, examination with quizzes, open questions, and elaboration of solution for solving problems are more appropriate. For the master level students, analysis of situation/data from experiments and presentation of findings/conclusions to the other students are more appropriate. The modernised courses content and teaching process were evaluated using methodology and templates developed for the project needs.

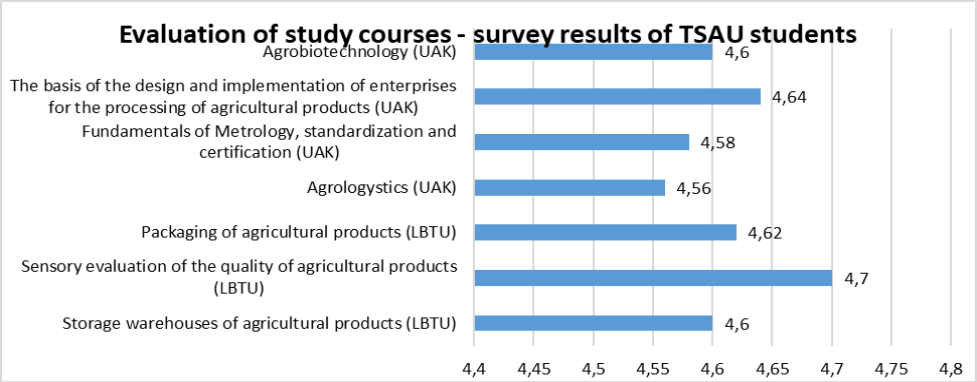
Evaluation of students have been summarized after provision of studies at each respective CA university. Students have highly appreciated the performance of EU teachers. The average student rating in P2 NSU is 4,82, in P3 KNAU - 4,72, in P4 SBTSEU - 4,34, but in P5 TSAU - 4,61. Students have highlighted such qualitative aspects as: a) the professionalism of EU lecturers, b) the modern teaching methods used in the process of pilot training and c) the knowledge provided on the latest developments in agribusiness related sectors.

Summary of students' feedback on the pilot teaching quality:









RELEVANCE TO THE ACTUAL NEEDS OF AGRO-INDUSTRY SECTORS IN THE COUNTRIES CONCERNED

The feedback that the agro-industry stakeholders have provided during national seminars and one-on-one meetings indicates that they value learning about the Global G.A.P., the certification process, geo-indications, and innovative techniques for extending food shelf life. Additionally, they emphasised their understanding of the application of food chain traceability systems, which are founded on global food safety standards like ISO 22000. It has been noted that having access to international experience is quite important. Stakeholders in the agroindustry believe that new information enhances the competitiveness and quality of food items, which in turn promotes exports of the goods. Graduates will be able to assess and resolve current production issues and advise producers with their newfound expertise. Leadership qualities and critical thinking skills have been mentioned as “must be” in order to be able to work in any steps of the food production chain.

For example, during the national seminar, held in Kyrgyzstan on April 6, 2023, entrepreneurs, invited by the Naryn State University, noted the need to open the laboratory on the basis of universities, where entrepreneurs and farmers can cooperate academically and to do analyses of their products. The provision of the training on quality control of agricultural products on the village level was also noted as one of the significant points. Stakeholders invited to the seminar by KNAU, emphasized the need for the trained auditors, being able to guide companies and clusters through the Global G.A.P. certification processes and management of the standard when implemented.

ACADEMIC STAFF CAPACITY BUILDING IN TEACHING METHODSAND PEDAGOGIC SKILLS, CAPACITY BUILDING IN STUDY COURSES SUBJECTS, MASTER CLASSES

Academic staff training in teaching methods was done by Linnaeus University teachers in the time period October 2021 – April 2022, using distance teaching with a follow-up visit to each CA university. 48 teachers at the involved CA universities were trained in learning, adoption and use of contemporary teaching methodologies and pedagogic skills:

Table 10

P2 NSU	P3 KNAU	P4 SBTSEU	P5 TSAU	**Total**
10	**12**	**14**	**12**	**48**

All CA universities involved have adopted several new teaching methods. Most actively it has been done in the Samarkand branch of Tashkent State University of Economics. Other CA universities have adopted a few of them. Number of trained teachers, who have implemented acquired teaching methods is as following:

Table 11

Teaching methods/teaching tools (4 methods mentioned as the most often adopted)	Number of academic staff, who have applied acquired listed teaching methods, per involved CA university				Total
	P2 NSU	P3 KNAU	P4 SBTSEU	P5 TSAU	
Experiential learning	10	12	12	8	42
Case studies	5	14	16	12	47
Distance learning	10	12	12	10	44
Texts, audio, and video materials	10	12	16	8	46
Total	**35**	**50**	**56**	**38**	**179**

Preparation and provision of video lectures (taught by Linnaeus University) have been marked as a method having the highest interest among CA academic staff. There was a range of existing experience of the use of the Moodle system in different CA universities.

Academic staff training in study subjects was done by teachers at the involved EU partner universities in the time period September 2022 – May 2023 69 teachers at the involved CA universities were trained:

Table 12

P2 NSU	P3 KNAU	P4 SBTSEU	P5 TSAU	**Total**
15	**15**	**19**	**20**	**69**

The participating CA universities have expressed great appreciation for the opportunity to update study programmes by drawing on the experience of their European partner universities. Many topics were novel to the partners, either entirely or in part. Geo-indication (offered by LNU), Zero waste production (UAK, LBTU), Quality systems in the food chain (LBTU), Laboratory works organisation principle, starting with problem and actuality, developing aim and solutions (LBTU), Waste free recycling (UAK - waste processing for obtaining plastic, LBTU - dairy products production) are the ones mentioned as the most innovative. Finding answers by looking at specific problems from the perspectives of multiple disciplines and synthesising scientific information from various sectors was also cited as an innovative technique.

Master classes – open lectures/discussions, involving internal and external stakeholders, was a new form of teaching and communication higher education to the society, adopted at the involved CA universities while implementation of the project. Master classes were led jointly by EU and CA academic staff. According to data, provided by the project team, 274 stakeholders took part in the total, where out of the total number 54 were external. Number of the participants per each involved CA university and per groups of stakeholders is provided in the table below.

Table 13

Indicator	**P2 NSU**	**P3 KNAU**	**P4 SBTSEU**	**P5 TSAU**	**Total**
Number of master classes realised in each particular CA university	**5**	**7**	**7**	**6**	**25**
Total number of participants, inter alias:	**62**	**87**	**55**	**70**	**274**
Academic staff	15	47	14	12	88

Students	33	16	31	52	132
Food production entrepreneurs, inter alias farmers	11	7	6	4	28
Representatives of public authorities	3	17	4	2	26

Thematic interest of internal stakeholders (both the academic staff and students) was identified through internal meetings of academic staff. The interest of external stakeholders was evaluated during national level workshops (held twice in each CA country involved) and by varying approaches in each CA university. P2 NSU organised a Plenary Discussion during the 2nd part of National Seminar with Stakeholders and NSU Staff. P3, KNAU & TSAU used Direct Contact method (Individual Meetings of Entrepreneurs and Academics). P4, SBTSEU developed a questionnaire and sent it to food processors.

Positive feedback from stakeholders, who participated in the master classes, was received. As very successful and useful master classes on the following topics were mentioned: a) new product development (provided by LBTU), b) agricultural enterprise certification system (UAK) and c) regulatory aspects (UAK), and c) Geo-indication: concept, international experiences, and opportunities (LNU, UAK, HWI). Format of the event – open discussion was characterised as novel and up to date format, unusual in Central Asia. Participants emphasised the significance of the provision of specific examples for demonstration of challenges, solutions, and results, because it helps to understand and choose possible pathways in own situations.

STUDY VISITS

During the project implementation period there were five study visits organised for the CA universities academic staff involved. Participants of Kyrgyzstan's and Uzbekistan's higher education institutions were preselected based on their involvement in the curricula modernisation, piloting, and foreseen further implementation.

Table 14

Month, year	Venue of the study visit - country and university	P2 NSU	P3 KNAU	P4 SBTSEU	P5 TSAU	TOTAL
June 2022	Sweden, Linnaeus University	6	6	6	6	**24**
June 2022	Latvia, Latvia University of Life Sciences and Technologies	6	6	6	6	**24**
September 2022	Poland, University of Agriculture in Krakow	6	6	6	6	**24**
April 2023	Latvia, Latvia University of Life Sciences and Technologies (	6	6	6	5	**23**
April 2023	Poland, University of Agriculture in Krakow	6	6	6	6	**24**

During the study visits the EU partners demonstrated the CA academic staff various aspects of academic work: integration of themes into EU HEIs curricula, integration of studies and research into their overall curricula, integration of research results into the teaching content, as well as incorporation of sustainability into their

curricula. When visiting external stakeholders' academic staff, they were introduced to cooperation forms between higher education institutions (HEIs) and agro -business sector, how they are working with businesses to make sure the business environment takes sustainability into account, how they are taking responsibility for their environment and society and what innovative and digital solutions they are using.

It is reported that the main benefits obtained from the study visits are a) new knowledge and better understanding how different food production and processing processes are organised, controlled, and evaluated, b) increased capacity to carry research, c) joint initiatives with EU partners for cooperation in the development of novel food products, d) cooperation among CA and EU partners and among CA partners for conducting joint research and writing international scientific publications. Increased teaching potential in the field of food safety has been mentioned as especially significant.

The experiences gained will be used for a) development of new curricula and/or study courses, especially in fields of agricultural food innovation, food safety, sustainable production chains, quality management in agricultural production, development and management of plant and animal origin based food production systems, food shelf-life extension, and other, b) development of effective regional and international networks and cooperation mechanisms, where universities, governmental institutions farmers, food processors are equally and fairly represented. After each study visit participants evaluated the impact of the particle experience gained visiting institutions and participating in planned events. It is reported, that visits to Latvia, Sweden and Poland fully corresponded with participants' professional interests and needs.

MODERNISED PROGRAMMES AND SUBJECTS IN EACH OF THE UNIVERSITIES IN KYRGYZSTAN AND UZBEKISTAN

The corresponding programmes and subjects were selected as a result of analysing the current education programmes that best match the scope of topics in question and that have potential for future growth. Evaluator may confirm, that at the stage of evaluation the following programmes and particular subjects were modernised:

P2 NARYN STATE UNIVERSITY (NSU)

Bachelor-level programme - Technology for the production and processing of agricultural products

Table 15

Modernised programmes	*Credits as part of the system used in the EU (ECTS)*	*Modernised subjects*	*Status at the stage of evaluation*
Programme 610600 "Technology for the production and processing of agricultural products"	2/4	Basics of biotechnology of agricultural products	Completed
	2/4	Technology for the storage and processing of crop production	Completed
	1.5/4	Technology feeding animal husbandry	Completed
	3.5/4	Standardisation and certification of agricultural products	Completed
	3/4	Food safety	Completed
	3.5/4	Food technology	Completed
	2/4	Packaging materials and food storage methods	Completed
	3/3	Sanitation and hygiene in processing plants	Completed
	3 /3	Management and marketing	Completed
	2/4	Basis of fodder production and maintenance of farm animals	Completed

P3 KYRGYZ NATIONAL AGRARIAN UNIVERSITY (KNAU)

Bachelor-level programme – Zootechnics

Table 16

Modernised programmes	*Credits as part of the system used in the EU (ECTS)*	*Modernised subjects*	*Status at the stage of evaluation*
Programme 610400 "Zootechnics"	2/5	Fodder production and grassland management	Completed
	3/10	Zoo-hygiene with basic design	Completed
	1.5/10	Animal breeding	Completed
	1/10	Animal nutrition	Completed
	1.5/10	Cattle and yak breeding	Completed
	1.5/10	Sheep breeding	Completed
	3.5/5	Livestock product standardisation and certification	Completed
	5/5	Dairy business	Completed
	2/5	Quality management	Completed
	2/5	Basics of veterinary medicine	Completed

Bachelor-level programme - Technology of production and processing of agricultural products

Table 17

Modernised programmes	*Credits as part of the system used in the EU (ECTS)*	*Modernised subjects*	*Status at the stage of evaluation*
Programme 610600 "Technology for the production and processing of agricultural products"	2/5	Technology of meat and meat products	Completed
	2/5	Technology of milk and dairy products	Completed
	2/5	Poultry processing technology	Completed
	2/5	Technology of fish and fish products	Completed
	3/3	Biological food safety	Completed
	2/2	Food law	Completed

Bachelor-level programme - Agronomical science

Table 18

Modernised programmes	*Credits as part of the system used in the EU (ECTS)*	*Modernised subjects*	*Status at the stage of evaluation*
Programme 610200 "Agronomical science"	2/8	Crop production	Completed
	2/5	Plant breeding and seed production	Completed
	2/4	Fodder production	Completed
	2/7	Plant protection	Completed

P4 SAMARKAND BRANCH OF TASHKENT STATE UNIVERSITY OF ECONOMICS (SBTSUE)

Bachelor-level programme - Agribusiness and investment activities

Table 19

Modernised programmes	*Credits as part of the system used in the EU (ECTS)*	*Modernised subjects*	*Status at the stage of evaluation*
Programme 5233300 "Agribusiness and investment activities"	6/6	Agro consulting	Completed
	2/6	Storage and processing of foodstuffs	Completed
	2/6	Agricultural production	Completed
	2/6	Technology of processing agro products	Completed

	2/6	Fruit and vegetable production	Completed
	3.5/6	Metrology, standardisation and certification	Completed
	6/6	Organic food production and management	Completed
	6/6	Agribusiness management	Completed
	2/6	Food quality and safety management	Completed
	3/6	Agrarian policy and food security	Completed

P5 TASHKENT STATE AGRARIAN UNIVERSITY (TSAU)

Bachelor-level programme - Technology for the storage and processing of agricultural products

Table 20

Modernised programmes	*Credits as part of the system used in the EU (ECTS)*	*Modernised subjects*	*Status at the stage of evaluation*
Programme 5410500 "Technology for the storage and processing of agricultural products"	3.5/4	Agro-logistics	Completed
	2/4	Storage warehouses of agricultural products	Completed
	3.5/6	Fundamentals of Metrology, standardisation and certification	Completed
	2/8	The basis for the design and implementation of enterprises for the processing of agricultural products	Completed
	2/8	Agrobiotechnology	Completed
	2/6	Sensory evaluation of the quality of agricultural products	Completed
	2/4	Packaging of agricultural products	Completed

Within the project documentation (The Project Results' Sustainability Plan) a set of measurable indicators on implementation of the programmes described above is provided:

On autumn 2022 the content of 6 bachelor level curricula and teaching and learning materials, meeting the needs defined in the joint report and national workshops (WP1) and the defined quality criteria in the provided quality assurance methodology & quality assessment and monitoring plan (WP4), available on regular basis at 4 CA higher education institutions, has been modernized.

Specific weight of modernised content in comparison to total volume of the professional disciplines in each curriculum is as following:

- 27% of P2 NSU curricula "Technology of production and processing of agricultural products"
- 28% of P3 KNAU curricula "Zootechnics"
- 27% of KNAU curricula "Technology of production and processing of agricultural products"
- 6% of KNAU curricula "Agronomical science"
- 42% of P4 SBTSEU curricula "Agribusiness and investment activities"
- 43% of P5 TSAU curricula "Technology of production and processing of agricultural products".

In conclusion, the project has demonstrated high relevance by effectively aligning with country needs, educational priorities, and the Erasmus+ CBHE Programme's objectives.

EFFICIENCY

Efficiency, as per the DAC methodology, focuses on measuring the outputs in relation to the inputs, emphasizing how efficiently the project utilizes resources to achieve its goals. To evaluate the efficiency of the Project, we will consider the effectiveness of project administration and implementation, the influence of partner-organized activities on project efficiency, and the utilization of donor-provided resources.

In terms of activities accomplished, the following results were obtained per Work Package where "A" indicates fully completed, "B" indicates mainly completed, "C" indicates partly completed and "D" indicates not completed.

WP1 **Detailed needs analysis and inventory of relevant curricula in involved Central Asia universities**

Table 21

Result #	Description	Assessment
Expected Result 1	Assessment of selected curricula	A
Expected Result 2	Survey for assessment of industrial stakeholders	A
Expected Result 3	Elaboration of joint report-overview	A
Expected Result 4	Reading and evaluation of the joint report – overview by all partners	A
Expected Result 5	National academic-industry-public authorities' workshops	A

Remarks: All activities were implemented, and results achieved as initially planned and contractually agreed; detailed evidence is available in the project documentation, available at the stage of the evaluation.

WP2 **Elaboration of needs based tailor-made study content and teaching materials.**

Table 22

Result #	Description	Assessment
Expected Result 1	Formulation of new content scope, methodological objectives, syllabuses, teaching plans	A
Expected Result 2	Content development workshops	A
Expected Result 3	Development of syllabuses and teaching plans	A
Expected Result 4	Development of teaching materials	A
Expected Result 5	Joint workshop on progress regarding development of content and teaching materials	A

Remarks: All activities were implemented, and results achieved as initially planned and contractually agreed; detailed evidence is available in the project documentation, available at the stage of the evaluation.

WP3 **Increase of Central Asia HEIs teaching and technical capacity**

Table 23

Result #	Description	Assessment
Expected Result 1	Study visits of involved Central Asia HEIs teaching staff at EU partner HEIs	A
Expected Result 2	Training of CA HEIs teaching staff in study course subjects	A
Expected Result 3	Training of CA HEIs teaching staff in teaching methodologies	A
Expected Result 4	Master classes provided by EU academic staff with wide representation of at CA HEIs academic staff, students, external experts	A
Expected Result 5	Field (farm based) training for teaching staff	A
Expected Result 6	Purchase of equipment and study literature	A

Remarks: Although minor changes in the initially planned time schedules due to COVID 19 restrictions could be reported, the activities were implemented, and results achieved as initially planned and contractually agreed; detailed evidence is available in the project documentation, available at the stage of the evaluation. Significant overachievements in terms of number of participants of the training events could be reported.

WP4 **Development of curricula and the project quality assurance tools**

Table 24

Result #	Description	Assessment
Expected Result 1	Elaboration of the quality assessment methodology and adoption at the involved CA HEIs	A
Expected Result 2	Permanent evaluation during pilot studies	A
Expected Result 3	Elaboration of the project quality evaluation plan	A
Expected Result 4	The project quality assessment	A
Expected Result 5	Elaboration and updating of the results sustainability plan	A

Remarks: All activities were implemented, and results achieved as initially planned and contractually agreed; detailed evidence is available in the project documentation, available at the stage of the evaluation.

WP5 **Piloting of the modernised study courses**

Table 25

Result #	Description	Assessment
Expected Result 1	Pilot teaching	A
Expected Result 2	Joint workshop - exchange of experiences	A
Expected Result 2	Revision and updating of the content and materials	A

Remarks: All activities were implemented, and results achieved as initially planned and contractually agreed; detailed evidence is available in the project documentation, available at the stage of the evaluation.

WP6 **Publicity, dissemination, and exploitation**

Table 26

Result #	Description	Assessment
Expected Result 1	Design, development and maintenance of the project's website	A
Expected Result 2	TV and radio broadcasts in KG, UZ	A
Expected Result 3	. Publications in social media, websites, and newspapers in KG, UZ	A
Expected Result 4	Design and print of dissemination materials	A
Expected Result 5	National academic-industry-public authorities' seminars	A
Expected Result 6	Joint academic and industries forum	A

Remarks: All activities were implemented, and results achieved as initially planned and contractually agreed; detailed evidence is available in the project documentation, available at the stage of the evaluation.

ASSESSMENT FOR EFFICIENCY CRITERION:

Table 27

	Unsatisfactory	Unsatisfactory with positive elements	Satisfactory	Highly satisfactory
Management of project				x
Involvement of partners				x
Promptness in project implementation				x
Completion of activities				x

The activities organized by the project management and all partners have played a significant role in shaping the project's efficiency. High involvement of all project partners was observed, and contents of the new curricula have been tailored to actual agro-economic needs of Kyrgyzstan and Uzbekistan.

The efficiency of resource utilization has been satisfactory. Although some activities have been delayed due to external factors like Covid-19, the project consortium has successfully adapted to ensure efficient resource utilization.

Overall, the Project has demonstrated efficient resource utilization and effective management in achieving its goals. The adaptability of the consortium in response to challenges further underscores the project's efficiency.

EFFECTIVENESS

Effectiveness is usually understood as the extent to which an activity attains its objectives. In evaluating the effectiveness of the project, it is useful to consider to what extent were the objectives achieved or what were the major factors influencing the achievement or non-achievement of the objectives. The assessment is based on the logical framework and the project objectives expected to be achieved. Thereby, in this particular case the effectiveness demonstrates, what extent have the project components achieved, their planned outcomes, in particular, what impact, has the project had on the modernization of higher education and the promotion of practical-oriented education. In addition, the lessons learned within the project will help ensure the sustainability of the project, as well as future interventions within the Erasmus+ CBHE Programme.

In general partners considered that the overall aims project **was fully achieved**, in particular, in relation to the main project activities - modernisation of 6 study programmes including the necessary preparatory measures - training of academic staff, contribution to development of material and technical provision (laboratory equipment, literature), testing of the modernised programmes and development of their quality assurance system, as well as extensive dissemination and awareness rising activities implemented.

ASSESSMENT FOR EFFECTIVENESS CRITERION

Table 28

Objectives	Contribution	Achievement
Goal 1 Modernising the content of higher education in Kyrgyzstan and Uzbekistan necessary for the development of national systems of agro-food production, apply internationally recognised best agricultural practices and standards.	High	Fully achieved
Goal 2 Improving the relevance of higher education to agribusiness needs by improving the efficiency and competitiveness of agro-industries and the processing industry in Kyrgyzstan and Uzbekistan.	High	Fully achieved

Thereby the overall effectiveness of the project implementation could be characterised by the following:

- Successful training of academical staff and new scientists with creative ideas and the ability to make independent competent decisions, allowing them to further develop the production of high-quality and safe agricultural products;
- Improving the competitiveness of the agricultural and food industries of Kyrgyzstan and Uzbekistan in the domestic and foreign markets and encourage the export of products to foreign countries;
- Advancing the development of the human resources potential of the agrarian sector and increase the competitiveness of specialists in the world labour market.

Numerous examples of good practice within the project implementation could be reported. A large-scale analysis of the agro-business sector in Kyrgyzstan and Uzbekistan, interrelated with recent developments in the higher education sector in the countries concerned was developed. All initially planned study programmes were modernised with a strong link to actual needs of labour market and economic development of the countries concerned.

All partner institutions from CA clearly recognized the project's innovativeness, with some highlighting cutting-edge methodologies and interdisciplinary approaches. The collaboration between EU and CA universities was considered successful and fruitful. Thereby the project effectively addressed the needs for HE modernisation in relation of overall development of the agro-business sector and was well-timed to contribute to sustainable socio-economic growth of Uzbekistan and Kyrgyzstan. The project results are fully compliant with the national strategy and policy development documents.

As an overall conclusion it should be mentioned, that besides the primary goals the project has significantly contributed to promotion of good agricultural practice, sustainable management of agro-business, contributed to synergy development fields of science and research to the targeted economics' sectors of Uzbekistan and Kyrgyzstan.

According to opinion of the evaluator, in the terms of overall effectiveness this project could be considered as the best practice sample.

IMPACT

Impact analysis typically refers to the impact, direct or indirect, of a development intervention, intended or unintended, on the social, economic, environment and other development indicators over the life of the project. The main impacts and effects of the activity on these indicators should be included in the evaluation. The evaluation should focus on both the intended and unintended results. External factors should also be considered. For example, changes in legal framework and development of new international collaboration initiatives that could make it easier for EU-third country partners to strengthen academic collaboration.

It may be considered that the Project has had, and is expected to have, a significant impact on partner organizations and the capacities of both on the level of institutions and individuals (students, academic staff, business and governmental sector as well as other stakeholders' representatives involved). The project has led to improved institutional performance among partner organizations in Central Asia. Through various work packages, partner institutions have worked on the development on modernisation of 6 study programmes, curriculum enhancements, capacity building measures of the academic staff involved quality assessment methodologies as well as sustainability assurance measures. These improvements have contributed to making the partner institutions more dynamic, innovative, and responsive to the changing educational landscape, as well as contributed to ongoing reforms in agro-business sectors of the countries concerned.

IMPACT ON PROJECT PARTNERS

According to opinion of the evaluator, the following impact should be highlighted:

IMPROVED INSTITUTIONAL PERFORMANCE

The project has improved institutional performance within partner organizations in Kyrgyzstan and Uzbekistan. The modernisation of 6 study programmes, curricular developments, promotion of innovative teaching and learning methods, expanding the capabilities of laboratories and training materials development, and enhanced quality assessment methods have rendered partner institutions more dynamic and innovative. The emphasis on Bologna standards and learning outcomes has not only streamlined curriculum development but also raised the global competitiveness of higher education in CA.

CAPACITY BUILDING

The Project has provided a significant contribution in building institutional capacity of the project partners. Through the project faculty members have gained exposure to contemporary teaching methodologies and materials, bolstering the overall educational quality. This has improved the teaching capabilities of partner organizations, empowering them to deliver education that is both relevant and of high quality. It should also be noted that the project planning and implementation process guided by the LBTU significantly contributed

to overall development of project management, coordination and collaboration skills of CA partners, including project planning, teamwork and flexibility, time management, budgeting, effective using of various online collaboration tools like Google Drive, ZOOM and related, as well as contributed to upgrading of planning skills. Project CA partners highlighted, that the acquisition and upgrading of project management skills during all stages of the project are very useful in planning and implementation of other international projects and collaboration activities ongoing and planned for the future.

It is necessary to highlight that the EU partners – HE institutions have significantly increased their competence and capacity to operate in challenging multicultural environment and due to extensive research work implemented in the initial stage of the project may provide deep expertise on situation with the agro-business sector development in the countries concerned. Hilfswerk Austria has increased its capacity and competence in collaboration with higher education sector in the CA and EU countries. Thereby European partners could be a valuable source of expertise for implementation of projects, covering similar themes and content in CA countries.

CONTRIBUTION TO GLOBAL COLLABORATION

The project has broadened the international scope of partner organizations by facilitating collaborations across European and CA universities, public and private institutions, and industries related to the agro-business. This global networking has not only increased the partners' international standing but also has been instrumental in enriching the academic and professional experiences of the stakeholders involved.

IMPACT ON INSTITUTIONAL AND INDIVIDUAL CAPACITIES

The project has contributed to the development of the institutional capacity of CA partners involved, particularly in curricular development and faculty training. This has been pivotal in modernisation of 6 bachelor level study programmes described, which has strengthened the universities' specialized academic offerings. The project activities have contributed to research and innovation capacities of the CA partners as well.

On an individual level, the project's impact should be mentioned both to the students and to the academic staff involved. The development of the modernised programmes has diversified educational pathways, paving the way for more broad employment opportunities and equipping students with skills competences, required by the labour market.

Due to full compliance to the national policies and strategies of agro-business development the economic and socioeconomic impact should be considered, however more details on this aspect could be considered within the final report, which was under development at the stage of implementation on this evaluation.
The project has significantly contributed to the awareness rising among the decision makers and stakeholders from CA countries concerned practical and realistic approaches in the agro-business HE development and its interaction with labour market needs and overall socioeconomic development.

OVERALL ASSESSMENT OF PROJECT IMPACT:

Table 29

Project impact on	Unsatisfactory	Unsatisfactory with positive elements	Satisfactory	Highly satisfactory
Institutional capacity building				X
Individual capacity building				X
Modernisation of higher education				X

Economic and Socioeconomic Impact			X	

According to opinion of the evaluator, the socioeconomic impact of the project results is considerable, however at the project finalisation stage there could not be objectively assessable indicators to evaluate it in a full scale. Thereby it could be expected that the socioeconomic impact could be evaluated in the period of next 3 years, as described in the project results' sustainability plan.

SUSTAINABLITY

According to DAC criteria, sustainability pertains to the continuation of benefits from a development intervention after major development assistance has been completed. That is, whenever possible is prominent to assess the probability of continued long-term benefits. Thereby it is necessary to evaluate: are the positive effects of the project sustainable? How is the sustainability or the continuity of the intervention and its effects to be assessed? To what extent will activities, results and effects be expected to continue after donor intervention has ended? What degree of ownership of the project exists? To what extent will capacity development be sufficient to sustain the project achievements? How entrenched is partnership and c between partner members?

These questions are covered in detail in the Project Results' Sustainability Plan, developed and available at the stage of evaluation.

The sustainability plan is aiming to ensure sustainability of the results created and achieved within the project, and results arise from outcomes and outputs to be produced till the end of the project. The plan is divided in two periods: 1) short term plan for 3 years period and 2) long term plan for 5 years period.

FINANCIAL SUSTAINABILITY

The financial sustainability of the project results is quite clear due to with commitments from the responsible government bodies of Kyrgyzstan and Uzbekistan, accepting the modernised programmes in the overall curricula of the HE institutions involved and has become an integral part of provision of learning opportunities in the universities. As it is stated in the Project Results' Sustainability Plan, the main directions for ensuring financial sustainability are as following:

In the section "Planned short-term activities to ensure sustainability of project results in Central Asia":

- *Support and actively participate in the established working groups at national level, involving universities and public authorities, to address the resource needs for short- and long-term activities and development in relation to GAP & Global G. A. P.*
- *At the university level, develop and implement regulations for the use of laboratory equipment and research services.*
- *Include in the annual budget funding for laboratory supplies, reagents, equipment maintenance.*

In the section "Planned long term activities to ensure sustainability of the project results" the following measures are planned:

- *Discuss with government agencies the possibilities of budgeting for regular educational activities through public funding.*
- *Include in the annual budget funding for the purchase of laboratory supplies, reagents, maintenance, and proper upkeep of the equipment.*

Although financial elements may be considered to be addressed in several sections of the report, a detailed section on financial sustainability is included in the Project Results' Sustainability Plan. The section includes a

detailed descriptions of particular tasks and activities in all CA universities involved in relation of financial sustainability of:

- Equipment obtained within the project;
- Capacity building mechanisms for the academic staff;
- New collaboration and cooperation initiatives and projects.

The particular activities are well described and specific, clearly related to the actual financial and human resources capacity of each particular university involved, national legal frameworks of Kyrgyzstan and Uzbekistan, determining the work of HE sector, as well as collaboration plans with national level stakeholders and particular enterprises of agro-business sector. According to opinion of evaluator, the particular activities described, including international collaboration plans, are clear and realistic.

INSTITUTIONAL SUSTAINABILITY

The partner institutions have accepted the project's vision, in addition they have clearly incorporated it into their operating frameworks. The quality assurance mechanisms are an indication of the project's long-term institutional impact. Stakeholder ownership is strong in the partner universities in Kyrgyzstan and Uzbekistan, creating an environment conducive to the success of the project's goals after completion. The results of the media campaigns and the public engagement activities demonstrate increased public awareness and support, which are essential for long-term stakeholder ownership.

OWNERSHIP, CAPACITY DEVELOPMENT, LONG TERM EFFECTS AND PARTNERSHIPS

All CA universities involved have developed well elaborated, realistic, detailed and specific plans, aimed to ensure sustainability of the project results and clearly demonstrating ownership, increased capacity of CA partners, long term impact of the project and expected continuation of the partnerships developed.

For the sustainability of the project results, the partners from Kyrgyzstan are planning to:

1. To establish an advisory centre for agribusiness at the NSU and KNAU, providing consultations and trainings for partners. The main planned activities of the centre will be:

- Creation of an information base on agro-trading companies and cooperatives, large farming households interested in implementing the Global GAP standard.
- Provision of consulting services and short-term training courses, seminars, webinars, and trainings on the basics of GAP & Global G.A.P., for agro-trade companies and cooperatives, large farming households.
- Creating a video course on completing the GAP Checklists for farmers.

2. To organise round tables, institutional meetings, seminars and trainings for farmers and members of the associations interested in application of Global GAP standards and quality. These activities will result in the training of specialists in accordance with the demands and needs of employers.

3. To strengthen the capacity of the manufacturing and processing industry with expertise in implementation and proper compliance with GAP and the Global GAP standard.

4. To promote competitiveness and creation of prerequisites for starting exports to the EU and other countries of companies, considering the opportunities provided under GSP + (GSP+) (General Scheme of Preferences GSP+).

5. To conduct applied case studies and analysis on the implementation and effective application of Global GAP standards in the agricultural sector.

6. To improve the competitiveness of universities for attracting and training students through updated curricula and improved facilities.

7. To train bachelors and masters using the knowledge and practical skills to carry out work in the agro-industrial complex to establish modern food quality and safety management systems.

8. To conduct short training courses and trainings on GAP & Global G.A.P. fundamentals, for agro-industrial complexes.

9. To issue state certificates, based on the licence of KNAU obtained from the Ministry of Education and Science of the Kyrgyz Republic to trainees of training courses and trainings.

10. To assess the quality of knowledge and determine the competence of students; for this, tests developed by lecturers of partner universities from Europe and supplemented by the teaching staff of the department and the department of quality of education at KNAU will be used.

11. To use the laboratory facilities updated as part of the Project for practical classes and pilot tests on extended topics of food safety and quality determination. Research and graduate works of undergraduate, postgraduate, graduate students and teachers will also be carried out.

12. To promote the results of the Project through various media in Kyrgyzstan, as well as at conferences, seminars, roundtables dedicated to the problems of training a new generation of higher education specialists in the field of quality assurance and food safety.

The results of the project will support the aims of the Kyrgyz Republic Food Security and Nutrition Programme 2018-2023. The specialists, who have enhanced their knowledge and skills due to the project and finish the modernized programmes will be able to introduce food safety and sustainable agriculture standards and methods in cooperatives and companies (those who choose to develop their career in the private sector, and to contribute to enabling policy and environment to promote food safety and sustainable agriculture (those who choose to engage in state agencies and ministries) and to further multiply this knowledge and skills (for those who decide to make an academic career and stay at the universities). This will contribute to increased food safety, enhanced health of population and export potential of the countries. One of the external factors affecting food safety and nutrition (FSN) is the low level of effectiveness of the food safety infrastructure in the Kyrgyz Republic. Internal factors include low agricultural productivity, which negatively affects the volume of domestic agricultural production and causes the low competitiveness of domestic agricultural producers; weak food safety infrastructure, insufficient awareness of citizens about good nutrition, which creates sustainable risks of consumption of low-quality and harmful products for human health.

The results of the project will also address the implementation of the Action Plan to ensure the promotion of priority products on the EU market, approved by the Government of the Kyrgyz Republic on 20.10.2018. This Plan includes the following activities: development of educational programmes for SMEs and farmers on the benefits of certification to international standards and their requirements, development of educational programmes (courses at universities) for future experts in food certification and quality control, promotion of consulting and certification services on FSSC, ISO, GLOBAL G.A.P, IFS, Fairtrade standards.

Strategically, the sustainability of the project is conditioned for the Kyrgyz Republic by its membership in the Eurasian Economic Union (EAEU) and the need to implement the Generalised Scheme of Preferences (GSP+) signed by the Kyrgyz government and the EU European Commission in 2018.

For the sustainability of the project results, the partners from Uzbekistan are planning to:

1. To conduct regional and international scientific and practical conferences, seminars, round tables, meetings, etc. with involvement specialists from EU countries.

2. To strengthen the capacity of the manufacturing and processing industry with expertise in implementation and proper compliance with GAP and the Global GAP standard.

3. To contribute to the competitiveness of companies and creating prerequisites to start exporting to the EU and other countries, considering the opportunities provided under GSP+ (GSP+).

4. To improve the competitiveness of universities for attracting and training students, through updated curricula and improved facilities.

5. To train bachelors and masters with the knowledge and practical skills to work in the agro-industrial complex to establish modern food quality and safety management systems.

6. To create a database of agro-trading companies and cooperatives, large farms and conclude agreements with them to provide them with training, methodological and advisory services on the overall results of the Project.

7. To conduct short training courses and trainings on the basics of GAP & Global G.A.P., for employees of large agro-clusters and holdings, large and small farms and dekhan farms.

8. To conduct annual scientific-practical conferences, round tables, seminars with the participation of the educational sphere, agricultural producers, specialists in food quality and safety. These activities will result in the training of specialists in accordance with the needs and demands of employers.

9. To continue to apply the developed quality assurance tools for assessment of the quality of curricula implementation, as well as knowledge and the competence of students.

10. To use the laboratory facilities updated as part of the Project for practical classes and pilot tests on extended topics of food safety and quality determination. Research work by undergraduate, graduate, and postgraduate students and teachers will also be carried out.

11. To promote the results of the project through the media of Uzbekistan, as well as during conferences, seminars and round tables devoted to the problems of training a new generation of higher education specialists in the field of quality assurance and food safety.

12. To produce and promote e-learning, via producing of learning video materials.

The project results will support the implementation of the Roadmap for the Agricultural Development Strategy of the Republic of Uzbekistan for 2020-2030 in order to diversify production, improve land and water relations, create a favourable agribusiness climate and a high added value chain, support the development of cooperative relations, widely introduce market mechanisms and information and communication technologies into the sector, and effectively use scientific achievements and improve human resources capacity.
The project will also result in the implementation of an action plan to increase the export potential of the agricultural sector, increase value-added production, widely implement a certification system based on international standards and develop cooperation mechanisms: organisation of short-term and distance training courses for horticultural and greenhouse specialists, development and distribution of training manuals; creation of an innovative educational centre – AKIS (Agricultural Knowledge Information Services)

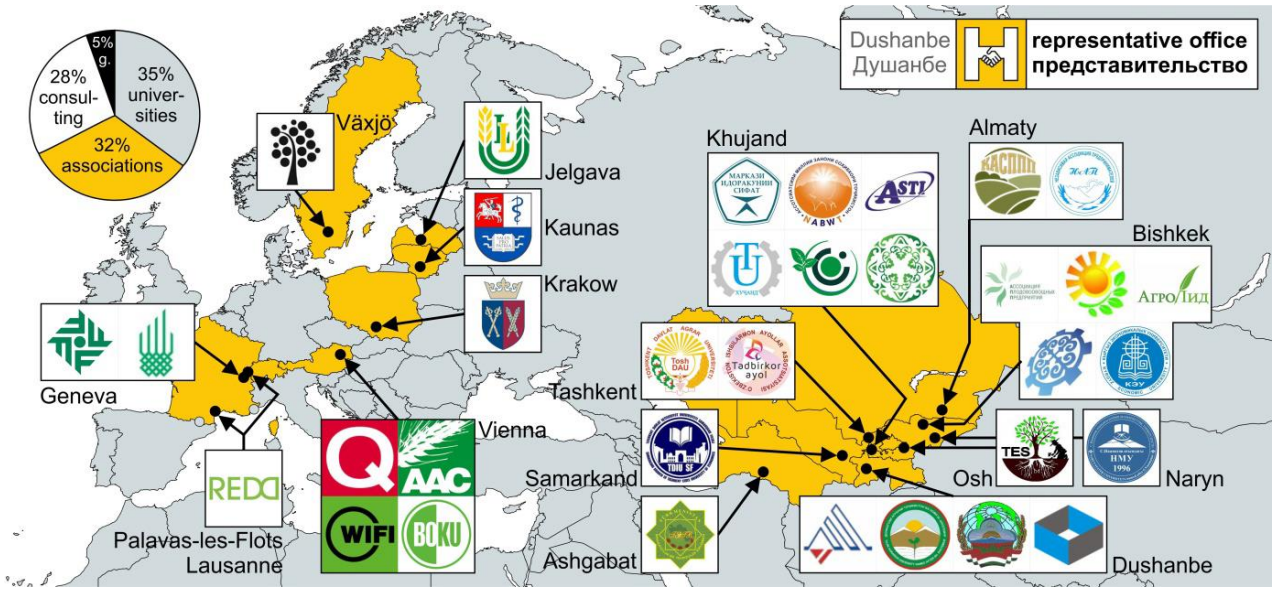
OVERALL ASSESSMENT OF PROJECT SUSTAINABILITY

Table 30

Project impact on	Unsatisfactory	Unsatisfactory with positive elements	Satisfactory	Highly satisfactory
Financial and institutional capacity building			X	
Positive long-term effects and continuity				X
Ownership and capacity Development				X
Partnership and Collaboration				X

COLLABORATION BETWEEN HIGHER EDUCATION SECTOR AND INTERNATIONAL NGO HILFSWERK INTERNATIONAL – A SAMPLE OF BEST PRACTICE

A detailed description of role of Hilfswerk Austria in the Project implementation in context of overall activities of Hilfswerk Austria in the Central Asia is provided in academic publication "Hilfswerk International: the role of an NGO at the interface between science, society, and government in Central Asia". [1] The description provided about the Project, overall context and background according to opinion of evaluator may be considered as a source of justification to highlight the best practice methods and approached used, clearly explaining the opinion of Hilfswerk Austria on the project benefits.



Previous and current partnerships of Hilfswerk International in Central Asia. More than 30 partners in 12 countries cover the sectors of higher education (35%), consulting and training providers (28%), associations representing various communities of interest (32%) and governments (5%).

"The second academic project of Hilfswerk International, "Development of Higher Education Content Aimed to Support Industries for Sustainable Production of Qualitative Agri-Food" (AgroDev; HWI, 2023i), started in 2021 and is currently in its finishing phase. Funding was obtained from the Erasmus+ program "Capacity Building in Higher Education" (CBHE; EC, 2023) of the EU, the successor initiative after EPHE, however, dedicated to the same goals regarding the improvement of higher education systems in partnerships between EU and non-EU countries. Because of the previous success with HECAFS, the Latvia University of Life Sciences and Technologies in Jelgava retook the position of the main applicant, and also the University of Agriculture in Krakow (Poland) became a returning partner, pairing with the Linnaeus University in Växjö (Sweden), the Kyrgyz National Agrarian University in Bishkek, the Naryn State University in Naryn (Kyrgyzstan), the Tashkent State Agrarian University and the Samarkand Branch of the Tashkent State University of Economics both in Uzbekistan.

Besides the goal-orientated implementation of the classic CBHE practices like in HECAFS, AgroDev bridges back to the gradually acquired experience of Hilfswerk International during the project series of CANDY I–V, establishing ties between universities and agro-industrial enterprises. Here, the main aim was to sensibilize the

[1] Source - "HILFSWERK INTERNATIONAL: THE ROLE OF AN NGO AT THE INTERFACE BETWEEN SCIENCE, SOCIETY, AND GOVERNMENT IN CENTRAL ASIA", Gisela Domej, Stoyanka Manolcheva, Umed Aslanov, Shuhrat Qodirov; e-ISSN: 1694-8688, 2023. A quote provided from pages 25 – 26 of the publication.

academic landscape for various needs of the agro-industrial sector in order to improve the training of specialists (i.e., researchers, teachers, etc.) and specialists to-be (i.e., students and generally the younger generation) by high-quality content development according to up-to-date research standards, introduction of adapted pedagogical methods, collaboration with field-relevant industries, mutual knowledge transfer, and the creation of modern study environments in classrooms, laboratories, and libraries. Additionally, the introduction of internationally standardized agricultural practices as well as sustainable agro-business management principles and approaches constituted an essential part of AgroDev, thus increasing primary production and pre-processing effectiveness and competitiveness within the agro-industry sector, and thereby supporting business development, ensuring qualitative food and clean environments, and finally promoting regional and rural development.

Extensive documentation of activities and events is available on the AgroDev project webpage (KNAU, 2023) and the one of Hilfswerk International (HWI, 2023i) complying with the partners' as well as the grant requirements of transparency and traceability of project activities.

Synergy of projects

By running several projects characterized by different layouts, conceptions, and beneficiary dedications, Hilfswerk has demonstrated its thematic adaptability while remaining consistent within a common thematic and overall goal: a holistic and multi-sector approach for the development of agricultural activities in Central Asia involving science, society and governments at equal shares in order to enhance dialog between those entities and optimize results. One remarkable aspect of Hilfswerk International's efforts is self-sustainability. In all countries of activity, primary attention is paid to establishing structures and procedures that can be sustained in the long term, i.e., even once projects finish and funding is no longer available."

OVERALL CONCLUSIONS

The project's contribution to the overall development both of HE reforms with a particular emphasis on development of agro-business sectors. The impact on the capacity, competence and performance of the CA partners - universities in Kyrgyzstan and Uzbekistan is evident in quantitative terms as indicated in the project documents developed. Better trained and equipped academic staff, using innovative technological and pedagogic tools is playing valuable role in helping to shift from teacher-oriented to student-oriented approach in education. Given the impending changes in educational paradigm, and based on past experience, there is very likely to be considerable turnover in staff which means that, in order to maintain project impact, the people retrained in the project will have the important responsibility of imparting new skills and knowledge to incoming young teachers who are serving the corresponding chairs, departments and faculties.

The **success of the project** can be attributed to several key factors:

- The project greatly benefited from the **expertise of contribution from the EU** project partners who provided valuable insights and knowledge transfer, enhancing the project's educational quality. Exchange Programmes and training opportunities for academic staff from Uzbekistan and Kyrgyzstan higher education institutions abroad played a significant role in broadening their horizons and improving their teaching capabilities.
- Strong project management and active involvement of partners ensured **efficient coordination and effective execution of project activities**. Close collaboration with academic staff from Latvia, Poland and Sweden added an international dimension to the project, fostering cross-cultural learning and bringing best practices to the forefront. The commitment to building and maintaining excellent networking relationships facilitated knowledge sharing and ensured a broad impact on the agriculture and agri-food education.

- The project achieved significant **milestones**, including the **approval of modernised curricula**, solidifying the project's impact on the education system of the CA countries involved. Moreover, the project not only enhanced the thematic knowledge of participating CA universities but also contributed to their growth in project management capabilities, beneficial for sustainable educational reforms.

In addition to these factors, the project successfully **raised awareness about the contemporary concepts of agro-business development** among stakeholders in Kyrgyzstan and Uzbekistan, thereby contributing to sustainable socio-economic development.

Furthermore, the project's emphasis on collaboration with industry stakeholders showcased a holistic approach to education, **bridging the gap between higher education and the labour market/socioeconomic development of the countries concerned.** Training sessions, workshops, and educational resources significantly improved the capabilities of faculty members, benefiting educators and enriching the learning experience for students.

The project **fostered personal connections** among staff from different knowledge fields and universities, promoting cross-disciplinary collaboration and commitment to project goals. It provided students from Kyrgyzstan and Uzbekistan with a useful experience, introducing them to a new disciplines and curriculum, which is invaluable for their education and future careers.

According to DAC criteria the opinion of the evaluator is, that **the project results are very relevant for the donors, the EACEA, and the most important, the Project has provided a significant impact to the beneficiary institutions in the overall modernisation process of higher education sector in CA, contributing to successful implementation of ongoing national policy reforms in ago-business sector.**

According to opinion of the evaluator, this Project may be considered as a best practice project due to the main following achievements:

- The main reason of project to be considered as a best practice project is **sustainability** of its main results – the 6 study programmes modernised are well integrated in the permanent work of universities and are clearly responding to their development needs and the national policy of agro-business education development in the countries concerned;
- The project may be considered as a best practice sample due to its **effectiveness and efficiency** – it should be noted that a set of sustainable results was achieved within a relatively moderate EU grant in amount of 899 012,00 €;
- The project may be considered as a best practice sample in the field of **collaboration and partnership** between the higher education sector and an international NGO – Hilfswerk Austria, working in Central Asia;
- Significant **overachievements** of the initially planned results and activities could be reported (a summary provided in Table 1 of this report);
- Besides the deliverables developed and activities implemented, the project team has developed several well elaborated documents, ensuring the evaluation of capacity building measures, results, quality and impact, dissemination and exploitation strategy, methodology for the assurance and assessment of quality of higher education study programmes modernised to train specialists with competences for managing the processes of implementing and maintaining food production standards and systems.
- The project has significantly contributed to the development of project **management, collaboration and cooperation skills of the project partners – CA Universities** involved.
- The overall project management implemented by the project coordinator – the LBTU was highly appreciated by the CA partners. Both the project results achieved, and opinion of partners may confirm, that **the project planning and management methods and approached used were highly effective** and could be disseminated to other EU organisations and institutions, going to be involved in HE collaboration projects with Kyrgyzstan and Uzbekistan. Thereby according to opinion of evaluator, it could be relevant to propose to use the competence of the LBTU project management team involving their representatives

in thematically relevant EU level conferences, seminars, work groups related to collaboration development with the HE sectors in CA countries.

- In addition to the above mentioned it may be necessary to highlight that the EU partners – HE institutions involved in the partnership have significantly **increased their competence and capacity to operate in challenging multicultural environment** and due to extensive research work implemented in the initial stage of the project may provide **deep expertise on situation in the agro-business sector development in the countries concerned.** Hilfswerk Austria has increased its capacity and competence in collaboration with higher education sector both in the CA and EU countries. Thereby **the European partners could be a valuable source of expertise for implementation of other EU funded projects, covering similar themes and content in CA countries**.

In order to ensure effective overall EU and international level dissemination of the best practice, evaluator strongly recommends to ensure publication of detailed description of project results in the Erasmus+ project results Database.

ANNEX 1 - LISTS OF PARTICIPANTSOF EVALUATION SESSIONS

List of participants of online evaluation session Kyrgyz National Agrarian University, 22.12.2023

Almazbek Irgashev	Vice-rector for academic affairs
Aijan Tolobekova	Head of International Relations Department
Nurila Ibraeva	Head of the Department of postgraduate and doctoral Studies
Saltanat Derkembaeva	Senior lecturer of the Department of Management and agro-marketing
Victoria Sultanbayeva	Candidate of agricultural sciences, acting assistant professor of the Department of plant production and plant protection
Elmira Kaparova	Senior Lecturer of the department of technology of processing of agricultural products
Chinara Kadyrova	Candidate of agricultural sciences, associate professor of the department of management of animal husbandry and aquaculture named after academician M.N. Lushikhin.
Ishenbek Alykeev	Head of the Department of management of animal husbandry and aquaculture named after academician M.N. Lushikhin

https://agrodev.knau.kg/en/2024/01/31/external-evaluation-of-the-project-development-of-higher-education-content-aimed-to-support-industries-for-sustainable-production-of-qualitative-agri-food-agrodev-by-mr-linards-de/

List of participants of online evaluation session from the Naryn State University, 22.12.2023

Dr.Baibagyshov Ermek -	Rector of NSU, professor, lecturer
Mamyrbaev Adilet	Head of the Agri-food processing technology faculty, lecturer
Kurmanalieva Gulzana	Lecturer at the agri-food processing technology faculty
Akylbekova Iskra	Lecturer at the agri-food processing technology faculty
Zhaparov Adilet	Lecturer at the agri-food processing technology faculty
Azhybaeva Aisalkyn	Lecturer at the agri-food processing technology faculty

List of participants of online evaluation session from the Tashkent State Agrarian University, 28.12.2023

Name	Position
Aziz Abduvasikov	Vice-rector for international cooperation, transformation and strategic development, TSAU
Safarov Askar	Dean of the Faculty of Storage and Processing of Agricultural Products, doctor of agricultural sciences.
Khamidova Feruza	Associate Professor of the Department of Storage and Processing of Agricultural Products, Doctor of Technical Sciences.
Sharipov Sultan	Head of the department "Storage and processing of agricultural products", Doctor of Technical Sciences.
Odinayev Mirzamat	Head of the Department of Agricultural Biotechnology, Standardization and Certification, doctor of agricultural sciences.
Ochilov Musurmon	Associate Professor of the Department of Storage and Processing of Agricultural Products, doctor of agricultural sciences.

List of participants of online evaluation session from the Samarkand branch of Tashkent State University of Economics, 28.12.2023

Ishniyazova Shokhista	Head of Department, Associate professor
Farhod Ahrorov	Deputy Director for Academic Affairs
Ibragimov Gayrat	Dean of Faculty, Associate professor, PhD
Pardaeva Ozoda	Head of Department, Associate professor, PhD
Mardonov Mamed	Head of Department, Associate professor, PhD
Yuldashev Sherzod	Senior Lecturer
Boymurodova Iroda	PhD student
Vafokhodjaeva Dilafruz	Senior Lecturer
Hasanov Shavkat	Rector, professor