

Evaluation Report and Certification Recommendation

International Certification procedure under the Erasmus+ Project „RegAgri4Europe“

Training programme: “Regenerative Agriculture”

offered by:

Agricultural University of Athens (AUA), Greece
Metropolitan College (AMC), Greece
Schloss Tempelhof, Germany

developed by:

CEFE (Project Coordinator, Germany), Schloss Tempelhof (Germany), Agricultural
University of Athens (AUA, Greece), Metropolitan College (AMC, Greece) & Safe
Food Advocacy Europe (Belgium)
Platform Developer: Skybridge (Greece)

I Procedure

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Abbreviations

| <u>Institutions</u> | |
|----------------------|---|
| AMC | Metropolitan College, Greece |
| AUA | Agricultural University of Athens, Greece |
| SAFE | Safe Food Advocacy Europe, Belgium |
| KEDIVIM | Center for Lifelong Learning at the Agricultural University of Athens, Greece |
| NARIC | National Academic Recognition Information Center |
| <u>EU terms</u> | |
| ESG | European Standards and Guidelines |
| EQF | European Qualifications Framework |
| EQAF | European Quality Assurance Framework |
| EQAVET | European Quality Assurance in Vocational Education and Training |
| <u>General terms</u> | |
| QA | Quality Assurance |
| VLE | Virtual Learning Environment |
| LTTA | Learning, Teaching and Training Activities |
| HEI | Higher Education Institution |
| VET | Vocational Educational Training |
| CVET | Continuing Vocational Educational Training |

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Introductory note

The **evaluation report** of the expert group is based on the self-documentation of the participating HE and VET institutions as well as the online discussions with the education partners, the developers of the programme as well as administration and management of the education organisations.

Evaluation criteria are based on the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) in the official version valid at the time the contract is concluded. Since the assessed training programme is not a full degree programme, the standards of the ESG are not fully applicable; deviations are highlighted in the report.

1. General information

1.1 Short portrait of the institutions

Under the guidance of CEFE International, project Coordinator of the RegAgri4Europe project (www.regagri4europe.eu), the participating HEI/VET/non-formal education providers have developed the training programme “Regenerative Agriculture”. The RegAgri4Europe project is a two-year project (2020-2022) successfully granted by the European Commission (EC), consisting of a consortium of 7 partners from Germany, Belgium and Greece. The project aims to promote, facilitate, and accelerate the global transition to regenerative food, farming, and land management to restore climate stability, increase biodiversity, rebuild soil fertility, and produce healthy food.

Schloss Tempelhof and CEFE have coordinated the curriculum development in collaboration with the Agricultural University of Athens (AUA), Metropolitan College (AMC) and SAFE. AUA and AMC apply for this certification procedure.

Metropolitan College

The Metropolitan College (AMC; since 1982) is one of the first private colleges in Greece, offering the widest range of study fields while being the largest UK TNE (Transnational Education) provider in Greece. AMC is offering curricula of EQF level 6-8. All programmes are aiming to meet students' demands and facilitate entry into the Greek and international job market. The College is accredited by the British Accreditation Council as an independent institution offering higher education, and NARIC recognizes all its academic degrees. AMC is recognized for its educational excellence, as it cooperates with distinguished UK state universities.

Furthermore, it is the only college in Greece that is a member of the International University Network Compostela Group of Universities. Being a member of this network offers international academic recognition and networking with top universities around the world. Metropolitan College is also a member of the Hellenic Colleges Association. The association's members are Greek private colleges that offer university programmes in collaboration with European universities. This collaboration results in the award of diplomas or degrees of foreign universities to Greek students, following two to four years of study in Greece.

Metropolitan College has campuses in 8 locations throughout Greece: a privately-owned campus of 13,000 m² in Maroussi (northern suburb of Athens), a 3.500 m² branch in Piraeus, a 2.700 m² downtown Athens branch, and one in the center of Thessaloniki in a building of 2.000 m², as well as state-of-the-art facilities in four more cities in Greece: Heraklion – Crete, Rhodes, Larissa, and Patra. The university campuses throughout Greece feature auditoriums, laboratories with equipment of cutting-edge technology, libraries with thousands of titles, sport facilities and

recreational areas, thus creating a unique educational environment of international standards.

AMC has more than 10 academic faculties offering over 70 bachelor, master, and PhD programmes. Aiming to promote scientific research and the generation of new knowledge, the Metropolitan College also features extensive research activity. It encourages and supports student participation in national and international scientific conferences and events, aiming at the expansion of their academic and professional knowledge, networking with renowned scientists and professionals from their field, as well as coming into direct contact with the market pulse and needs. Furthermore, it also participates as a partner in several European research programmes along with institutions and universities from around the world.

Finally, Metropolitan College organizes international conferences on a wide range of scientific topics, in collaboration with universities and institutions from all over the world. The goal of the conferences is to promote interdisciplinary knowledge and inform participants about the latest developments in their scientific fields of interest. Furthermore, the conferences enable the students to broaden their horizons, participate in research groups, present papers, and meet internationally renowned scientists.

Agricultural University of Athens

The Agricultural University of Athens (AUA) is the 3rd oldest university in Greece. Since 1920, it contributes consistently and continuously to the Greek and European primary sector development, by conducting basic and applied research in agriculture related sciences. AUA offers high-level undergraduate and postgraduate education and research in agricultural science, and its vision is to achieve educational and research excellence to occupy a dynamic position in the international academic environment. AUA campus is a complex of 16 buildings comprising of auditoriums, 50 fully equipped laboratories, a modern library, computer clusters, extensive agricultural facilities. The university counts 190 academic staff members, 580 supportive staff, 13,636 bachelor students, 656 MSc students and 444 PhD students. These human resources together with the infrastructure cover one third of the agricultural research conducted in Greece annually. For the past 4 years AUA has participated in 70 EU funded projects as project leader or partner. AUA contributions address a wide range of issues related to food safety and environmental protection significantly affecting the daily lives of Greek and other European citizens: food quality and safety, water resource conservation, organic farming, alternative energy sources, biotechnological applications in agriculture, information, and communications technology.

AUA has six schools which offer programmes of study and research providing students with the necessary knowledge for a scientific and professional career both in Greece and abroad. The educational programmes aim at equipping graduates for their role as

competent agriculturalists/agronomists, who may serve as farmer consultants and executives in agricultural development providing solutions to the problems of the agricultural sector based on modern research, respect for the environment and the principles of sustainability. Furthermore, the subjects are designed to meet current international trends and requirements within the sectors of food science and technology, human nutrition, biotechnology in biosystems, environmental and biosystems engineering as well as in the economic and social sectors of agricultural development.

Schloss Tempelhof

Schloss Tempelhof e.V. is a registered association with a focus on youth and adult education. In addition to a private elementary and secondary school, the organization offers a wide range of educational trainings for adults. With over 100 events per year, the Schloss Tempelhof association provides a large scope of topics focused on sustainable living. The association is embedded in the “future lab” and ecovillage of Schloss Tempelhof, which experiments with alternative lifestyles. Part of the community is its own 30 ha farm implementing the newest regenerative farming practices. Over the past years, its educational offerings were focusing on practical experience as well as theoretical knowledge around regenerative agriculture. Examples are the annual regenerative farming symposia with over 100 participants, as well as numerous workshops and seminars.

SAFE Europe

SAFE Europe receives funding from the Belgian Education Ministry to conduct trainings in Brussels schools, which aim to provide students with information about health risks associated with food additives and sugar, as well as tools to make educated food choices such as guidance to read food labels. Within 3 years, SAFE has trained more than 5000 students. Prior to this project, SAFE Europe has supported the development of an undergraduate module on permaculture together with 4 partner universities and two permaculture associations from 5 different EU member states. Together with university professionals in permaculture they have developed a curriculum, including its teaching methodology and several intensive study programmes in permaculture.

1.2. General information on the assessed programme

The RegAgri4Europe Training Programme

| | |
|---------------------------|--|
| Location | Online and at the premises of Schloss Tempelhof |
| Date of implementation | April 2022 |
| Duration of the programme | 90 hours: 70 hours online, 20 hours (5 days) on site |
| EQF Level | 5 |
| Number of ECVET points | 3 |
| Number of study places | 2 (Germany & Greece) |
| Language of instruction | English, Greek, French, German |
| Target group(s) | Apprentices; students of agriculture and agriculture-near studies; farmers; other persons interested in regenerative agriculture |
| Entry requirements | Requirements corresponding to EQF Level 5 (i.e., high school degree, VET degree, background in agriculture or agricultural policy) |
| Form of study | Blended Learning |
| Tuition fee | Free during the EU funding |

The RegAgri4Europe project aims at promoting, facilitating, and accelerating the global transition to regenerative food, farming, and land management to restore climate stability, increase biodiversity, rebuild soil fertility, and produce healthy food.

The project's and the programme's main objectives are to:

- Close the skills gap in agriculture education by providing a web-based training on regenerative agriculture. The programme will enable learners to apply alternative cultivation methods.
- Equip the students with the competences to respond to the challenges the agricultural sector is experiencing.

- Inform VET authorities and policy makers about regenerative agriculture thereby giving impetus to include teaching contents on the subject into national framework curricula.
- Integrate the programme into curricula of agricultural VET providers, training companies and HEIs.
- Provide policy makers, VET providers, farmers, and the public with a coherent picture of the state of the art of regenerative agriculture and help improve the perception about alternative farming, its benefits, and the possibilities to upscale measures.

The common methodology of the project

All institutions commit to the importance of student-centred learning and a clear definition of learning outcomes.

The training programme

The innovative vocational curriculum on regenerative agriculture will provide learners with skills and knowledge to implement sustainable cultivation methods, and to transform agricultural practices and landscapes.

Lecture 1: Background, context, insights into regenerative agriculture

- Lesson 1: Movements, definitions, differences, labels
- Lesson 2: Soil erosion
- Lesson 3: Energy use in agriculture
- Lesson 4: Barriers and challenges

Lecture 2: Reasons and principles behind regenerative agriculture

- Lesson 1: Living soils and plant symbiosis
- Lesson 2: Key principles of regenerative agriculture
- Lesson 3: Methods of regenerative agriculture
- Lesson 4: Key principles of permaculture

Lecture 3: RegAg in practice I – vegetable production

- Lesson 1: Mulch vegetable system
- Lesson 2: Low-till protected crop production

Lecture 4: RegAg in practice II – regenerative agricultural production

- Lesson 1: Cover cropping
- Lesson 2: Minimum tillage & surface composting

- Lesson 3: Living mulch systems
- Lesson 4: Intercropping

Lecture 5: RegAg in practice III – other practices for large scale implementation

- Lesson 1: Agroforestry
- Lesson 2: Keyline design
- Lesson 3: Mob grazing & holistic grazing management

Lecture 6: Benefits of regenerative agriculture for the environment, society, and human health

- Lesson 1: Carbon sequestration potential
- Lesson 2: Planting water
- Lesson 3: Relation between human and soil microbiome
- Lesson 4: Economic aspects – benefits and challenges of transformation.

2. Evaluation according to ESG Standards

The quality of the programme and the compliance with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) were assessed by the expert group nominated on page 1 of this report.

2.1 Policy for quality assurance

ESG Standard 1.1: Institutions should have a policy for quality assurance that is made public and forms part of their strategic management. Internal stakeholders should develop and implement this policy through appropriate structures and processes, while involving external stakeholders.

Findings

The below findings are related to the policy for Quality Assurance, vision, mission, and strategy of the two education institutions applying for certification under this procedure.

AMC derives its internal quality assurance standards from EOPPEP, which is the national reference point for quality assurance and represents the country in the European Network for Quality Assurance in Vocational Education and Training (EQAVET). AMC promotes a well-organized, efficient, and flexible system of vocational education and training, and aims to implement the National Quality System in the field of formal and non-formal vocational education, utilizing standards according to the ESG. The existence of sufficient and homogeneous data and indicators is considered key to understanding the components of VET, to enhance lifelong learning and to evaluate in qualitative terms its institutional development. Internal quality control mechanisms include periodic feedback from learners, measuring employability and career success of graduates, characteristics of students, teaching and learning processes, content, enrolment/unenrolment figures, extent of skills improvement or levels of failure.

The competent coordinating agency for the organization and fulfilment of internal QA procedures at AUA is the Quality Assurance Unit (MO.DI.P.). The responsibilities and tasks of the Quality Assurance Unit include the formation of organizational units, structuring and operation of the Internal Quality Assurance System. Its main duties include the development of a specific policy and strategy, as well as the establishment of all the necessary procedures for constant improvement of research and teaching and other services provided by the university. The unit cares for structuring, functioning, and perpetual refinement of the AUA Internal Quality Assurance System, coordination and support of the evaluation of academic units, and organization of internal evaluation groups (OMEA). It provides assistance for external evaluation and accreditation processes, in alignment with the Standards, the Directives and Guidelines, of the Hellenic Authority for Higher Education (HAHE).

The Regenerative Agriculture programme will be delivered through the Center for Training and Lifelong Learning (KEDIVIM), which is a unit of the Agricultural University of Athens. KEDIVIM adopts the national and European institutional framework for lifelong learning, which ensures coordination and interdisciplinary cooperation in the development of Continuing Vocational Education and Training (CVET) and lifelong learning. KEDIVIM is governed by the institutional framework of AUA, the Senate, and the Rules of Procedure. The Center can organize and carry out non-formal education curricula, which lead to the award of relevant certificates related to CVET and lifelong learning.

Conclusion

QA policies include the mission and vision, strategic objectives and tasks, principles and values underlying the institutions' activities, as well as the general vision for the development of skills of learners, teachers, and heads of educational organizations. The QA policies are aimed at implementing internally their strategic objective and tasks in the field of higher and continuing education, improving the professional development of learners, and ensuring the institutions' high competitiveness in the domestic and foreign educational services market. Students' participation in QA is established in an appropriate manner.

The assessed programme complies with the requirements of standard 1.1 Policy for quality assurance. The standard is **fulfilled**.

2.2 Design and approval of programmes

ESG Standard 1.2: Institutions should have processes for the design and approval of their programmes. The programmes should be designed so that they meet the objectives set for them, including the intended learning outcomes. The qualification resulting from a programme should be clearly specified and communicated and refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area.

Findings

General objectives

The main purpose of the project was to design an innovative vocational curriculum on regenerative agriculture, which will provide learners skills and knowledge to implement sustainable cultivation methods, giving impetus to transforming agricultural practices and landscapes. The programme fits very well with the overall strategic goals of

Agricultural University of Athens that contributes consistently and continuously to Greek and European primary sector development by conducting basic and applied research in agriculture related sciences. At Metropolitan College, the programme will be integrated in Polytechnic School degrees of Architecture and Engineering, which focus among others on urban sustainability and environmental aspects of urban design.

The learning objectives of the programme focus on regenerative agriculture as a conservation and rehabilitation approach to farming systems, successful implementation methods, as well as the history and background of the concept. The course expands on topsoil regeneration, increasing biodiversity, improving the water cycle, supporting bio-sequestration, increasing resilience to climate change, and enhancing soil fertility. These topics are all reflected in the learning objectives of the programme.

Upon completion of the programme, learners will have gained important theoretical and practical skills and knowledge on regenerative agriculture, improved digital competences, improved perception, awareness and understanding of regenerative agriculture. The learning objectives correspond with the learning outcomes defined for the course.

The programme was designed by very diverse partners (VET providers, academic experts, pedagogical experts, and experts for digital learning). Consultations were also sought with associated partners and experts from other departments of AUA who were not directly involved in the project. Project partners have also involved feedback from students and other stakeholders in the design of the current programme.

General structural features

The programme consists of one module that can be used in different learning contexts. On completion the student achieves 3 credit points (ECVET), which can be integrated into existing programmes as an elective module. The module contains six lectures (with 2 to 4 lessons each) that do not necessarily build on each other and can be selected according to the learner's needs. Each lesson is presented by a video (besides lecture 1, lesson 3), a presentation which can be used by teachers in presence sessions (face to face or online), a handout (pdf) and an assessment.

The training material was designed employing Bloom's Taxonomy and a student-centred approach. A course catalogue that outlines the overall structure, learning objectives and outcomes is available. Learning objectives correspond to EQF level 5.

The programme includes 90 hours of training – 70 hours for the online programme, 20 hours for the practical part – corresponding to 3 ECVET. After completion of the online part, learners will attend the practical part on the premises of Schloss Tempelhof. The

programme follows a blended learning approach with its combination of online and practice. Students are expected to work through the entire programme within 8 weeks.

Currently, the programme does not offer placement opportunities for learners, but education institutions have signalled that this can change once the programme is fully integrated in the curricula of the hosting institutions.

Target Group

The self-documentation defines the target group of the programme as:

- Apprentices and other interested persons with an agricultural background (end users).
- VET providers in agriculture.
- VET representatives and policy makers.
- Training companies and higher education institutions offering agricultural education.

Conclusion

The expert group recommends elaborating in more detail on the integration of animals in regenerative agriculture and how to better connect animal and plant ecosystems. Secondly, the diversity in the agricultural reality of the different participating countries should be more visible. With the practical part of studies organized in Germany, experts see a need to discuss the context of Greece more explicitly. The expert group also recommends adding lectures on emerging topics such as European trends in regenerative agriculture. Also, the learning objectives and learning outcomes of the practical part should be included in the documentation.

Since the programme targets farmers and apprentices, it is recommended that the course provides clear advice to learners on how farmers implement regenerative agriculture methods. and elaborate more on their opportunities and access to the labour market.

With regards to the VLE, the experts suggest including pointers on the terminology used in the form of brief explanations of newly introduced concepts. The project team responds that they are currently developing a 'wiki' within the platform for this very purpose.

The assessed programme complies with the requirements of standard 1.2 Design and approval of programmes. The standard is **fulfilled with recommendations**.

Educational organizations are suggested to:

- Elaborate in more detail on the integration of animals in regenerative agriculture.
- Make agricultural reality of different participating countries (i.e., Greece) more visible.
- Add lectures on European trends in regenerative agriculture.
- Define and include learning objectives and learning outcomes of practical part.
- Provide clear advice on how farmers implement regenerative agriculture.
- Include 'wiki' in the VLE for explanation of terminologies.

2.3 Student-centred learning, teaching, and assessment

ESG Standard 1.3: Institutions should ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach.

Findings

The programme was developed with a student-centred approach. Especially the VLE contributes to a customized and flexible learning environment. Students can learn at their own time and pace. They can study individually and seek contact with trainers and fellow learners during the LTTA at the premises of Schloss Tempelhof or online. The VLE offers online support through discussion forums and consultation hours. It also offers student-centred analytics for trainers to help them understand how learners engage with the programme material and adapt it to learners' needs.

The VLE learning sequence promotes active engagement as students alternate between learning concepts and solving simple exercises to check their understanding. This active-learning method enables students to apply what they have learned from the training material before moving on to the next lesson. Lectures and lessons do not necessarily build on each other, therefore learners can select from and arrange the course according to their individual needs and priorities. At the same time, the course material can be readily integrated into full degree programmes.

The VLE PowerPoint presentations contain the same content as the videos. This enables the education provider to deliver parts of the programme in a classroom context. Videos show regenerative agriculture methods applied on a farm or they deliver lessons that explain the theoretical content with examples and photos from real life for learners to transfer skills and knowledge into their own working contexts.

The practical part of the programme provides students with significant hands-on learning experiences in the context of a real farm also offering intensive contact with

trainers and other learners. This encourages active participation and co-creation of the learning process.

Assessment

The learning outcomes specify the criteria for success/failure and learners' performance, making the assessment process more transparent. Learners are assessed in all lectures by means of multiple-choice exams. The VLE allows three attempts for a successful final assessment. During the practical part, assessment will focus mainly on assignments.

The VLE allows trainers considerable control over what type of graded exercises the programme will have, and the exact nature of the grading policy. They can adjust grade ranges and decide on the number of possible grades. RegAgri4Europe partners define the threshold that qualifies learners for a certificate.

Learning types

The programme considers different types of learners. Learners can use the material which fits their learning style, which will help to increase learning success using differentiated teaching and learning methods. The videos serve the *visual and auditive* type. The handouts serve the *reading type*. Graphics, charts, and pictures in presentation and handouts serve the *visual type*. The work-based training during the practice part serves the *kinaesthetic style*.¹ⁱ

Additionally, the programme considers learners who tend to independent learning; they can pass the programme with minimal contact to others. Participative, competitive, and collaborative learners² can discuss with trainers and fellow learners on the discussion forum in the VLE and during the practical part on site.

¹ Leite, Walter L.; Svinicki, Marilla; Shi, Yuying (April 2010). "Attempted validation of the scores of the VARK: learning styles inventory with multitrait-multimethod confirmatory factor analysis models". [Educational and Psychological Measurement](#). 70 (2): 323–339.

² Riechmann, Sheryl Wetter; Grasha, Anthony F. (July 1974). "A rational approach to developing and assessing the construct validity of a student learning style scales instrument" . . 87 (2): 213–223.

Conclusion

The training programme is based on online self-paced sessions that enhance the flexibility and accessibility of the programme. At the same time, learners have the freedom to decide how and in which context they want to implement their knowledge. Since learners will be able to access all contents upon signing in, the expert group recommends introducing the programme with a welcome note that secures structured navigation within the programme and suggests optimal learning path(s). Even if each module or lecture can be studied independently, it is highly advised that there is a learning sequence within each of them (i.e., a learner needs to complete the video before going to the slides before going to the reading text before doing the quizzes).

To improve availability of learning materials for learners who cannot participate in the practical part of the programme, the expert group recommends the inclusion of videos from on-site teaching sessions in the VLE so that all learners can partake in this experience.

The experts also suggest implementing a direct link with external stakeholders through the platform to facilitate knowledge exchange and link students with potential employers and thereby creating opportunities for internships and employment.

The chosen assessment method should always be aligned with the objectives, contents, and methodology; it should be valid, reliable, and transparent, so that it allows comparability of learning results. Also, assessment of learning outcomes should always showcase what and how a student is learning (formative assessment). Regarding the fact, that exclusively multiple-choice tests will be used as assessment method within the platform, the expert group recommends considering further methods of evaluation throughout the programme (i.e., poll quizzes, multiple-choice grid, tick box grid, drop-down questions, etc.). At the current state, the expert group can only assume that the proposed activities promote autonomous, engaged, and shared student learning. In summary, the learning environment should not merely be a tool for monitoring learning success, but for formative student learning.

Regarding certification, the expert group recommends the introduction of digital badges to enhance transferability and approval of knowledge in the market.

The assessed programme complies with the requirements of standard 1.3 Student-centred learning, teaching, and assessment. The standard is **fulfilled with recommendations**.

Educational organizations are suggested to:

- Present students with potential learning paths in the VLE.
- Include videos from on-site teaching sessions in the VLE.

- Involve external stakeholders and potential employers in the VLE.
- Consider further methods of assessment.
- Use digital badges for assessment/reward purposes.

2.4 Student admission, progression, recognition, and certification

ESG Standard 1.4: Institutions should consistently apply pre-defined and published regulations covering all phases of the student “life cycle”, e.g., student admission, progression, recognition, and certification.

Findings

Both education institutions have a well-described procedure for admission and enrolment of learners into training programmes as well as the certification of achievements. As of 2010, degrees offered from private colleges like AMC have received full recognition, according to the directives 36/2005 of the European Communities Council. According to those directives, all professional rights of the citizens of the European Union who are holders of degrees from recognized European universities (based in member states) are equal. The degrees that are awarded to all Metropolitan College graduates after successful completion of their studies in Greece, are awarded directly by the collaborating accredited UK Universities.

Admission

The programme is open to all students of EQF level 5 (i.e., high school degree, VET degree, background in agriculture or agricultural policy). The landing page of the VLE informs learners that prior basic knowledge of terms related to agriculture will make them feel more comfortable and confident with the subject matter. After their enrolment learners will have access to all relevant material.

Progression and certification

The trainer dashboard in the VLE provides a source for tracking learners' progression through the programme. Learning analytics inform trainers on transition patterns, activities, and problems with regards to assignments, and which units of the course prevent students from moving forward. Trainers define the number and kinds of assessment and learners that pass the threshold will automatically receive their certification. Credit points for the programme are only awarded when the learner completes the online as well as the on-site part of the course.

Conclusion

The assessed programme complies with the requirements of standard 1.4 Student admission, progression, recognition, and certification. The standard is **fulfilled**.

2.5 Teaching staff

ESG Standard 1.5: Institutions should assure themselves of the competence of their teachers. They should apply fair and transparent processes for the recruitment and development of the staff.

Findings

Both institutions state in their self-documentation that they focus on reskilling and upskilling the competences of staff and alumni. Through various educational programmes and seminars, people are trained properly to be competitive towards the current needs of the labour market.

AMC is established as an institution of educational excellence that cooperates with distinguished international universities. It offers highly experienced academic staff, with continuous training by the collaborating universities. Analogous to all other programmes, AMC states in their self-documentation to employ as trainers professionals with many years of experience in the field. Currently, one staff from the sector of EU Funded Projects is entrusted with the smooth integration of the programme into existing full degree programmes.

AUA and AMC indicate that they will identify qualified teaching staff for the programme according to its requirements. Also, secondary staff is guaranteed. AUA includes two staff members who have also been leading the university's involvement in the RegAgri4Europe project. Their backgrounds are in Agricultural Engineering, and they dispose of extensive experience relevant to the programme. Their research and educational efforts have focused on sustainable agriculture, regenerative agriculture, renewable energy technology, energy efficiency, and water desalination in combination with renewable energy.

Conclusion

The education institutions demonstrate their commitment to the success of the training programme. Sufficient human resources are available for the successful

implementation of the programme. However, based on the information in the self-documentation report and the online conference, not all human resources have been fixed for after the end of the RegAgri4Europe project. The expert group recommends that appropriate further training for (new) teachers should also be based on feedback from students.

The assessed programme complies with the requirements of standard 1.5 Teaching staff. The standard is **fulfilled with recommendations**.

Educational organizations are suggested to:

- Train (new) teachers informed by feedback from students.

2.6 Learning resources and student support

ESG Standard 1.6: Institutions should have appropriate funding for learning and teaching activities and ensure that adequate and readily accessible learning resources and student support are provided.

Findings

The educational resources created within the project will be offered freely and openly for educators, professionals and self-learners for use and sharing through the VLE. All online resources are released under the Creative Commons License CC BY 4.0 meaning that users can share (copy and redistribute) and adapt (remix, transform, and build upon) the material for any purpose, even commercially. The legal documents which are linked to the RegAgri4Europe VLE (Honor Code, Terms of Service and Privacy Policy), promote the transparency of the RegAgri4Europe project. All users of the VLE are legally bound by these documents.

Outside the VLE, both institutions grant their learners access to contemporary and fully equipped libraries featuring international scientific journals, and dissertation databases. Both have their own e-learning and e-student systems giving students personal access to information about their grades, their schedules of courses and management of enrolment, as well as e-learning services.

Learners at KEDIVIM can make use of all training facilities available at AUA. AUA campus covers roughly 180 ha of farmland for educational and research purposes as well as 50 laboratories in all agriculture-related disciplines. Auditoria and classrooms of varying sizes are also available to cover any kind of educational activity. KEDIVIM already offers live, distance or mixed programmes.

The Metropolitan College disposes of state-of-the-art facilities and specialized laboratories, lecture theatres and lecture rooms, equipped with the most modern audio-visual equipment. Student support services include a Counselling Centre, Academic Learning Centre, Dietetic Office, Learning Difficulties Support Centre, and Career

Office which maintains links with industry and organizes annual Career Days. AMC also provides personal academic tutors who ensure that individual learning needs of each student are covered.

Conclusion

The project partners developed a full set of necessary learning resources which will be provided for free. The expert group praises the open-source approach and confirms a targeted elaboration of the contents. The experts do however suggest enabling access and seamless use of the VLE also from mobile devices. Experiences from other education institutions have shown that students increasingly request this modality.

The assessed programme complies with the requirements of standard 1.6 Learning resources and student support. The standard is **fulfilled with recommendations**.

Educational organizations are suggested to:

- Enable seamless use of the VLE from mobile devices.

2.7 Information management

ESG Standard 1.7: Institutions should ensure that they collect, analyse and use relevant information for the effective management of their programmes and other activities.

Findings

The Software Development Department of Skybridge is involved in the design, development, pilot-testing and evaluation of various e-learning tools, platforms, websites, applications, and assessment portals etc. based on the needs of the project being implemented by the organization.

Skybridge checks the performance of the RegAgri4Europe VLE regularly, based on a set of predefined key performance indicators. The indicators set standards on the diversity of materials available (i.e., language resources), minimum numbers of students and countries participating, learner satisfaction regarding the usability of the VLE, programme content and trainer support. The feedback of learners is also obtained through a discussion forum, where opinions, ideas and any comments regarding the programme can be shared.

The VLE provides intelligent, learner-centric analytics to help trainers understand how learners engage with the platform and the course material. The analytics report on problematic assignments for students, all students' progress in a simple spreadsheet form, clustered information on progression and transition patterns, and possible programme units that prevent students from moving forward.

An evaluation questionnaire is placed at the end of the training programme. Closed and open-ended questions will document student satisfaction and their assessment of the course content, the trainers, and technical aspects of the VLE.

Conclusion

According to the indicators mentioned above, the VLE will provide learner-centric analytics to help trainers understand how learners engage with course material. The programme elaborated by the platform developer Skybridge, allows for tracking of completion rates and progress during the course. As information system, the platform provides a safe environment based on open source where trainers and learners are connected, communication tools like chats and forums are integrated, news and information on tests and relevant information for the course are announced and sent to designated mailing lists.

The assessed programme complies with the requirements of standard 1.7 Information management. The standard is **fulfilled**.

2.8 Public information

ESG Standard 1.8: Institutions should publish information about their activities, including programmes, which is clear, accurate, objective, up-to date and readily accessible.

Findings

The RegAgri4Europe VLE

The RegAgri4Europe Platform, developed by Skybridge is based on the edX software, the Open edX1. The Open edX software is open-source technology focusing on learning easier and faster. This software platform is designed to engage trainers and learners in an interactive and modular manner. It promotes active learning by using video snippets, interactive components, and game-like experiences.

Technically, the platform is supported by a collection of autonomous web services called independently deployed applications (IDAs) to address scaling and expandability needs. Most of the back end or server services are implemented in

python, the front-end is based on the Django web application framework, while the browser-side code is written primarily in JavaScript supported by SaaS2, Backbone.js3 and Bourbon4 frameworks. At the centerpiece are the two key components: the Learning Management System (LMS) and the RegAgri4Europe Content Management System (CMS). The CMS or Studio, is the authoring tool where the trainers/coordinators create, update, and manage the programme. Several heavy tasks are performed by separate background workers rather than in the web applications themselves. These tasks are queued and distributed using Celery5 and RabbitMQ6.

Moreover, the VLE offers analytics to learners and programme staff. Learners can view their problem scores, percentage of completion, current grade, and the passing threshold. Learners can gain knowledge regarding their progress towards completion and certification. Each time a learner interacts with the VLE, relevant data records are created in the VLE data storage system. The data API can read, and process data coming from different databases (MongoDB, MySQL) and feed the embedded visualization interface. Trainers can also check the profile of users, their progress, problems, and grades with the relevant reports.

The Instructor Analytics Tab will include reports on enrollment and unenrollment activities, assessment stats, participants' info, and demographic data.

The trainers/coordinators use the aforementioned information to give access to the platform, communicate with participants, and improve the services that are offered. They use the performing analytics to evaluate access to and performance in courses and course-related products. All personal data are retained for the duration of the project, as mandated by the relevant grant agreement. However, after this period, the data will be irrevocably deleted. At the same time, participants can access their data and remove all their information and profile through the platform.

The VLE can be found under <https://regagri4europe.eu/regagri-course/>. The link is available in the project's website www.regagri4europe.eu. Users have direct access to the available training programme description and can retrieve information regarding the VLE and the project. Skybridge has designed and deployed a custom theme following the visual identity of the RegAgri4Europe project ensuring responsiveness. The VLE's design is in line with the project website taking into consideration several design parameters.

Conclusion

The project website offers useful, up-to-date, and readily accessible information on the project and the programme. The VLE collects user information transparently and personal data are appropriately protected. The expert group recommends that AMC and AUA (KEDIVIM) should provide information about the regenerative agriculture

programme also through their own websites, including selection criteria for enrolment, the intended learning objectives and outcomes, the qualifications they award, the teaching, learning and assessment procedures used, the pass rates, graduate employment information and competences acquired that can be useful for the labour market.

The assessed programme complies with the requirements of standard 1.8 Public Information. The standard is **fulfilled with recommendations**.

Educational organizations are suggested to:

- Include information on the programme through institutions' websites.

2.9 On-going monitoring and periodic review of programmes

ESG Standard 1.9: Institutions should monitor and periodically review their programmes to ensure that they achieve the objectives set for them and respond to the needs of students and society. These reviews should lead to continuous improvement of the programme. Any action planned or taken as a result should be communicated to all those concerned.

Findings

AMC achieves ongoing quality assurance of existing programmes through continuous annual and on-demand monitoring of key performance indicators and annual programme plans. The review mechanism evaluates both the effectiveness and sustainability of curricula identifying its strengths and weaknesses. Reviews usually occur in the delivery of programmes, (i.e., broadening the availability and access), addition or deletion of programmes, or modification of learning outcomes. The ongoing review of programmes validates that learning objectives and learning outcomes are relevant and current in the workplace or industry, and that they meet learners' needs and support their education and career goals. AMC takes special care to align its curricula with changing and emerging trends of the external VET environment and the needs of curriculum key stakeholders. The review also checks whether trainers' performance and competences are in line with learning objectives and producing expected learning outcomes.

Since AMC is a tertiary college, its curricula follow quality and academic standards of a university level programme. This ensures high quality of the institution's study programmes and the consistent application of ESG standards. Internal quality control mechanisms include periodic feedback from the programme participants.

Monitoring and review of programmes at AUA are carried out by its Quality Assurance Unit. It ensures continuous enhancement of the quality of its academic and research

activities, effective functioning and performance of all services offered, according to international practices, especially those within the scope of the European Higher Education Area, and the principles and directives of the Hellenic Authority for Higher Education (HAHE).

The AUA Quality Assurance Unit accounts for the development of policy and strategy, and procedures for constant improvement of its activities and services. The AUA Internal Quality Assurance System also coordinates and supports evaluation processes of the academic units, internal evaluation groups and other institutional services.

Training needs analysis

Prior to the curriculum development, the RegAgri4Europe project team undertook a training needs analysis in the participating countries Germany, Belgium, and Greece via desk research, interviews, and questionnaires. It aimed to gain an understanding of the present situation of regenerative agriculture in today's education sector on national and EU level, and to understand labour market demands for regenerative agriculture skills.

Conclusion

The training needs analysis revealed there is no formation directly mentioning regenerative agriculture in current education programmes, although some principles common with regenerative agriculture are being taught. The dissemination of the concept, however, depends on the lecturer. It was concluded that the curriculum can be classified as innovative in the partner countries.

The regular monitoring and review of the programme ensures that a supportive and effective learning environment is created for learners. It includes the evaluation of the content of the programme to ensure it is up to date, and that it keeps responding to the changing needs of society and the labour market. The learning environment and support services are assessed, as well as their suitability for the purpose of the programme along with student workload, progression and success rate, effectiveness of student assessment procedures, and evaluation of students' expectations, needs and satisfaction in relation to the programme.

After the piloting of the programme, education institutions are suggested to conduct an impact study documenting to the local, regional, and national authorities how the programme has impacted the local and regional societies.

The assessed programme complies with the requirements of standard 1.9 On-going monitoring and periodic review of programmes. The standard is **fulfilled with recommendations**.

Educational organizations are suggested to:

- Conduct an impact study at the level of local and regional societies.

2.10 Cyclical external quality assurance

ESG Standard 1.10: Institutions should undergo external quality assurance in line with the ESG on a cyclical basis.

Findings

Both education institutions state in their self-documentation reports that they conduct external quality assurance procedures in accordance with internal quality assurance regulations. Both institutions are accredited by relevant national accreditation bodies to provide their education services at national level. External evaluations are planned as ongoing routines.

AUA receives accreditation of its internal QA of educational, research and administrative functioning, by the Hellenic Authority for Higher Education (HAHE), the former Hellenic Quality Assurance and Accreditation Agency (HQA), with a four-year validity (up to 13.11.2023).

AMC aims to implement external QA in the field of formal and non-formal vocational education, utilizing European and international experience, and applying EQAVET standards through EOPPEP (national reference point for QA of curricula). The existence of sufficient and homogeneous data and indicators is the key to understanding the components of vocational education and training to enhance lifelong learning and to evaluate in qualitative terms the progress of its development. AMC is also accredited by the British Accreditation Council as an independent institution offering higher education. NARIC recognizes all its academic degrees.

The current international certification procedure by ACQUIN is part of external quality control. The education institutions are undertaking it as part of the RegAgri4Europe project.

Conclusion

The programme is reviewed externally, and the information collected will be used to adapt deficiencies and ensure that all standards are up to date.

The assessed programme complies with the requirements of standard 1.10 Cyclical external quality assurance. The standard is **fulfilled**.

3 Recommendations to the accreditation committee of ACQUIN

3.1 Assessment of the implementation "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (ESG) as amended.

The "Regenerative Agriculture" programme was assessed based on the "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (ESG).

Standard 1.1 Policy for quality assurance: Institutions have a policy for quality assurance that is made public and forms part of their strategic management. Internal stakeholders develop and implement this policy through appropriate structures and processes, while involving external stakeholders. The standard is **fulfilled**.

Standard 1.2 Design and approval of programmes: Institutions have processes for the design and approval of their programmes. The programmes are designed so that they meet the objectives set for them, including the intended learning outcomes. The qualification resulting from a programme is clearly specified and communicated and refers to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area. The standard is **fulfilled with recommendations**.

Standard 1.3 Student-centred learning, teaching, and assessment: Institutions ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and the assessment of students reflects this approach. The standard is **fulfilled with recommendations**.

Standard 1.4 Student admission, progression, recognition, and certification: Institutions consistently apply pre-defined and published regulations covering all phases of the student "life cycle", e.g., student admission, progression, recognition, and certification. The standard is **fulfilled**.

Standard 1.5 Teaching staff: Institutions assure themselves of the competence of their teachers. They apply fair and transparent processes for the recruitment and development of the staff. The standard is **fulfilled with recommendations**.

Standard 1.6 Learning resources and student support: Institutions have appropriate funding for learning and teaching activities and ensure that adequate and readily accessible learning resources and student support are provided. The standard is **fulfilled with recommendations**.

Standard 1.7 Information management: Institutions ensure that they collect, analyse and use relevant information for the effective management of their programmes and other activities. The standard is **fulfilled**.

Standard 1.8 Public information: Institutions publish information about their activities, including programmes, which is clear, accurate, objective, up-to date and readily accessible. The standard is **fulfilled with recommendations**.

Standard 1.9 On-going monitoring and periodic review of programmes: Institutions monitor and periodically review their programmes to ensure that they achieve the objectives set for them and respond to the needs of students and society. These reviews lead to continuous improvement of the programme. Any action planned or taken as a result is communicated to all those concerned. The standard is **fulfilled with recommendations**.

Standard 1.10 Cyclical external quality assurance: Institutions undergo external quality assurance in line with the ESG on a cyclical basis. The standard is **fulfilled**.

3.2 Certification recommendation

The expert group concludes that all standards are fulfilled and proposes the certification of the training programme **without any conditions**, but with the following **fifteen recommendations**:

1. Elaborate in more detail on the integration of animals in regenerative agriculture.
2. Make agricultural reality of different participating countries (i.e., Greece) more visible.
3. Add lectures on European trends in regenerative agriculture.
4. Define and include learning objectives and learning outcomes of practical part.
5. Provide clear advice on how farmers implement regenerative agriculture.
6. Include 'wiki' in the VLE for explanation of terminologies.
7. Present students with potential learning paths in the VLE.
8. Include videos from on-site teaching sessions in the VLE.
9. Involve external stakeholders and potential employers in the VLE.
10. Consider further methods of assessment.
11. Use digital badges for assessment/reward purposes.
12. Train (new) teachers informed by feedback from students.
13. Enable seamless use of the VLE from mobile devices.
14. Include information on the programme through institutions' websites.
15. Conduct an impact study at the level of local and regional societies.

4. Decision of the ACQUIN Accreditation Commission

Based on the evaluation report of the expert group, on 12th September, 2022 the Accreditation Commission of ACQUIN takes the following decisions unanimously:

The Erasmus+ “RegAgri4Europe” Project training programme “Regenerative Agriculture” is certified without any conditions. The certification is valid until 30th of September 2027.

The following recommendations are given for the further development of the study programme:

- Elaborate in more detail on the integration of animals in regenerative agriculture.
- Make agricultural reality of different participating countries (i.e., Greece) more visible.
- Add lectures on European trends in regenerative agriculture.
- Define and include learning objectives and learning outcomes of practical part.
- Provide clear advice on how farmers implement regenerative agriculture.
- Include „wiki“ in the VLE for explanation of terminologies.
- Present students with potential learning paths in the VLE.
- Include videos from on-site teaching sessions in the VLE.
- Involve external stakeholders and potential employers in the VLE.
- Consider further methods of assessment.
- Use digital badges for assessment/reward purposes.
- Train (new) teachers informed by feedback from students.
- Enable seamless use of the VLE from mobile devices.
- Include information on the programme through institutions' websites.
- Conduct an impact study at the level of local and regional societies.