

Strategic partnership for competence based training in Bio-fertilizers

Bio-FIT

Sector-oriented VET for sustainable development of bio-farming



The project

The project innovates the VET themes in the field of bio-farming through introduction of the subject of bio-fertilizers, which are alternative in modern agriculture to substitute agrochemicals, causing increasing production costs and problems for the environment.

The use of bio-fertilizers is a viable alternative to improve the profitability of crops, particularly for agriculture on medium and small-sized farms with intensive production systems, such as vegetables.

Given that bio-fertilizers can be produced on the farm and used successfully in crop production, the Bio-FIT programme can successfully contribute to stimulate small and medium business as well as to enhance the employability in the sector.

Thus, investing in the education in the innovative technologies in bio-farming a strong ecological feedback is expected. Following all these, the Bio-FIT programme is foreseen to:

- ✓ Embed the best practices and results based on competence description focused projects and to implement of EQF principles;
- ✓ Introduce innovative e-based educational curriculum and blended learning methodology using ECVET tools;
- ✓ Build up Learning Outcomes (LOs) and implement those standards in the curricula;
- ✓ Strengthen the mutual learning within partner organizations and their partners at the workplace;
- ✓ Form a learning network between the partners, disseminate and use the results of the learning partnership and the services offered by the partner organizations.

The idea

Development of innovative educational programme based on biotechnology of bio-fertilizers applying EQF / NQF strategic system for VET process organization.

The mission

Offer of a scheme for innovative training, reflecting the specific partners' country needs through:

- ✓ Showing the eco-innovative character of biofertilizer technologies and effect on environment
- ✓ Targeting the types and quality of biofertilizers for preventing and supporting bio-farming

- ✓ Studying the influence of bio-fertilizer technologies in decrease material inputs, reduce energy consumption and emissions, and minimize waste
- ✓ Greening the economy through raising competitiveness and employability

The prospects

Bio-FIT project prospects are grounded in its philosophy to support the maintenance of its activities and benefits after its life time. Thus, project sustainability can be outlined in the following dimensions:

- ✓ Equity: Equitable sharing and distribution of project benefits respecting IPR agreement
- ✓ Logistics: continued operation and maintenance of project main facility, the project web-site (<https://bio-fit.eu/>)
- ✓ Community: continued participation of project end-users
- ✓ Institutional: institutional support to project operations continue after the life of the project

Project achievements

Intellectual Outputs

1. Bio-FIT National Case Studies

“Promoting organic farming by training in bio-fertilizers”

Essentials

- ✓ Needs for better definition of biofertilizers legal status
- ✓ Needs for provision of more profound information regarding benefits and restriction of biofertilizers application

- ✓ NCS Synthesis Report presentation
- ✓ No offers for systematic learning for innovation in biofertilizers
- ✓ Need for broad information about existing opportunities for training in biofertilizers
- ✓ Need for development of innovative training programme on bio-fertilizer production and application, designed for VET professionals and agricultural SMEs' personnel
- ✓ Need of building of specialized e-platform dedicated on biofertilizers formal/informal training
- ✓ Specification of Bio-FIT target groups

2. Bio-FIT Qualification Passports

Descriptions of 11 key competences for specialists, working in the project subject area, selected on the basis of O1 conclusions

Essentials

- ✓ Designed for professionals at EQF level 5, 6 and 7
- ✓ Application of Knowledge-Skill-Competence framework for qualifications' description in compliance with ESCO
- ✓ Bio-FIT Qualification Passports describe the main features of qualification, its functions and approaches for Bio-FIT certification
- ✓ Establishment of algorithm for connecting the obtained "knowledge" from the training content with the Learning Outcomes of a given Bio-FIT qualification
- ✓ The ppt is outlying Bio-FIT documentation framework for competence demonstration referred to EUROPASS and DIGCOMP

3. Bio-FIT e-Training environment

Comprehensive information about project aim, objectives, innovations, results, target groups, partners

Essentials

e-Training environment: Guides box and multilingual learning content, organized interactively in VET-LPs designed for professionals working in the area of biofertilizers with core education corresponding to EQF levels 5, 6 and 7

Bio-FIT book: full training content in pdf form through off-line access

e-Resources: key development tools and EU and national state-of-art concerning related to the project field sectors

D&U platform: facility for Bio-FIT project results transfer to a broad spectrum of end users/target groups

4. Bio-FIT Training Programme

Development of new training content in different types of biofertilizers, their mass production, application, technology constraints, and EU policy and potential market for biofertilizers

Essentials

- ✓ Formation of Certification Units of Learning Outcomes as basic components of a qualification
- ✓ Creation of 11 VET-Learning Pathways

- ✓ Application of ECVET based concept for evaluation and assessment of project training materials and learning methodology
- ✓ Provision of prospects for certification process
- ✓ External evaluation of the training content, and e-positioning and operation of the e-programme

5. Bio-FIT Handbook for Trainers / Trainees

Training Manual: guide designed to prepare trainers who already have knowledge and skills in sustainable agriculture and organic farming to proceed to a higher level of training implementation

Essentials

ICT guide for Trainers systematic prescription how VET-Trainers to use the on-line and off-line possibilities of the Bio-FIT e-Training programme

ICT Guide for Trainees: introduces to Bio-FIT trainees the opportunities provided by Bio-FIT Training programme for new knowledge, skills and competences development

6. Bio-FIT ECVET Framework

ECVET implementation (by structure and tools) in accreditation of learner's achievements after completion of Bio-FIT Training programme

Essentials

- ✓ Detailed explanation on ECVET concepts, principles and processes, objectives and technical specifications

- ✓ Templates for Memorandum of understanding (MoU) and Learning agreement (LA)
- ✓ Bio-FIT ECVET Concept and Principles guideline: practical application of ECVET theoretical considerations into Bio-FIT context
- ✓ Bio-FIT ECVET Presentation, designed to enhance the Bio-FIT training process organized by VET Teachers/Trainers