

BIO-FIT PROJECT¹**ANNA KUJUMDZIEVA**

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The EU Strategic Framework for Cooperation in Education & Training highlights the crucial contribution of VET to competitiveness, employability and social inclusion. In this context the project "Strategic part-nership for competence based training in Bio-fertilizers - Bio-FIT" (Erasmus+ programme) implements eco-innovation. It is also a core action of EU 2020 strategy and promotes new products and processes, thus contributing to sustainable development and commercial application of knowledge in order to elicit ecological improvements. The EU Commission also has launched Common Agricultural Policy (CAP) im-plicated in the concept of Bio-FIT and giving project rationality. It sharps the need for VET of the profes-sionals working in green biotechnology application for improving the agriculture sector, possessing high employment capacity. This gives a big advantage for societal and economic improvement in Bulgaria as well as in the partner countries. The Bio-FIT target groups (VET teachers/trainers/tutors, and agricultural SMEs managers) need specific training within the frame of green biotechnology and especially in bio-fertilizers. This type of education can contribute in bridge building between technology and farming, and can introduce bio-innovations in sustainable development of the agricultural sector.

The key factor for human resources improvement in this branch is creating a vision of green jobs and implementing VET tools to support workers in adoption of innovative green skills and competences.

The need for implementation of these green abilities of the workforce in agricultural sector fosters knowledge transfer and innovation through introduction of educational programmes and resources us-ing opportunities of VET system.

Thus, the objectives pursued and the innovative training offered reflects the specific partner country needs and is focused on:

- showing the eco-innovative character of bio-fertilizer technologies and effect on environment;
- targeting the types and quality of the bio-fertilizers for preventing and supporting bio-farming;
- studying the influence of bio-fertilizer technologies in decrease material inputs, reduce energy con-sumption and emissions and minimize waste;
- greening the economy through raising competitiveness and employability in Bulgarian and Euro-pean economy and making sure development of technical competence as well as training skills.

¹ Project web-site: www.bio-fit.eu

Applying the “Education for Sustainable Development (ESD)” concept, the Bio-FIT facilitates the com-petence based blended learning and improves prospects for entrepreneurship.

Taking into account all these considerations, the development of Bio-FIT project requires transnational efforts of the strategic partnership, created for this purpose. In this way the applied transnational ap-proach for implementing the best educational practices raises employability in agricultural sector and reduces the consequences of the European economic downturn. Thus, Bio-FIT project is developing future learning and career paths at National and European level.

Bio-FIT Innovations

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 in-creasing production costs and problems for the environment. The use of bio-fertilizers is a viable alter-native 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 pro-duced 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 sec-tor. 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;
- to introduce innovative e-based educational curriculum and blended learning methodology using ECVET tools;
- to build up Learning Outcomes (LOs) and implement those standards in the curricula;
- to strengthen the mutual learning within partner organizations and their partners at the workplace;
- to form a learning network between the partners, disseminate and use the results of the learning partnership and the services offered by the partner organizations.

Since VET professionals are recognized as an important source of knowledge, the following basic require-ments for changing the role of trainers are included in the Erasmus + programme: improvement of sub-ject competence; establishment of links between theory and practice; and use of learner-centered ap-proach. The Bio-FIT target beneficiaries: teachers, trainers, learning facilitators, guidance professionals, school/institution managers and political decision makers are the selected players to fit these require-ments.

The novelty of Bio-FIT is supported by the need for updated educational EQF based approach for train-ing of already mentioned target groups in biological farming by use of bio-fertilizers curriculum. It is based on Units of Learning Outcomes designed in accordance with ISCO/ESCO system for qualification description. This approach gives opportunity for future development and transfer of well educated pro-fessionals in Bio-FIT field at a broad EU scale. Given these changes in the structure of VET qualification description, this work-related training in the sector will be strengthened across different EU countries.

Bio-FIT project proposes a blended learning platform structured as a knowledge-based matrix matching the innovative qualification description in that field. It is a core element of a learning material concerning bio-fertilizers production and application designed on the

principles of ECVET and EQF technical specifications. This enables the introduction of ECVET based learning material to Europe through a digital platform in order to increase the skills of the trainees. Using workshops and seminars the programme is researched and tested. Also, a selection of the good practices and qualitative instruments of job-embedded training are done. This outlines the best EU educational examples (based on a web portal) and testing qualitative instruments to integrate job-embedded learning in the curricula (life story interview, PPT, portfolio). The Bio-FIT meetings between partners enable selection and adoption of "training on the job" best practices. This facilitates building up of community between workplace (canvassing partners) and educational institutions providing VET in the partner countries.

Another innovative aspect of the new Bio-FIT project is the transparent approach for creation of transferable Green Qualification Passports in accordance with EQF and ECVET framework. The launched Strategic Partnership in the field of biological fertilizers includes these documents to establish of a joint trans-European competence based VET model. It also considers NQFs and multiplies the impact of knowledge sharing and mutual learning among the Bio-FIT partners. This model can be implemented in formal/non formal VET in accordance with existing curricula, and strengthen the positive professional mind-sets to enhance innovative competencies and to unlock business opportunities in the future.

The Bio-FIT Consortium

Its structure follows hierarchic principles, governed by the Project Management Board (PMB), led by a Project Coordinator. The Board includes the contact persons of each partner and is responsible for the performance of the project operational phases. The National Management Desks (NMDs) are responsible for coordination and performance of the project work at local basis. The dissemination and use activities are assigned to Project Dissemination and Use Desk (DUD) and project quality management - to Quality Management Desk (QMD).

The structure of the consortium relies on main players and facilitators from the supporting network. The *main players* are responsible for wide spreading and optimization of the project outcomes at national and international level. As representatives of decision makers, VET professionals, and social partners, the *supporting network participants* facilitate the project performance. The main project consortium consists of members with different background and long term experience in various national and European programmes – LdV, Socrates, 6FP and 7FP, NATO and others. Partners have the necessary capacity, experience and competence, and on the basis of their competence the project activities are distributed.

The consortium infrastructure and connections with formal/non-formal education sector ensure direct contact with the target audience. The contacts with SMEs from the same sector help for product testing and feedback analysis.

The Bio-FIT Consortium unifies:

"BULGAP" Ltd. Bulgaria

"BULGAP" Ltd. (Bulgaria) is a company focused on Food and Agri Industry, supporting companies, agricultural producers, and producer organizations in the establishment and implementation of various Food safety standards – ISO 22000, FS 22000, IFS, BRC and Codes for Good agricultural Practices. It provides strategic solutions for development and implementation of management systems and standards as well as for development and implementation of standards for product certification. Its activities are also focused on

preparation for accreditation of laboratories and inspection bodies; CE marking; developing and managing projects in various funding programmes; optimization and re-design of business processes. Through groundwork and project management of EU funds and programmes, company supports other SMEs and individuals, municipalities and NGOs wishing to take advantage of funding opportunities from the European Union. As a part of this activity "BULGAP" Ltd. performs feasibility assessment on various operational programmes and funds, development of over-all project documentation and project management. The company offers also seminars and trainings on the international standards (including implementation of Good Agricultural Practices) as well as on current social issues. The trainings are conducted by highly experienced speakers in their respective fields who successfully combine theoretical knowledge and practical skills.

Research and Development Center "Biotech", Bulgaria

Research and Development Center "Biotech" Ltd. (R & D "Biotech") is founded in accordance with European strategic goal to increase the role of R & D in introducing new knowledge into education and technological innovations. It promotes research and development in the area of consumer and environmental friendly technologies, information and communication technologies by bringing together experts in that field from Bulgarian and European Universities, research organizations, industry and decision policy making institutions. R & D "Biotech" possesses expertise in the field of production, application and economic planning in the field of Green Biotechnology and especially Green Energy and Bioeconomics. The team of R&D Center "Biotech" involves experienced educators and trainers. The participants are members from all levels of education.

They are experienced educators in textbook writing, quality assurance issues, curriculum development, new training techniques as well as provision of trainings in VET with adults and youth. Training is one of their main lines, which is aimed at both active adults and unemployed, in order to allow them to adapt to a constantly changing work environment within a society and a market increasingly competitive. R & D Center "Biotech" is targeting in adaptation of adults and young people to the transformations of educational, technological and physical environment through improvement of their communicational and social skills, exchange of experience and knowhow of good practice in national and international level. It can also offer to the project partnership own staff expertise and competence in governing as contractor/coordinator/expert of multinational projects under different EU initiatives – TEMPUS, INCO-Copernicus, 5FP, NATO, Socrates/Erasmus, LdV I and LdV II programmes, ERASMUS+.

Europa 21, Bulgaria

Europa 21 (Bulgaria) is a non-government and non-profit organization in the field of education, training and culture. Its activities are fully directed towards education and training of SMEs and development of citizenship society. The team of Europa 21 has involved experienced educators and trainers. The participants in the NGO are members from all levels of education. They are experienced educators in textbook writing, quality assurance issues, curriculum development, new training techniques as well as provision of trainings with adults and youth. Training is one of our main lines, which is aimed at both active adults and unemployed, in order to allow them to adapt to a constantly changing work environment within a society and a market increasingly competitive. Europa 21 is targeting in adaptation of adults and young people to the transformations of educational, technological and physical

environment through im-provement of their communicational and social skills, exchange of experience and knowhow of good prac-tice in national and international level.

National School of Public Health, Greece

The **National School of Public Health** is currently providing courses in various themes concern-ing public health like postgraduate training programmes in the following fields: i) Public & Environmental health; ii) Public & Environmental health management;

iii) Occupational health; iv) Health & Environmental engineering. Due to the big teaching and organizing experi-ence of the staff it will extensively contribute for the development of competence based collaborative blended learning model implementation, in transfer activities, in products/outcomes elaboration, and in dissemination and use methods and techniques. They will also participate in milestones establishment, in structuring activities and establishment of practical guidelines for project performance.

GREENFORCE LTD., Cyprus

GREENFORCE LTD. (Cyprus) representing a small and medium sized trading company which filed of activity en-compas-ses green technologies/services market at national and international level. The company main mission is to support the development of positive business activities providing its customers with the very best in cutting-edge solutions, the most innovative technologies, expertise and information, with first rate coordination skills and global-support systems, while creating sustainable value. GREENFORCE LTD. has built strong relationships with customers by providing cost-effective technically superior environmental-friendly goods and services, including management solutions. Its convinced commitment is to provide a safe environment for its employees, contrac-tors and the general public in the communities where the company operates.

Kék Tenger Business Network Kft. Ltd., Hungary

Kék Tenger Business Network Kft. Ltd. (Hungary) is with wide range of educational, management consulting, research related activities. The Kek Tenger College (a part of the Business Network), prepares foreign students for success in college-level classes.

The Kek Tenger College has set up partnership with top national and European high quality Universities. Partners of Kék Tenger Business Network are the Eötvös College of Eötvös Lonard University (ELTE), where the students of The Kek Tenger College can earn an associate degree or certificate for language proficiency. The students have opportunity to choose a transfer to a four-year college or university to attain a bachelor's degree at other Euro-pean Universities, such as the Central European University (CEU) one of The Kek Tenger Language College's key partners, providing Master and Doctoral fellowship with possible scholarship for the students. The training pro-gram provides students with personalized attention.

One of the very particular interests and activities of Kék Tenger Business Network, related with research and ICT based education in relation to the principles of EQF/NQF. It is focused on the sustainability, human ecology and social innovation through development of training models, products and processes. These ac-tivities contribute to sustainable development, where commercial application of knowledge can lead to im-provement and quality of life within wide range of social and cultural dynamics. In relation to this area of activities, the Kék Tenger Business Network implements in its own educational programme particular facets emphasizing on ecology, sustainability and 'green' agricultural training. This

is achieved in collaboration with consultants and experts employed as facilitators in the fields of green biotechnology and sustainable agricultural practices. The green approach to education and training offered by Kék Tenger Business School Network aims to develop “green” skills and competences of actual and prospective students, to enhance the human ecology awareness.

The strategic partnership is established in accordance with the relevant and complementary competences of the above mentioned partners. They are engaged in supporting the strategic orientation of the Bio-FIT project, suggesting and participating in the process of elaboration of the concept and training programme. All partners assume the responsibility for the operative organization of the project and are able to ensure a good flow of communication within the partnership and with national advisory groups and/or silent partners. They are also acknowledged as specialists in regard to educational competence in the Bio-FIT field and are able to develop new LOs based system for sector qualification and training. The more relevant factors used as criteria for building of the partnership are: capacity to overcome the existing weaknesses in the partner institutions; strong background facilitating the specific thematic field in the project sector; ability to support development of LOs based training Bio-FIT model common for all partners.

Bio-FIT elaborates innovative results

IO 1 National case studies “Promoting organic farming by training in bio-fertilizers”

In brief: National case studies aiming to analyse/assess the current state of the art in each partner country in respect to existing education curricula in bio-fertilizers, the presence of green approaches in them, existing competence assessment schemes and classifications, etc. will be prepared. The studies will include collected information through questionnaires among specific target groups and case studies representing the current status of training in bio-fertilizers in each partner country, the main structures involved in the training, existing National/European legislative framework and policy, assessment of the educational needs / gaps in the project subject area, alignment with National/EU VET priorities (implementation of EQF/NQF and ECVET). The expected milestone of the deliverable is identification and analysis concerning partners` national peculiarities in respect to national sustainable agricultural practices and training opportunities. It is used to:

- further development of the other BIO-FIT Intellectual Outputs;
- improve the development, exchange and maintenance of foreseen VET certificate;
- enhance the accessibility and transparency of acquired *e*-competences by harmonizing the EUROPASS, ESCO and other European instruments (EQF, ECVET).

In: Bulgarian, English.

Available: as texts on the website; CD.

Methodology: surveys, questionnaires, interviews, desk research, consultations.

O 2 Bio-FIT Qualification Passports / Green Competence Dossier

In brief: A general frame for gathering of documents certifying completed training and acquired competence/qualification during the Bio-FIT training. It facilitates the mobility process and comprises the following:

- Documents complying with EUROPASS and newly introduced DIGCOMP Framework;
- Work experiences or traineeships certificates;

- Non-formal education and training certificates (such as in-company training);
- Informal learning certificates (e.g. from job experiences, leisure activities or volunteer work);
- All other relevant internationally recognized certificates.

The system frame is set up following the established common for the project criteria and procedures, and standard quality indicators.

In: Bulgarian, English, Greek, Hungarian

Available: CD, as documents on the website.

Methodology: a Skills Passport is constructed for each qualification description.

IO 3 Bio-FIT eTraining environment

In brief: An interactive e-learning portal that serves as flexible e-medium providing competence-based carrier development. It also acts as knowledge data base, supplying relevant information in the project subject area, as well as experience exchange platform within and outside the project consortium. The BIO-FIT e-portal also operates as a powerful dissemination and exploitation tool. It consists from the following parts:

- General information about the project describing Bio-FIT aims, deliverables and impacts;
- Bio-FIT qualifications e-platform providing a frame for establishment of an algorithm for competence development in Biofertilizers;
- Project e-gallery representing collection of logically related records, consolidating relevant information into a common pool of data in the project target sector.

In: Bulgarian, English, Greek, Hungarian

Available: on the website

Methodology: e-learning; partners and target users have free online access to the web portal.

IO 4 Bio-FIT Training Programme

In Brief: A multilingual model for qualification update in the field of bio-fertilizers production and application grounded of the recent EU tools for EQF/NQF and ECVET implementation in VET process. The platform promotes competence-based training approaches through development of Bio-FIT VET training content and Bio-FIT LO training scheme for acquisition of set of knowledge, skills and wider competence by the project target groups and end-users

In: Bulgarian Greek, Hungarian, English

Available: on the website, CD

Methodology: design of an algorithm for presentation of elaborated training content in Certification Units of Learning Outcomes, Creation of 10 VET-Learning Pathways (VET-LPs), application of EU VET tools and concepts, multiple choice questions, matching situations.

IO5 Bio-FIT Handbook for Trainers/Trainees

In Brief: A handbook comprising three distinct parts will be designed to provide all necessary information about the structure of the eTraining environment and trainers/trainees participation in the training programme. The three parts will be:

- *Part I "Training Manual"* – this guide will help trainers with already acquired knowledge and skills in the sus-tainable agriculture and organic farming to proceed to a higher level of training implementation.
- *Part II "ICT Trainers' guide"* – the guide represents a prescription of how is Bio-FIT eTraining environment operating and how VET trainers to use the on-line and off-line possibilities of the Bio-FIT eTraining programme.
- *Part III "ICT Trainees' Guide"* – this part will be developed for trainees and it will include description of Bio-FIT training scheme and content and written instructions for on-line off-line exploitation of training material.

In: Bulgarian Greek, Hungarian, English

Available: on the website, CD

IO6 Bio-FIT ECVET Framework

In Brief: This practical guide will provide detailed explanation on ECVET concepts, principles and processes and how they to be integrated for accrediting (ECVET) learner's achievements after completion of the Bio-FIT Training programme. Trainers, VET providers, research centres and institutes providing training in agricultural sector will implement ECVET tools and processes developed and tested within the Bio-FIT project.

In: Bulgarian, English

Available: on the website, CD

Methodology: ECVET points, methods used in credit transfer and accumulation, Memorandum of understanding

Tools for performance of Bio-FIT Intellectual Outputs

Analysis, testing & evaluation

In brief: Bio-FIT project evaluation strategy involves internal and external monitoring and evaluation. Internal monitoring covers activities of partner organizations, internal evaluation of interim/final results by experts, and application of quality indicators. External monitoring applies external evaluation criteria organized by academic national and international structures.

The final evaluation of project results/outcomes is conducted through testing/evaluation and tuning process. As a result an evaluation report is delivered, which comprises:

- A set of documents regarding the evaluation/certification procedure;
- Information for the format and specific content for each event and summary for the type and specificity of target groups and stakeholders involved;
- Collected feedback information for project products applicability and relevance;
- Measures implemented for the final tuning of the planned outcomes.

In the evaluation report the relevant conclusions for the possibility for approbation of the system for qualifications' description – mobility procedure for cross-organizational / multinational cooperation is also made.

Methodology: Evaluation methodology involves application of self-assessment strategies through questionnaires, tests and evaluation forms; creation and use of an algorithm for the training process, gathering of data by structured testing tools, and analysis of feedback information.

Supporting multiplier events

Four testing trainings events are planned for piloting and exploitation of project results and products accompanied by a set of evaluation documents. The events are organized in each partner country with participants selected from the main target groups / stakeholders, which main activities are focused on project specific area. Thus, approbation and piloting of Bio-FIT eTraining in a blended learning manner is organized at all partners` countries. The other pro-ject intellectual outputs are also faced and discussed. The process of training is evaluated by self/assessment using the programme evaluation tools. Off-line tuition is also implemented as a feedback for optimization of programme content and applicability.

In: Bulgarian, English, Greek, Hungarian

Available: in partners' countries, at workplace, as oral presentations and discussions

Methodology: face-to face tutorials, on-/off-line testing,

Dissemination and use activities

These activities are focused on the dissemination objectives and measures achieving throughout the course of the project. It defines and prioritize the key objectives of the project's dissemination; identifies main stakeholder types/categories and why to reach them; elaborates means for reaching out to stakeholders, defines time-lines for the planned dissemination activities and stakeholder contact and, finally, identifies and prioritizes dissemination tools.

An overview of the dissemination process is made by the PMB , conclusions are drawn how to identify and reach stakeholders, including end users and the public, in order to raise their awareness regarding the findings of the consortium and to encourage them to support and adoption of the consortium's recommendations regarding the access to the obtained research data. Analysis of applicability of dissemination tools is done, as well as assessment and mapping of tools to project activities and stakeholders groups. Final evaluation of BIO-FIT dissemination strategy is given.

Dissemination channels: face-to-face data presentation; dissemination of advertising and information materials, participation in various events, networking, spreading of targeted information.

Use of the Bio-FIT results: feed-back results for project applicability and acceptance gathering and analysis; Data review and implementation of relevant improvements in Bio-FIT project development.

Dissemination & use workshops

Multiplier events envisaged to diffuse developed project intellectual outputs to target audience and interested stakeholders through organization and performance of dedicated workshops. Depending on the country and in-stitution specific features the envisaged dissemination & use workshops will be focused as follows:

- *Workshop "Biofertilizers - a sustainable eco-friendly agriculture"* organized in Bulgaria aiming to foster re-search, knowledge transfer and training innovations in the agricultural sector. Additionally, participation in three targeted events within project

field is foreseen: International conference "Education, research and de-velopment", International Agricultural Exhibition, seminar "Ecology - 2016".

- *Workshop "Training and education in bio-fertilizers: a key issue in organic farming"* organized in Greece aim-ing to introduce the Bio-FIT eTraining concept and proposed framework for description of skills and compe-tences.
- *Workshop "Global Biofertilizers Industry Trends"* organized in Cyprus and aiming to increase the knowledge on strengths and limitations of EU approaches for making VET courses more relevant to the labour-market through improving the quality and recognition of training.
- *Workshop "Bio-FIT project - opportunity to scale up the vocational education and training in bio-fertilizers"* organized in Hungary and aiming to present an overview of the need for and requirements of integrating EU VET policy into national schemes for agricultural training.

In: Bulgarian, English, Greek, Hungarian.

Available: in partners' countries

The Bio-FIT quality management

The best quality management practices are implemented to measure the progress in different phases. Qual-ity management practices, such as documentation, verification, traceability, reviews and audits are estab-lished throughout the project. The quality management tools monitor the integrity, flexibility and efficiency of the project components, using procedures for control and assessment of the Bio-FIT outcomes.

Process quality indicators should observe:

- Internal and external project communication.
- Project overall management.
- Involvement of stakeholders during project development.
- Intellectual outputs delivery.
- Project piloting.
- Dissemination & use measures.

Bio-FIT impacts

European and National Qualifications Frameworks

European Qualifications Framework (EQF) provides a reference framework, which assists in comparison be-tween national qualifications systems, frameworks and their levels.

The EQF framework translates qualifications by making them more understandable across different coun-tries and systems in Europe. EQF promotes lifelong and life-wide learning and the mobility of European citi-zens whether for studying or working abroad.

The EQF encourages countries to relate their national qualifications systems to the EQF so that all new qualifications issued from 2012 on carry a reference to an appropriate EQF level.

European Credit System for Vocational Education and Training (ECVET)

The European Credit System for Vocational Education and Training (ECVET) aims to give people control over their individual learning experience and makes it more attractive to move between different countries and jobs. It facilitates the validation, recognition and accumulation of work-related skills and knowledge acquired during a stay in another country

and experience in different situations. ECVET works for better compatibility between different VET systems across Europe and the qualifications they offer.

ECVET creates a technical framework to describe qualifications in terms of units of learning outcomes that are subjected to assessment, transfer, accumulation and recognition procedures. Each unit is associated with a certain number of ECVET points developed on common standards: 60 ECVET points are allocated to the learning outcomes for a year of full-time VET.

Individual's learning outcomes are assessed and validated in order to transfer credits from one qualifications system to another. The system allows development of common references for VET qualifications and is fully compatible with the European Credit Transfer System (ECTS).

EUROPASS

EUROPASS is an EU initiative that aims at increasing transparency of qualifications and mobility of citizens across Europe. It is a lifelong learning portfolio of documents describing all learning results, qualifications, work achievements, skills and competencies, acquired over time, along with appropriate certificates.

The portfolio consists of the following five documents that make skills and qualifications easily understood:

- **Curriculum Vitae** is freely accessible CV format that helps the EU citizens to present their skills and qualifications in the best possible way.
- **Language Passport** is a self-assessment tool for language skills and qualifications.
- **EUROPASS Mobility certificate** records the knowledge and skills acquired in European countries.
- **Certificate Supplement** describes the knowledge and skills acquired by holders of vocational education and training certificates.
- **Diploma Supplement** describes the knowledge and skills acquired by holders of higher education degrees.

New green job opportunities

New green job opportunities emerge due to the EU recognition of qualifications acquired by the trainees in environmental protection, especially in relation to operation, management and economics and related to the ESCO system. They are opened to nationals who embark on reintegration into the national economies after studying and working abroad. These job opportunities appear as a result of the cross-border mobility of trainers and employers. Due to the application of Bio-FIT model offering scheme for transparency and better understanding of trainees' qualifications they can be realized in the partner countries.

The Bio-FIT programme tools

The Bio-FIT project takes the following steps to qualifications recognition:

- The Bio-FIT team establishes the management structure, distributes activities among partners and supporting organizations, and creates thematic and grade units and course subjects.
- The ECVET based system for sectoral qualification description is elaborated through creation of blended learning program agricultural sector, comprising courses, which

knowledge part is organized in Learning Pathways (LPs) designed to match EQF levels 5, 6 and 7, and weighed through ECVET.

- The project participants implement pilot procedures for assessment and transfer of the learning outcomes in formal and non-formal education.
- Bio-FIT Green Competence Dossier/Qualification Passport will be provided for gathering of documents certify-ing completed training and acquired competence/qualification in Agricultural sector.

These steps are to be made using the following instruments:

- A broad multilingual b-learning portal that hosts the Bio-FIT qualification e-scheme and the Green Competence Dossier, plus guidance, evaluation and dissemination materials.
- Partnership with sectoral organizations established for integration of the ECVET system at national and Europe-an level.
- Bio-FIT outcomes disseminated & used through open information and supporting resources.
- Measures for post-project exploitation of the Bio-FIT e-scheme for qualifications description based on Learning Outcomes.
- Links between the intended qualifications and qualifications required by the national training programmes us-ing ECVET.

The Bio-FIT Training methodology

Didactics: To fit the qualifications needed in a particular area of activity Training Units comprising Learning Out-comes are organized. Thus, the training materials are structured in a model focused on the units' identification. These educational materials are arranged in a way that corresponds to the changing role of educators from teach-ers to facilitators of learning.

Methodology: Bio-FIT methodology is based on the definition of the content of a formal unit defined as a subject in the study curricula. In the Learning Outcomes context, the Training Unit represents a number of competencies ac-quired upon completion of a study course. This Unit covers knowledge and skills that are part of the daily work life and lead to gaining of practical competencies.

Training process: The training process is based on the need of up-to-date education in the agricultural sector and covers innovative content. It is organized to function at an e-platform. The process follows special training and qualifications description model published in 4 languages. It encourages the development of national and sectoral qualifications' systems, applying EUROPASS, ECVET and EQF instruments.

Approbation, feedback and tuning: These processes are performed in cooperation with representatives of pro-ject target groups. They comprise estimation of the system for qualifications description and competence gain-ing at cross-organizational and multinational level. Approbation monitors as well the performance of training events and gathering of feedback from them. It reviews the feedback for project products applicability and rele-vance and carries out final tuning of the intellectual outputs.

The Bio-FIT targets:

Target groups

The Bio-FIT qualification building model concerns teachers, trainers, learning facilitators, guidance professionals, school/institution managers and political decision makers which are direct project beneficiaries.

Economic sectors

Agriculture and eco-engineering, environmental protection, biotechnology, and food industry need professionals with relevant and updated qualifications approved following the Bio-FIT qualification pathways.

Institutional cooperation

The Bio-FIT partnership is created from various institutions and national authorities contribute to the process of regulation, transparency and recognition of qualifications at national and European level.

What are the benefits from Bio-FIT

For the target groups:

- Mapping of soft skills competencies on national frameworks and EQF thus providing recognition for target learners.
- Enhanced training techniques and curriculum development skills for those responsible for VET delivery and EQF.
- Increased effectiveness in meeting the demands of learners within class and workplace learning environments.
- Better understanding of the needs of employers providing placement opportunities for learners.
- Improvement of their organizational skills, i.e. arranging meetings and social events for larger groups, organizing workshops, etc.
- Improvement of their learner centered teaching methods.
- Acquiring new approaches in vocational educational methods and a variety of practices, which they need for their lessons in different European countries.

For the stakeholders/target sectors:

- Transfer of Bio-FIT results and utilization of ECVET-based project outcomes.
- Supply of resources database adapted to meet the training needs in the sector(s).
- Drawing of workshops, testing sessions and guides for the staff development in the sectoral partners.
- Expanding the continuing education and quality enhancement in respect to the sectoral/national needs.
- Linking the related sectors in long term activities of Bio-FIT in order to improve the employment and work-place training.
- Joint qualifications description and relationship between different sectors and areas.

Bio-FIT challenges

The Bio-FIT project philosophy is in compliance with the European policies for **investment in education** and innovation management for successful **transition to knowledge-based economy** and society.

The investment in education is a national priority for all European governments that commit to ensure conditions for VET system operation where the European reference levels and quality practices in training have priority. The project outputs give prospects for the

achievements respective to the project objectives and seeks for successes and lessons learned. The following objectives are achieved in order to achieve this goal:

- Assessment of the structure and level of VET in the project specific sector.
- Conducting of document analysis on project activities and its quarterly reports and policy, and legal documents related with strengthening the VET in the area.
- Defining the level of participation of the different project target audience; stakeholders; policy makers and wide public.
- Stating the relations between project outputs, outcomes and effectiveness.
- Developing of recommendations for further actions based on evaluation results and conclusions.

The Bio-FIT project has been funded with support from the European Commission. This article reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.