



AGRO-MACVET

**Multi – Actor Cooperation for Vocational Education and Training in the
Agro-food Sector**

LLP LDV PARTNERSHIP

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COMPENDIUM

**Based on the partner proposals, discussions, developed documents by the Agro-MAC
VET partnership, and synthetised by**

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TITLE OF THE PROJECT ¹

Multi Actor Cooperation for Vocational Education and Training in the Agro-Food sector (AGRO-MACVET) -

PARTNER COUNTRIES

BE, CY, DE, ES, FR, EL, HU, ~~PT~~, TR (8 countries, 11 partners)

List of Partners: ²

- ACTIF-Europe sarl (FR)
- AESBUC (PT)
- ATEExcelixi SA
- European University Cyprus (CY)
- Fachhochschule Trier (DE)
- Foundation of the University of La Rioja (ES)
- Istvan Szechenyi Agricultural Vocational Education and Internship School (HU)
- MAC-Team aisbl (BE)
- METE - Hungarian Scientific Society for Food Industry (HU)
- POINT Project Construction & Engineering Trading LLC (TR)
- TEI Athens (GR)

AIM AND OUTCOME

The **aim** of this project is to provide a *framework* in order to resolve this shortcoming by taking a multi-actor (university – enterprise-stakeholders) approach and to create tools applicable to vocational education & training institutions, and also to SMEs and individuals (farmers). In this framework both the existing work force and the upcoming farmers can be trained and certified in the areas of contemporary agriculture, environment and the production of “healthy and safe” food, not excluding the financial guidelines for start-up business.

ACTIVITIES

In order to respond to these needs, the following **activities** have been carried out:

- Identification/ analysis of the training needs and the existing opportunities at national and European level, in relation with the applied laws and EU directives.
- Construction of a website containing a data base on Lifelong Learning opportunities throughout Europe. The website has been the “liaison” between partners for communication and project organization issues.
- Integration and dissemination of collected the data, e.g. data provided by:
 - CEDEFOP (European Centre for the Development of Vocational Training)
 - PLOTEUS (Portal on Learning Opportunities throughout E.U.)
 - National Training Organizations of participating countries.

¹ Originally, the present document was to be a list of training organisations and schools dealing with VET in agriculture, farming and rural activities (see **Compendium of schools and training centres** hereafter). To add value on this list it has been decided to include as well an extended background on the Agro-MAC VET project to facilitate future collaboration with other actors and countries.

² List of partners and contacts is available on the Agro-MAC VET website. Portugal has been kept in the list even if AESBUC couldn't participate due to their interest for future development and maintained contact.
agro-net.eu/index.php?option=com_content&view=category&id=46&Itemid=62

- Development of a **Generally Recognized As Minimum (GRAM) Curriculum** of agricultural vocational training, required for all professionals (farmers), seeking certification.
- Proposal of a framework for a vocational training recognition and certification at national and European levels. Cooperation with the EUROPASS authorities and the EQF (European Qualifications Framework) has been launched in some countries (e.g. Hungary) to be used as experience for future transfer to some other countries.
- Creation of a Guide of Good Practice based on **case studies** targeted at small European agricultural enterprises and with interest for transfer at a transnational level (at least one per participating country). This guide is accessible on the AGRO-MACVET site (intranet) and can be available/distributed on a multimedia form if needed.
- Development of a transnational *Compendium* of potential trainers, with specializations and scientific / technological qualifications, in line with the *GRAM Curriculum* (also provided on the AGRO-MACVET intranet site). These trainers can later be approached also, as potential authors of the foreseen training material.

OUTCOMES

The **outcomes** of the project, produced according to the above activities, are:

- The Agro – MACVET website
- A GRAM *Curriculum* for farmers
- A Guide of good practice of EU farms
- A *Compendium* for the AGRO – MACVET trainers and Training Institutions
- A Report/Proposal to LLP and the EU authorities for the certification of farmers according to the EQF.

The objective of the Agro - MACVET project was to provide the framework, in which multi-actor cooperation (university – enterprise-stakeholders) creates the framework for the necessary tools to be applied in vocational education & training institutions, as well to SMEs and individuals. In this framework both the existing work force and the upcoming farmers will be able to be trained and certified in the areas of **contemporary agriculture, environment** and the production of **quality, “health & safe”** food, not excluding the **financial guidelines** for start-up business. The training/certification on these aspects /fields is not a prerequisite for the start-up business and certification of potential farmers, at least at a non-university level and to the majority of the participating countries.

EUROPEAN ADDED-VALUE

This common action allowed an exchange of good practice between various actors of the agricultural sector, and real “in situ” consideration of training centres and curricula.

The idea was to confront habits and cultures of so different countries to produce common tools and practices.

Thanks to the experience and the existing networks (scientific / educational) of the Agro-MAC VET partners, the results are and can further be widely spread, even beyond the agricultural sector and the participating countries. It should be noticed that the Coordinator of the project along with the T.E.I of Athens, FH- Trier, ACTIF-Europe, METE and MAC-Team have had a long and successful collaboration since 1987 for most of them, when the Training Centre of the Agricultural Bank of Greece (since October 2006, ATExcelixi), established and coordinated the University-Enterprise Training Partnership in the European Agro food sector (Agro- UETP), in the framework of the COMETT program.



The partner institutions benefited from each other's experience, exchange knowledge and, using the operating intranet portal, have been able to convey to their staff and trainees the possibility to have an "open eye" on the good agricultural training and operational practices.

RELEVANCE

- To improve the quality and to increase the volume of cooperation between institutions or organisations providing learning opportunities, enterprises, social partners and other relevant bodies throughout Europe;
- To improve the transparency and recognition of qualifications and competences, including those acquired through non-formal and informal learning.

TARGET GROUPS

As final beneficiaries, the farmers require a special support and assistance to training, especially at the non-university level.

- Even if a certification/level qualification is not mandatory in most EU countries to start-up a farm/agricultural business, this qualification recognition is required to access national or European supports and, in some cases, to access some market activities.
- Farmers need to be trained and alerted on the latest guidelines concerning the various aspects of entrepreneurship, agricultural technology, health and safety of the agricultural projects along with environmental issues. Having obtained the necessary training they are expected to be more productive, competitive and respecting environmental and health issues. On top of their national competences, a European Value will be added to their activities including methods and tools for approaching and gaining European markets and consumers.
- This recognition and level qualification with a common approach at European level can also support mobility of agricultural workers and farmers geographically in complement to professional levels.

EU REGULATION³

The [Agro-MAC VET website](http://www.agro-net.eu)⁴ includes links to a number of regulations related to the VET systems.

A few further links:

- eur-lex.europa.eu/en/legis/latest/chap1630.htm
- europa.eu/legislation_summaries/education_training_youth/lifelong_learning/c11107_en.htm
- www.springerlink.com/index/n5887ul80p603817.pdf
- [Accreditation and quality assurance in vocational education and training](http://www.cedefop.europa.eu/etv/Upload/Information_resources/Bookshop/568/4089_en.pdf)⁵

³ Elements of national regulation in terms of education and vet systems can be found on the CEDEFOP website (www.cedefop.europa.eu/) and on the VET in Europe (www.cedefop.europa.eu/EN/Information-services/national-vet-systems.aspx).

⁴ www.agro-net.eu

⁵ www.cedefop.europa.eu/etv/Upload/Information_resources/Bookshop/568/4089_en.pdf



CURRICULUM

Proposal of the Agro-MAC VET GRAM curriculum

Based on the above approach, the GRAM curriculum (Generally Recognised As a Minimum) has been developed as a proposal to address the needs of farmers and workers in agriculture without any officially recognised professional level or access to the profession who may have some experience and practical knowledge and who are outside academic/school systems. This curriculum is a syllabus based on which common training materials and solutions can be commonly developed later including room for adaptation depending on each national system. The 9 days course can be organized as adult-education, in the form of two-week daytime course, one day/week evening course, including distance learning or e-learning when relevant.

Total Hours: 63 Total Days: 9

Part 1: 42 Hours of General Course (6 Days), 7 hour/day)

Part 2: 21 Hours on Special Sector Topics (3 Days)

1. Plant Production
2. Animal Production

Part 1

DAY 1: Financial Issues

- Agro Business & Economy
- Marketing
- Logistics
- Insurances

DAY 2: Laws and Directives

- CAP
- EU Directives and Standards
- National Legislations & Organizations

DAY 3: ICT

- Use of PCs
- Internet & Networks
- e-communication

DAY 4: Environment

- Resources
- Raw Materials
- Products and side-products
- Wastes

DAY 5: Quality

- Health and Safety (Producer and Consumers)
- Residues – Pollutants (HACCP)
- Organic Farming
- Sustainable Agriculture (Solar Energy, Geothermy)

DAY 6: Nutrition & Packaging (7 Hours)

- Nutrition (4 Hours):
 - Consumers & Animals
- Packaging (3 Hours):
 - New Materials & Technologies
 - Labelling

Part 2: Specialisations

Plant (21 Hours)		Animal (21 Hours)	
Water & Minerals Soil	4 Hours	Water & Minerals Feed	4 Hours
Traditional plant products	General Techniques & treatments 4 Hours	Traditional animal products	General Techniques & treatments 4 Hours
Special Products	<ul style="list-style-type: none"> - Fruits - Vegetables - Green Houses 6 Hours <ul style="list-style-type: none"> - Local Specific Production 4 Hours (Different courses/ depending on the needs of every country [e.g. olives, cereal, com....])	Special Products	<ul style="list-style-type: none"> - Milk & Dairy products - Meat & Meat Products - Eggs - Fishing - Aquacultures 2 Hours 2 Hours 2 Hours 2 Hours 2 Hours
New Methods & Technologies	<ul style="list-style-type: none"> GMOs Irradiation 3 Hours	New Methods & Technologies	<ul style="list-style-type: none"> GMOs Breeding Cloning Spray Drying 3 Hours

Didactics the EDU

Cognitive base, connected with Knowledge base.

- Motivated
- Individual effort
- Conscious
- Regular and continuous
- Long-term adaptive changes

Lifelong learning, education must be such as to later be able to learn.

Methods:

- Depends from the form of learning
- In case of LLL we prefer the e-learning, connected with organised practical trainings

Schools and teachers

The participating Countries have different VET education system and different school system. The nomenclature of the education, education systems, and school and education forms are determined by the CEDEFOP and EQVET definitions. This allows the comparison the systems of the Partner Countries.

Schools, training centres and in some cases teachers/trainers will be approached in the next steps as potential authors of the foreseen training material. So far, a list of schools and training centres has been established in the partner countries as part of the present compendium.

Case studies

The case studies prepared by the Agro-MAC VET project are available on-line www.agro-net.eu. These case studies illustrate the approaches taken by some countries and which could be relatively easily transferred to other countries (e.g. Belgium), or some cases of farmers/farmers.



List of Case studies:

The executive Summaries of the Case Studies and the [Case Studies](#) are available on the WEB page of the project: www.agro-net.eu/index.php?option=com_content&view=category&layout=blog&id=97&Itemid=58

List of case studies:

Belgium: Vocational Training in Agriculture in Belgium

Cyprus: Technical and Agricultural School Avgorou

France: A pioneer training model

Germany: Agro-Tourism in the Mosel Valley, Germany

Greece –Germany: Elimination of allergenic proteins with electromagnetic irradiation

Greece: The Thessalonica Agricultural and Industrial Institute

Hungary: Raising the added value by developing farm-cheese production

Hungary: Consortium of Training Centres

Spain: a training model

Turkey: Seedless Lemon Cultivars Developed by ALATA Horticultural Research Institute, Turkey

CERTIFICATION

Examination - accreditation the trainee

According the EU and National regulations.

All examination questions are based on the published learning outcomes and the recommended study materials contain the information required to answer these questions correctly.

The learning materials and Exam forms and structure must have official accreditation based on the EU guidelines.

Terms the Evaluation:

- Participation on the course
- Participation on the practice (placement)
- Good responses to the interim control questions
(The teacher must draw 5-10 different questions based on the curriculum, taking in consideration the country-regional specialties of functional foods.)
- Preparation of the professional paper, test product – if prescribed.

Accreditation the trainee

According the EU and the National regulations. All examination questions are based on the published learning outcomes and the recommended study materials contain the information required to answer these questions correctly.

Parts of the examination:

Theory

- **writing** (examination paper with multiple-choice questions and/or a question paper requiring short written answers) (Time: ...minutes)
- **verbal** (preparation: ... minutes; test: ... minutes)

Practice (minutes)

- Executable tasks of the training, depending the curricula.
- The lesson, the operation time and the necessary instrumentation have to be fixed.

Others

(as professional paper, test-product..., usually counted to Practice).

Weighting the exam-parts (EXAMPLE)

		Knowledge Levels (EQF)		
		Level 2	Level 3	Level 4
Theory		30%	50%	70%
	writing	10%	25%	35%
	verbal	20%	25%	35%
Practice		70%	50%	30%
	exercise	40%	20%	10%
	Professional paper		15%	10%
	test-product	30%	15%	10%
Total %		100%	100%	100%

Levels:

Knowledge in the context of EQF, knowledge is described as theoretical and/or factual.

We are dealing with students (target groups) needing knowledge level 2, 3 (occasionally 4)

L2	basic factual knowledge of a field of work or study
L3	knowledge of facts, principles, processes and general concepts, in a field of work or study
L4	factual and theoretical knowledge in broad contexts within a field of work or study

Requirements the certification

- kind of certification (confirmation, certificate, diploma, Euro pass...)
- form of certification
- content of certification
- must be defined by the EU and the National Certification Board.

The Certification (diploma) must serve the Mobility, therefore must be established in the National language and in English.

CREDIT CALCULATION:

Education the VET professionals in the third school phase (age 15-18)

- Need more school time.
- 2 full school years minimum

Ratio of theory/practice:

- 40/60% in the school year, 30/70 in the full year (out of the school phase farm practice.)

Credits

- Calculable for the day-over school system only:

in general:

30 hours/credit, calculated: Theory+Practice+Self learning (hours), where hours are:

at more theoretical tasks:

Theory 100% (1*hours)

Practice 50% (0,5*hours)

Self learning 80% (0,8*hours)

at more practice oriented tasks

(maintenance, laboratory practice, ICT and others)



Theory 100%
Practice 100%
No self-learning

The results of the former school phases (level 1 and 2)

Are not calculable, these are basic claims for level 3.

But the credits achieved in level 3 count in for the next step (level 4 –post secondary school and first university level)

COMPENDIUM OF SCHOOLS AND TRAINING CENTRES

This list of training schools and training organisation is not ment to be exhaustive. It is a compilation of training schools and trainig centres in the partner countries which deal with VET in agriculture, farming or rural activities. If your organisation is not included in the present list, please contact the Agro-MAC VET team via the contact web page on the agro-MAC VET website ⁶. Depending on the countries, not all the schools or training centres have been indicated, for instance, the main branch of some types of training organisations have been indicated with the possibility to search for local/proximity training centres. (See in Annex for a list of related school or traing centres).

MOBILITIES

Mobilities in terms of the Partnership type of Leonardo da Vinci European projects are the transnational meetings which have been done in the project to work on the project. In Agro-MAC VET, the partners performed about 70 transnational meeting in two years around the partner Countries. Number of participants over 260. List of mobilities see on the WEB site the project ⁷.

English was the official partnership language. Still during bilateral meetings French, German, and Greek was used when all the partners could use the same language. However minutes of the meetings were always produced in English.

There was a clear commitment of all the partners and a sharing of duties and activities among the partner institutions from the initiative point; and all partners have been actively collaborating to the various outputs to bring in their national contribution and their own expertise.

The quick adaptation of the new comers into the partnership was enabled thanks to the history of long cooperation between the core partners already used to Multi Actors Cooperation approach.

Apart the Portuguese partner who was obliged to withdraw due to internal restructuration issues right at the beginning of the project (apart the Portuguese specific data, the few specific activities which were planned to be achieved by the Portuguese partner at partnership level have been redistributed amongst the partners), the partnership as a whole and each partner met its obligations in an equally involved manner.

Despite the cultural and organisation differences between the various countries, the communication (thanks to efficient tools) was so clear and effective that it was easy to correct possible errors, answer questions and not lose time in such a tight schedule with ambitious objectives.

⁶ list of partner organisations: agro-net.eu/index.php?option=com_content&view=category&id=46&Itemid=62
list of individual contact details of partners: agro-net.eu/index.php?option=com_contact&view=category&catid=45&Itemid=60

⁷ Participants table: agro-net.eu/index.php?option=com_wrapper&view=wrapper&Itemid=104



One very important result of the collaboration and visits, is that the partners could determine and verify that the necessary and factual knowledge, training methods, of the participant countries and institutions are comparable and relevant (generally and special to the agro-food sphere). Therefore the country-specific education and evaluation supports the mobility of the professionals. (This is valid for the teacher-trainer education as well as for the VET sphere.)

All the hosts were taking care of the social events, introducing all the partners to their culture, history, daily life, by sightseeing tours, technical and cultural visits and others.

ABBREVIATIONS:

CEDEFOP	European centre for the Development of Vocational Training
ECTS	European Credit Transfer System
EQF	European Qualifications Framework
GRAM	Generally Recognised As Minimum
LLP	Life Long
PLOTEUS	Portal On Learning Opportunities throughout EU
TNA	Training Needs Analysis
VET	Vocational Education and Training

ANNEXES

Are published separately – especially the annex on the list of training organisations per partner country which could be of interest for future developments on the GRAM proposal.

CONTACTS

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or

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(country list and partners' contact points are available on-line)

