Innovation on Agroforestry Education, Training and Practice to Develop Rural Living and Environment Supported by the AgroFE Leonardo and Agrof-MM Erasmus+ Projects

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What is Agroforestry

There are many definitions, aims and potentials of agroforestry. One of the definitions, increasingly used by ICRAF publications and achieving wide acceptability is:

“Agroforestry is a collective name for land-use systems and technologies where woody perennials (trees, shrubs, palms, bamboos, etc.) are deliberately used on the same land-management units as agricultural crops and/or animals, in some form of spatial arrangement or temporal sequence. In agroforestry systems there are both ecological and economical interactions between the different components.”
Definitions imply

• agroforestry normally involves two or more species of plants (or plants and animals), at least one of which is a woody perennial;
• an agroforestry system always has two or more outputs;
• the cycle of an agroforestry system is always more than one year; and
• even the simplest agroforestry system is more complex, ecologically (structurally and functionally) and economically, than a monocropping system.
Agroforestry in pictures
The AgroFE Leonardo project
Objectives of the AgroFE

• Since there is a lack of training and teaching in agroforestry and the general knowledge about agroforestry is low, the overall objective of the project is to develop a teaching system for agroforestry formation and promotion in Europe.

• The project aims to build an innovative training system: conceptual, module trainings, with use of ICT (Information and Communication Technologies – computers, tablets etc.) and with professional’s participation.

• One of the innovations of the project is a strong participation of professionals in trainings and in qualification process.

• Significant importance is to give training in context of professional situations, “on the field”.

Specific objectives

To produce professional book of references as a support for transfers in training with a common framework and adaptation to local or national context.

To create knowledge database which will be used for tools and training resources and which will also integrate existing resources.

To implement experimentation in initial training in individual countries.

To develop a certification system for all levels (L4, L5, L6) of education adapted to particular country education systems and needs.
9 Partners + other associated partners in the AgroFE project

AGROSUP Dijon, FR

EURAF – European Agroforestry Federation, FR

Abacus Organic Associates Ltd, UK

EPLEFPA – Etablissement Public Local d’Enseignement Agricole de l’Aube, FR

Czech University of Life Sciences in Prague, CZ

University of Debrecen, HU

ONG mare nostrum, RO

AFAF – Association Française d’Agroforesterie, FR

AWAF – Association pour la promotion de l’agroforesterie en région wallone et bruxelloise, BE
Main results of the AgroFE project

• A collection of different resources were made based on the synthesis of needs and expectations of partners. This collection were used in developing new and existing training sessions.

• A professional book of references has been developed to support for transfers in training.

• The knowledge database has been developed which will be used for tools and training resources and which will also integrate existing resources in the future.

• Collaborative and dissemination platforms were created such as official web site, videoconference system, facebook, mailing list and Moodle for project document and as Learning Management System.
The Agrof-MM Erasmus+ project
The Agrof-MM Erasmus+ project

Based on the AgroFE Leonardo project the Agrof-MM extends the activity to the Mediterranean and Mountain areas.

The duration of the project: 2015-2018

The Project Coordinator: AgroSup Dijon – France

Partners:
• TEI Stereas Elladas (GREECE),
• The French Association of Agroforestry (FRANCE),
• University of Tuscia (ITALY),
• University of Debrecen (HUNGARY),
• AliénorEU (BELGIUM),
• Friends of Nature (LEBANON),
• Abacus Organic Associates Limited (GREAT BRITAIN),
• CFPPAF Mirecourt (FRANCE),
• EPLEFPA Valentin (FRANCE),
• University of Ondokuzmayıs (TURKEY).
The planned different types of trainings

- Courses, group work, conferences
- Training in the field and online
- Self-training
- Thematic workshops
- Case studies
- Visits to agroforestry plots
- Tutored placements on farms.
IT Tools
CW tools and repository in the AgroFE

1. Moodle
   - Virtual Collab. Sp.
   - E-learning,
   - On-line learning

2. Vidyo
   Desktop videoconference service

3. MCU
   Multi Control Unit
   Videoconference service
   Recordings
   Internet broadcast

4. Auditorium
   - Content manag.
   - Sharing
   - Uploading
   - Live streaming
   - Authentication

5. Off-line
   Recording lectures, demonstrations (Video and presentation)

The Internet

Moodle documents and databases

Repositorium

Recorded video-conferences

Connection

Conversion

Uploading

DB connects

Systems connects

Internet connects
Videotorium (http://videotorium.hu/)

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Videotorium as Repository for AgroFE

Knowledge databank in the AgroFE Project
Prof. Charles Burnel (ENESAD (France))
Prof. Jerzy Weres (http://videotorium.hu/)

Applied Informatics in agricultural and biosystems engineering – software supporting research of thermo-mechanical behavior of agri-food and forest products
Prof. Jerzy Weres (professor - Poznan University of Life Sciences)
Introduction

Agroforestry Education in Europe

During the 20th century agroforestry has experienced a strong abandonment, counting today only a few million hectares in all Europe. Following scientific research, development structures and experiments of professionals, agroforestry has met national and European recognition in recent years again. In some European countries namely Belgium, France and UK professional organizations and training actors try to reintroduce agroforestry by training of adults. There were some experimental courses conducted in these countries recently, but just on a small scale since resources such as trainers and skills and knowledge
Moodle as CW tools and LMS
https://moodle.agr.unideb.hu/agrofe/

This Forum is for common discussion for all.

The structure of TRAINING MATERIALS was created by Stephen Briggs

Course categories

- Project information (3)
- Workpackages (6)
- AgroFE Conferences - Workshops (15)
- Other Conferences - Related to AgroFE (7)
- Educational Materials and Links (3)
- Publications by AgroFE partners (1)
- AgroFE - Agroforestry Educational Program Developments (1)
- Partners (15)
Agroforestry subject on BSc at University of Debrecen

Teaching & Training materials

1. National and international practice of agroforestry
2. Natural science of agroforestry
3. Watershed management of agroforestry
4. Mitigation of erosion in agroforestry practice
5. Site evaluation in agroforestry practice
6. Ecological animal husbandry and agroforestry
7. Grassland management and agroforestry
8. Ecological crop-production and agroforestry
9. Phytoremediation and agroforestry
10. Agroforestry and machinery
11. Local government of agroforestry
12. Low and justice of agroforestry
13. Informatics of agroforestry I.
14. Informatics of agroforestry II.
AgroFE Facebook
https://www.facebook.com/Agrofe
Agrof-MM Social Média

14th ERDN conference
Knowledge sharing and innovation in agriculture and rural areas
Date: 03 - 05 Oct 2016
Location: Budapest

Training agricultural stakeholders in the development of agroforestry in the Mediterranean and in mountain areas

Find out more on http://agrofmm.eu

@AgrofMM
AgrofMMEU
Agrof-MM
Knowledge Database
or
Knowledge Data Bank
Knowledge Database and Service Architecture

- **Portal - CMS**
  - External Search Engine
    - Google Scholar
    - OpenSearchServer
  - BDC-KDB
    - RUBEDO – PHP – JS
    - MONGODB - Elasticsearch
  - Data sources
  - Editorial chain
    - Opale SCENARI Server
    - PDF, HTML, EPUB3 export

- **Archive system**
  - E-learning platform
    - Moodle

**Caption:**
- System components
- External sources / Info streams
- inter-applicative communication
- Usage of shared knowledge under different formats: PDF, HTML, EPUB3 export
- Input shared knowledge

**Logos:**
- AgroFE
- Lifelong Learning Programme
- Erasmus+
The Knowledge Data Bank (repository)

The knowledge data bank, (acronym KDB), is to enable the sharing, access and consultation in the use of certain resources for training. These resources are under different forms:

- Mono document object, like a photo, a text, a diagram,
- Composite materials, for example a html web page with images, a pdf file with pictures and diagrams, a video clip, with images and sounds ...

Under the project, these documents are identified, selected, proposed by partners and included into the KDB for the evaluation of their potential use in training, by one or more partners.

At the end of the evaluation phase, the KDB can be extended to other contributors, for other uses, such as exchange supports between different actors of Agroforestry.

The word "bank" is explicitly used here, not the word base.

- This is absolutely not the case in a databank in which we store structured tables of numbers as well as illustrated text or video or emails, external knowledge or those from the project, in their various forms. But it should be noted that the knowledge data bank in the prototype of the AgroFE project is based on a software, RUBEDO, developed in PHP and RUBEDO is built on different components:

A data base management software (DBMS-SGBD), type 'NoSQL', MongoDB,
And the user interface uses the ElasticSearch search engine.
AgroFE KDB Prototype

Welcome

The AgroFE project (www.agrofe.eu) aims to develop vocational training in the field of agroforestry, in 6 countries: United Kingdom, Belgium, Czech Republic, Hungary, Romania and France. Several levels of training are targeted by the project, levels N3-N4 relate to farmers and future farmers, levels N5 + N6 affect (future) advisors, trainers, teachers, technicians, ...
Agrof-MM Links

http://agrofmm.eu/

http://moodle.agrofmm.eu/

http://kdb.agrofmm.eu/

http://vps83633.ovh.net/en/accueil

http://vps83633.ovh.net/fr/accueil/v-dvd
Acknowledgements

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and

Project Partners
Thank you for your kind attention!