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European Professional Referential of the job of Agroferestry Farmer

(Proposal - Excerpt – English Version)

Document based on contributions from all the AgroFE project partners
Document produit par les partenaires du projet AgroFE

Ce document constitue un apport essentiel des partenaires du projet AgroFE à la specification du métier d'exploitant agroforestier. Ce document est une contribution aux objectifs du projet.

This document is an essential input from the partners of the project AgroFE specification of the job of agroforestry farmer. This document is a contribution to the project objectives.

WP2-R6 – Résultats
Excerpt

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European Professional Referential of Agroforester (RPAE / EPRA)

The core of the EPRA document

Introduction:

Although agroforestry is a whole, '' wood-agriculture''', indivisible and component interlinked, with all interactions that entails and requires, people aiming at acquiring the European Professional Referential of Agroforestry it is expected to have already a professional background on agriculture or forestry production, which will not be therefore part of the EPRA. Therefore, the main aim of the specialization and competencies of the EPRA will be focussed on the integration of the ''woody '' component within the already existing arable lands, including the tree dimension of the professional field, the management of woody vegetation (mainly focused on trees), from the discussion of the initial design of the project to the results of the integration of the woody in professional life of the farmer, the future farmer. Specially as agroforestry is, for many farmers, the result (or sometimes the starting point) of a gradual transition to a more sustainable agriculture based on three pillars: economic, environment and social.

Agricultural practices are changing when agroforestry is implemented, agroforestry trees developed in open areas will never be managed than trees in forest. This is also one of the main reasons why we consider agroforestry as a '' new '' profession, requiring a specific training, that should be established as professional referential (RPAE / PREA) at European level.

In this document, we consider the ''significant professional situations, SPS'' and '' core competencies, CP or CC'' as similar. The European Professional Referential of Agroforester will be organized around 5 ''significant professional situations'' or ''key competences'' identified (Phase 1 and 2 of the process),-as needed skills, knowledge, knowing, know-how and expertise, behaviour that characterize an ''agroforestry farmer''.

These five ''significant professional situations" or '' core competences'' are:
1) Understanding the main elements of the project and its context related to agroforestry activities; This means that the agroforester (future agroforester) will be able to analyse the contextual elements of his farm together with his expectations and needs in order to appropriately design its agroforestry project, while considering broader expectations and needs to improve its environment therefore considering sustainability (economical aspects, environmental services, ...).
2) Designing -and plan the project;
3) Implementing and shaping the project;
4) Providing technical agroforestry tracking and valorisation of tree products ;
5) Developing the Economic and patrimonial balance and the wealth inventory of the agroforestry farm.

The necessary system approach and the agroecological approach will have to appear within the 5 SPS or CP-CC that structure this referential, as this approach will be a cornerstone of the core-content training manual, referential and manual that will serve as the backbone of the training pathways or curricula of the EPRA.

1) SPS 1: Understanding elements of the project context in agroforestry activity

CC-CP: The EPRA professional should be able to understand all environment parameters (soil fertility, humidity, temperature) and their impact on operations related to of the agroforestry components and professional activity, being able to understand the agroecological and economic fundaments of agroforestry, its potential and vocation , double scale, plot, farm and territorial level. The agroforester should be able to make the best choice and explain the basis of the agroforestry approach: changing the current agriculture paradigm, undertake a comprehensive and ambitious reclassification of the agricultural model including the production, economy, society aspects, and the ''justifications'' that lead to choose the entrance of a "woody vegetation type" over another, to place it considering the whole agroecological approach: soil conservation, water management, nutrient recycling, the environment, the impact on farm and in the territory.
vegetation type" over another, to place it considering the whole agroecological approach: soil conservation, water management, nutrient recycling, the environment, the impact on farm and in the territory.

1.1) Defining the project:
1.1.1: Identifying agroforestry practices in order to better adapt them to a specific farm from an economic, ecological and social point of view;
1.1.2: Knowing the different goods / products and services associated with these agroforestry practices;
1.1.3: Choosing best agroforestry practices adapted to the location, the environment of the plot, of the exploitation;
1.1.4: Fitting the agroforestry project within a coherent legal framework, within a consistent economic and financial context.

1.2) Understanding the scientific and technical elements related to woody vegetation development:
1.2.1 in the framework of a At1 type of agroforestry;
1.2.2 as part of a At2 type of agroforestry;
1.2.3: Considering Competition, Complementarity and Facilitation:
- in the woody-crops interactions (in At1 or in At2);
- in the woody-animals interactions (in At1 and in At2);
- in the woody-crops–animals interactions (mainly in At1);
- in the woody-soil interactions.

2) SPS2: Designing and planning the implementation of the agroforestry project

CC-CP: The agroforester should be able to understand, plan and build the different stages of an agroforestry project, including economic, policy and legal dimensions;

2.1) Designing and planning an agroforestry project - At1
The agroforester will be able to integrate woody vegetation including trees on a plot where agricultural production is already obtained, livestock included;
2.1.1: Selecting the most appropriate woody species taking into account the technical and economic elements related to species selection, genetics and the type of young plants (clod, bare root);
2.1.2: Setting an itinerary for woody vegetation introduction on the plot and on farm;
2.1.3: Conceiving the project design by integrating its needs and expectations, its material and human constraints and the farm environment;
2.1.4: Knowing the legal, policy and regulatory elements linked to the establishment and conduct of agroforestry production system.

2.2) Design, plan the project as part of an agroforestry - At2
The agroforester will organize the forest, by implementing adequate management (thinning, pruning etc..) with the aim of introduction of agricultural production;
2.2.1: Understanding the elements related to agricultural production process (most commonly animal husbandry) in the forest, choice of animals considering with constraints ~~....)~~;
2.2.2: Knowing and integrating the specific legal elements in wooded areas that may interfere with the programmed project (planning regulations, land clearing, legislation about ~~cuts~~ harvesting, sustainable management documents, ...) and legal and policy elements related to natural areas (Natura 2000, ENS, classified sites, EBC, …)
2.2.3: Defining the interventions to be carried in forestry, thinning of forest grazing for example, and integrating them in the management of forest holding.

3) SPS3: carrying out the implementation, materializing the project

CC-CP: To be able to perform effectively and control the actions of an already approved agroforestry project, taking into account all the elements and project parameters and their impact on the sustainability of farming and professional activity;

3.1) Implement an itinerary (process) of agroforestry plantation - At1
Planting lumber, high value timber trees and fruit trees, hedges, isolated tree (s) in field, in spinney, ...;
3.1.1: Undertaking preparatory operations for planting (soil preparation work / sub soiling, ...)
3.1.2: Preparing elements falling within the vegetation management (management of the grassed strip at the foot of trees, mulching ...);
3.1.3: Planting young trees taking into account technical parameters, soil~~s~~, climate conditions, ...;
3.1.4: Ensuring the protection of young trees taking into account the environment; eg protection against game, ...

3.2) Implement an itinerary of forest thinning - At2
Forest thinning, if needed, to develop an activity of agroforestry (farming activity like livestock, poultry, …) in forest areas;
3.2.1 Planning the thinning for forest grazing (in the case of livestock production) as required; eg selection of trees to be cut and precise identification ...;
3.2.2: Conduct, to perform preparatory operations; eg cutting, unlading, ...;
3.2.3: Eventually, preparing the undergrowth; eg tillage, herbaceous seeding, protection of regeneration ...

4) SPS4: Provide technical monitoring of an agroforestry project
CC-CP: Being able to follow a management itinerary (process) of an agroforestry investment: maintenance, pruning, cutting ..., harvest and product promotion;

4.1) Follow an itinerary of management of an agroforestry investment on farm - At1
Follow-up: developing, driving, conducting or delegating an itinerary of management of an agroforestry investment on farm plot(s);
4.1.1: Conducting, sub-contracting the maintenance of the plot, the woody vegetation on the plot; eg replenished, sizing, pruning, game surveillance, ...;
4.1.2: Ensuring the partial or total crop production issued from trees and wood; eg harvesting of fruit, wood chips (pellets), lumber, ...;
4.1.3: Managing the valorisation of timber and related products; eg use of RCW-BRF on the exploitation, energy, heating with products issued from cutting, timber based fodder ;

4.2) Follow an itinerary of the management of forest resources on the farm - At2
Follow-up: developing, driving, conducting or delegating an itinerary of a forest investment on the exploitation, totally or partially in agroforestry farming;
4.2.1: Ensuring or subcontracting, the achievement of the timber from the plot-; eg size, pruning, cutting, ...;
4.2.2: Taking into account the management of the interactions tree-animal in the short-term, mid-term, long-term follow-up of the plot of wood;

4.3) Adapting the agricultural production process, crop(s) and / or animals - At1 andAt2
Adapting the agricultural production system, process related to to cultivations and crops or to animals:
- At1: in the framework of agricultural production conducted in parallel with the growth of trees;
- At2: or with the evolution of forest land, considering elements such as climatic events, ...

Taking into account the soil-trees interactions.

5) SPS5: Realizing the ST, MT, LT economical, financial, patrimonial balance, of the agroforestry project

CC-CP: The agroforester should be able to follow (doing, sub-contracting) the ST-MT economical balance, the MT-LT financial balance and the MT-LT patrimonial value of agroforestry part of a farm / forest exploitation, taking into account national rules, policy and legislation; eg accounting doctrine and national fiscal rules, ...;

5.1) - At1 : The agroforester should be able to have competences to assess (sub-contracting the evaluation) ST, MT, LT analysing the impact of trees on agricultural production, animal husbandry, …
Being able to get information, knowing about the valorisation of the agroforestry plot, for instance in the context of negotiation of a bank loan, ...;

5.2) - At2: Knowing how to assess (to evaluate)-ST, MT, LT analysing the impact of livestock or agricultural production (pasture, poultry for instance) on the wood production.