GLOBAL RESEARCH ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

Maria Rosa Mosquera Losada/University of Santiago de Compostela

Agroecology and Agroforestry: adapting systems and mitigating against climate change

Situation/Issue

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What's the problem?

- Reaching climate neutrality in farming systems is a need

Why is a global collaborative approach required to solve it?

Agroecology and Agroforestry has the capacity to:

- Mitigate Climate Change
- Adapt systems to climate chain
- Foster policies to improve climate change
- Foster monitoring methodologies to quantify the potential they have to mitigate climate change

Flagship Project Goal(s)

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Develop a portfolio of agroforestry and agroecology best practices including **agroecosystem, supply chain and policy scale**, and their respective value chains, which is clearly linked to their capacity to increase carbon sequestration and/or reduce greenhouse gases emissions.

Analysis will be conducted under an agreed, common, LCA methodology, in a set of representative countries of the world.

Analyse policies

Foster Methodologies

Anticipated Flagship Outcomes/Impacts

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The results will be included as a new section of the AFINET-AF4EU database which is currently linked to the GRA website.

The flagship will **involve input from all CRG Networks** and will be linked to the new FAO strategy and the Global Alliance for Climate-Smart Agriculture Enabling Environment Action group (EEAG).

The flagship will also contribute to the FAO Agroforestry monitoring agreement

Flagship Project Partners

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1. Spain, Marisa Tello
2. Brazil, Gustavo Mozzer
3. Argentina, Melipal Esteban
4. UK, Luke Spadavecchia
5. USA, James Dobrowolski
6. Colombia, Rodrigo Martinez
7. Canadá, Bob Turnok
8. Ecuador, Jose Intriago
9. Marina Castro, Portugal
10. Anastasia Pantera, Greece

Activities/Results To Date

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Most of the work was carried out initially in Europe, where there have been developed two papers to be published soon, 33 AF value chains, the initial analysis of AF policy in Europe.

The initial results will be presented in the following workshop with over 800 registrations all over the world:

*Undertrees project to be held online as the 2nd Seasonal School of Undertrees project (from the EU).

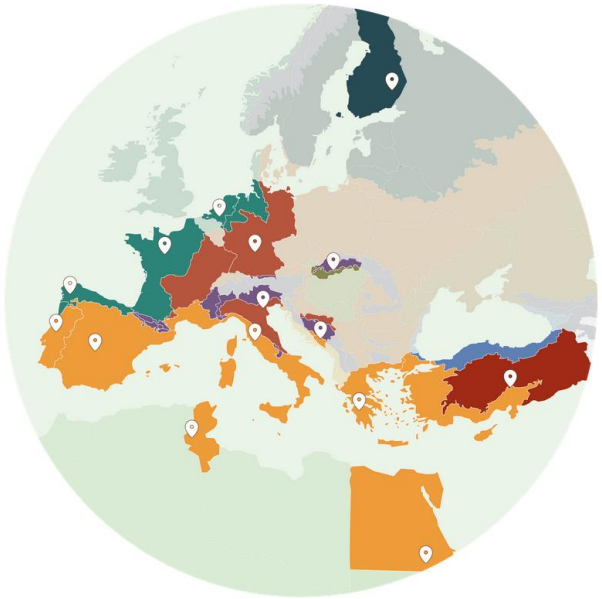
Please join online:

UNDETREES - 2nd Seasonal School in Pisa (Italy), September 23-27, 2024 (google.com)

Consortium & Living Labs

22 Partners from 13 Countries

15 Living Labs



- Boreal
- Atlantic
- Continental
- Alpine
- Pannonian
- Mediterranean
- Black Sea
- Anatolian

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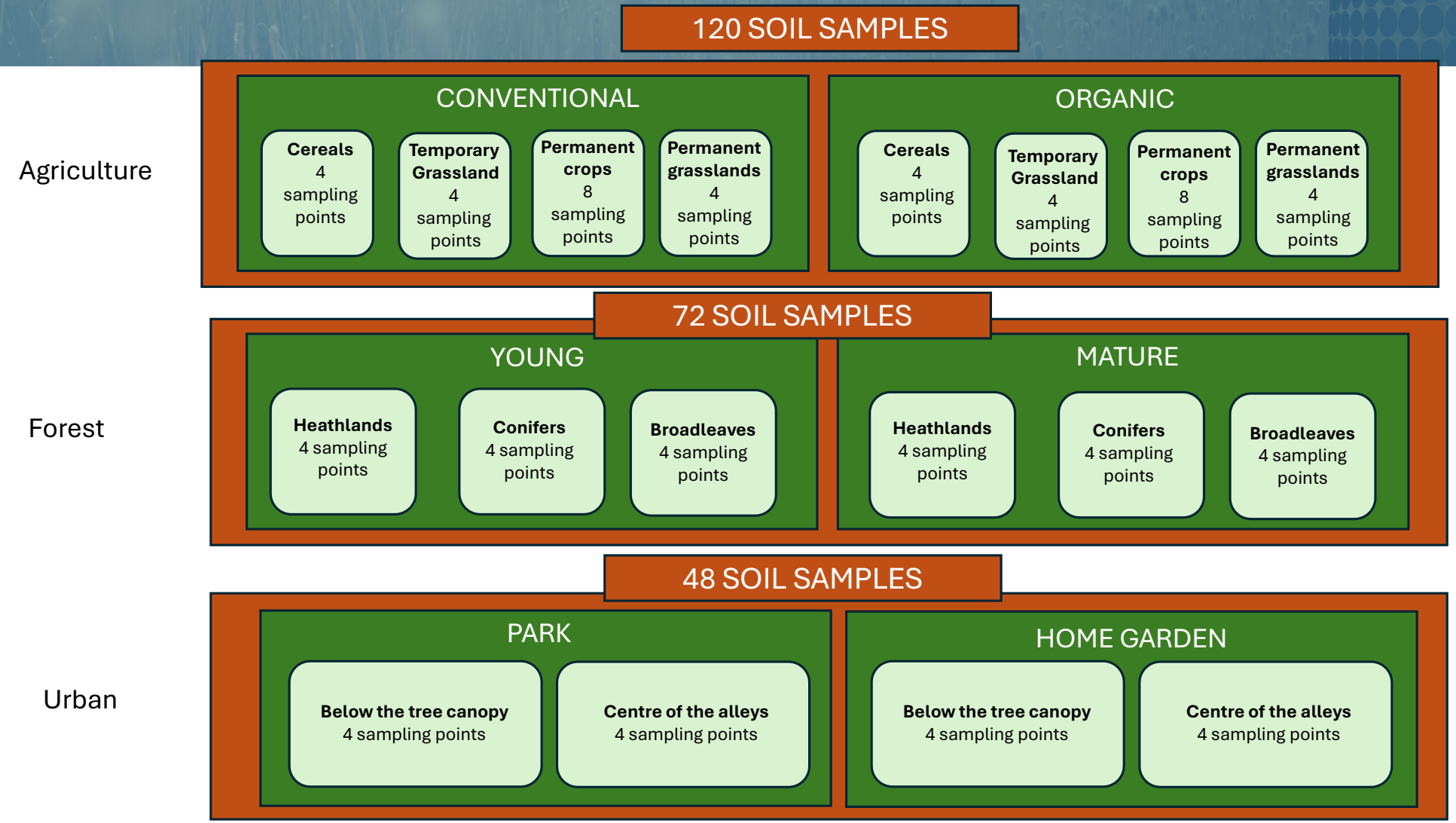

LUCAS DATABASE

Biochar Testing!

GRASS-ROOT PROJECTS

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CLIMALACT: Development of sustainability indicators linked to livestock grazing and forage practices extensive, semi-intensive and intensive guaranteeing sustainbility and climate neutrality of the farms and their value chains in collaboration with the Milk companies delivering the 60% of the milk in Spain

ASH4SOIL: Development of fertilizers coming from the forest biomass industry residues linked to the production of electric energy and manure

CARBON BALANCE: AFCLIMA-DEMO

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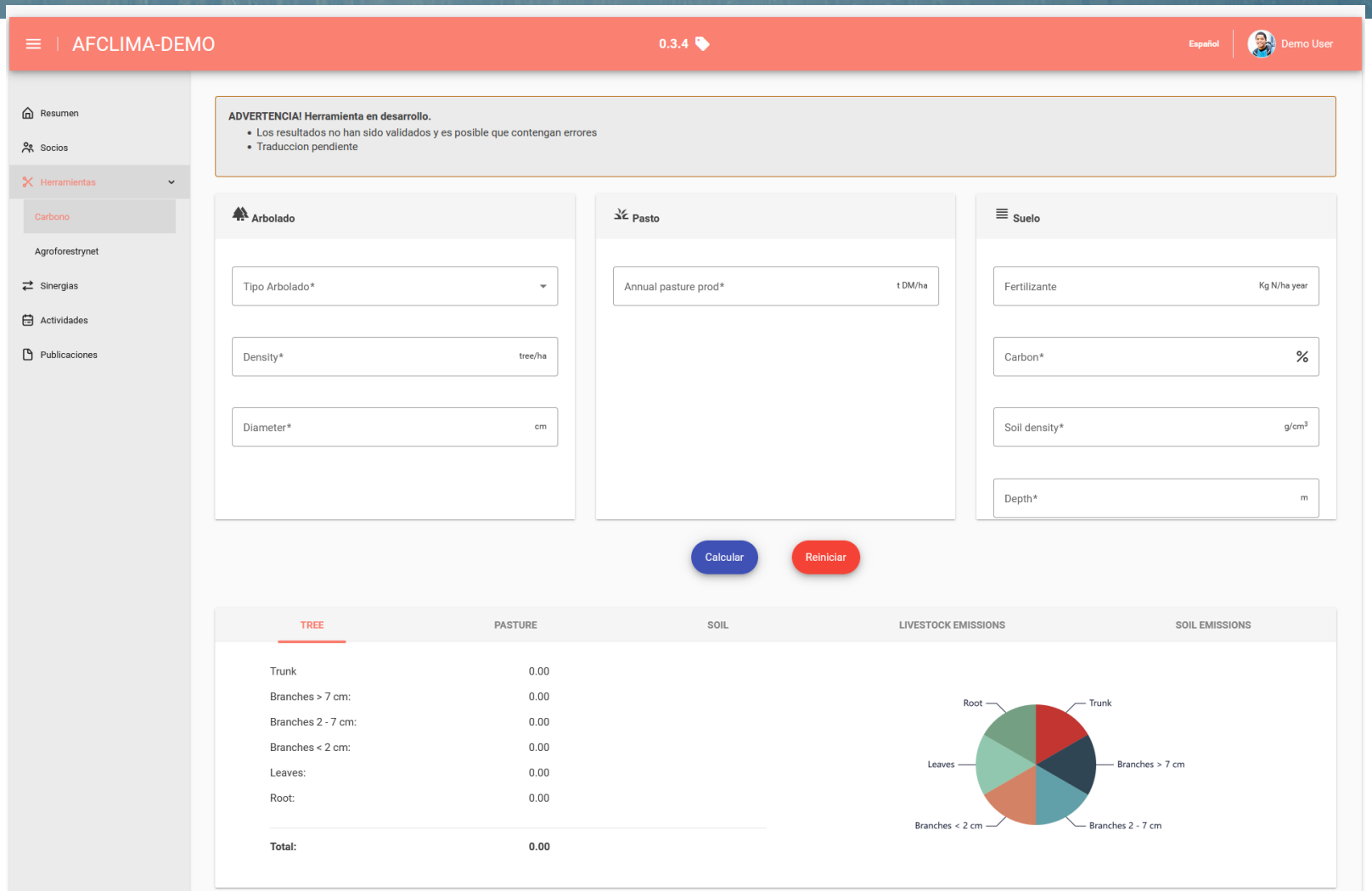

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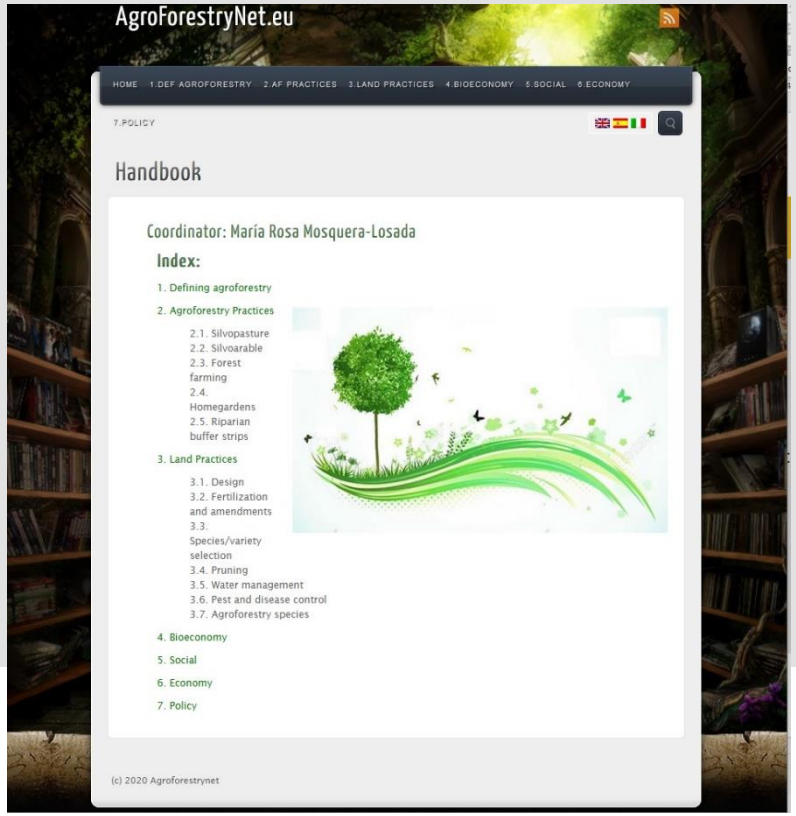
Task title	Description

1. 110 Practice abstracts
2. 33 Infographics
3. 33 Factsheets
4. 33 Technical articles
5. 26 Innovation tutorials
6. 12 Policy briefs

EU FARMBOOK

Contextualized
AF content modules

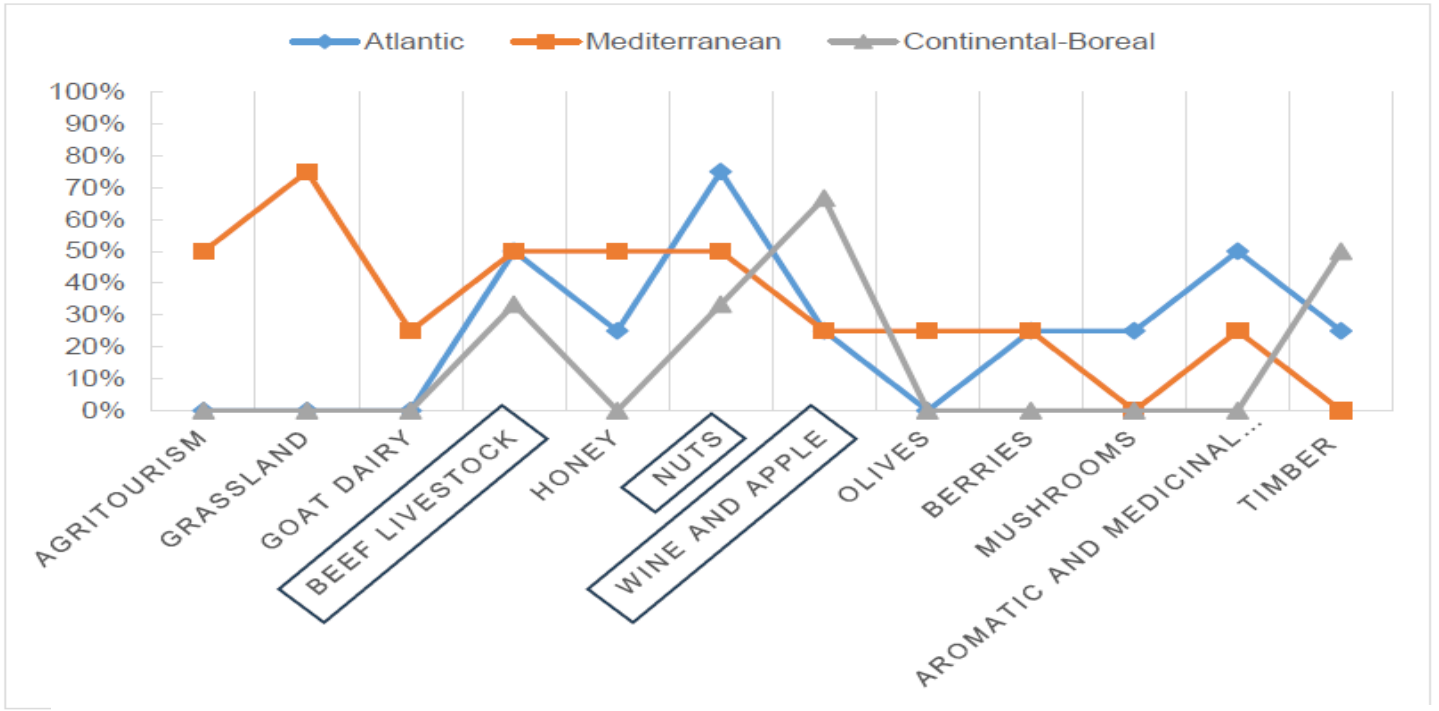


Under Grant Agreement 101086563

Advances in temperate agroforestry, Francis Dodds, 2025

Results: Farms Selection

-Agroforestry Farms and Value Chains



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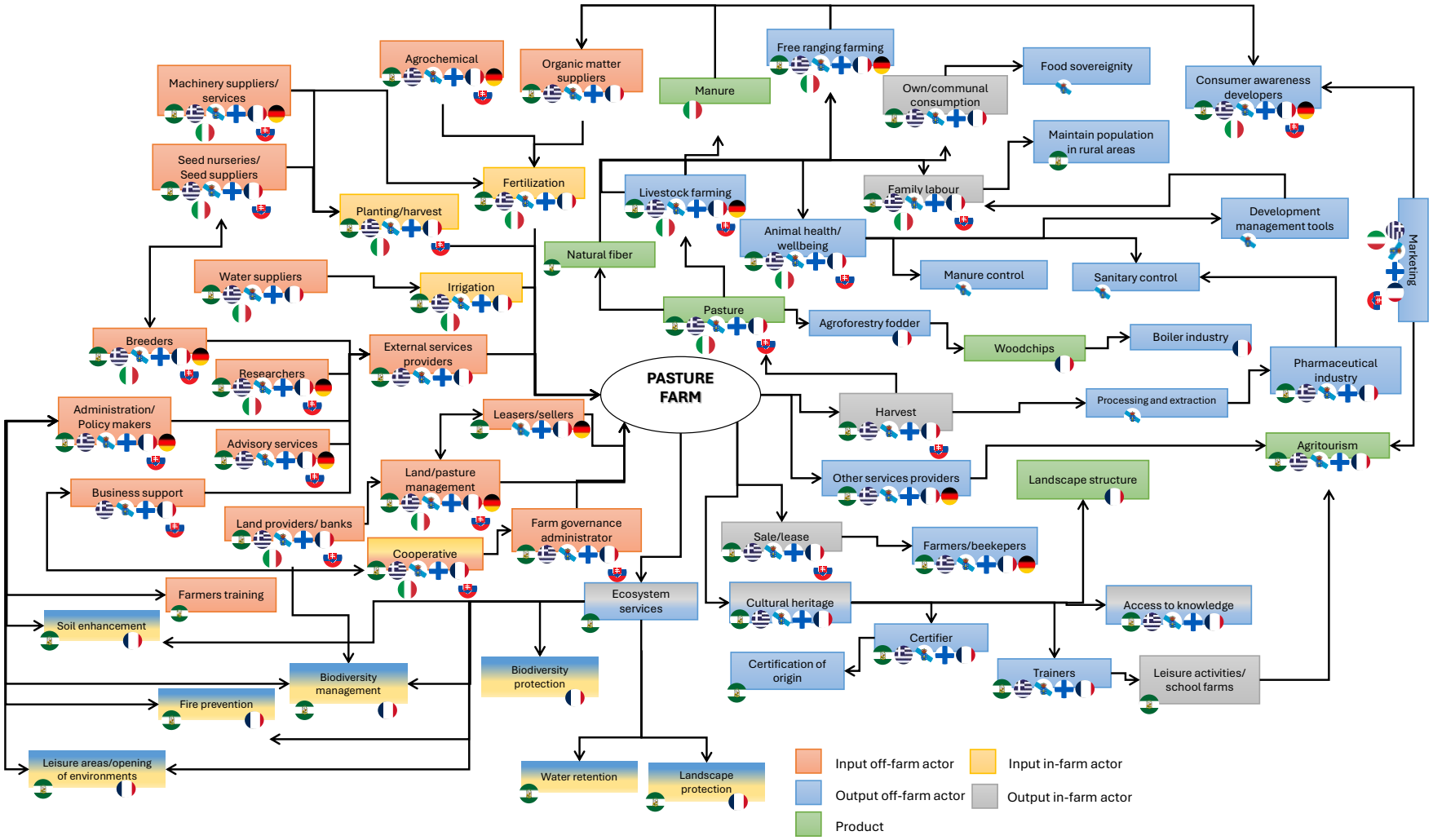

Business Plan & Business Models:

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POLICY MAKERS/FARMERS

Strategic Business Plan

- Production Plan
- Marketing Plan
- Organization Plan
- Financial Plan
- Strategic Plan

FARMERS

Local Business Model Canvas

BMC

- Key partners
- Key activities
- Key resources
- Value propositions
- Customer relationships
- Channels
- Customer segments
- Cost structure
- Revenue streams

DST: LONG TERM AND SHORT TERM STRATEGIES

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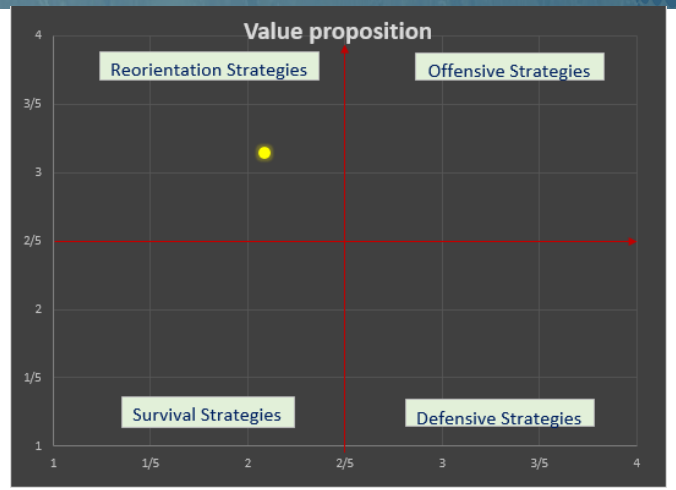
Results for each module

Value proposition	Farmer's score from 1st questionnaire
strengths	
As part of my marketing strategy, I actively communicate my agroforestry practices and take advantage of my pioneer position. **S1**	1
My agroforestry activities improve the animal welfare on my farm. **S2**	1
I produce sustainable and eco-friendly products on my farm. **S3**	1
I'm open to develop new products or services through agroforestry. **S4**	1
Weaknesses	
I do not explicitly inform buyers that a product was produced as part of an agroforestry system. **W1**	1
Consumers cannot differentiate my product from products that were not produced on agroforestry farms. **W2**	1
I do not engage in any processing activities of the primary product. **W3**	1
I lack understanding of pricing and marketing strategies for agroforestry products (e.g. wood products, fruit or nuts). **W4**	1
Opportunities	
I would participate in a certification scheme for agroforestry products if it existed.**O1**	1
Increased public awareness of agroforestry creates incentives for consumers to pa premium prices for agroforestry products. **O2**	1
Threats	
I receive insufficient income from my agroforestry system, because there is a low willingness of consumers to pay extra for agroforesty products. **T1**	1
End-consumers are unaware of agroforestry's positive impact on the environment.	1



SWOT RATING				
Strongy Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

The strategic poistion with regard to the farm will be indicated by a yellow point in the strategy frame

https://platform.af4eu.eu/strategic-plan

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Services to support the development of the Global FRA Study on Agroforestry Monitoring

USC-FAO

- **Centre of America**
- **West Africa**
- **Asia**

Opportunities to get involved

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- We plan now to expand the work across the world and foster the collaboration with the FAO as an agreement was signed to monitor Agroforestry across the EU, we are developing the analysis in Centre of America, West Africa and Asiz.

- Everyone is more than welcome