



Carbon Farming CE

CARBON FARMING BUSINESS MODEL APPROACH GUIDE

DELIVERABLE D.2.1.1



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CONTENT

1. INTRODUCTION AND SCOPE OF THE TASK	. 2
2.APPROACH FOR IDENTIFYING AND DEVELOPING CARBON FARMING COOPERATION MODEL	, 3
2.1 IDENTIFYING POTENTIAL METHODS RELATED TO SETTING-UP CARBON FARMING COOPERATION MODEL	
2.2 IDENTIFYING COOPERATION MODEL	, 3
3. START-UP & FINAL REPORT TO IDENTIFY, DEVELOP AND TEST PILOT CARBON FARMING COOPERATION MODEL IN PARTNER REGIONS	
3.1 METHODOLOGY FOR PREPARATION OF DELIVERABLE	. 6
3.2 TEMPLATE FOR START-UP REPORT FOR PILOT COOPERATION MODEL IN PARTNER REGIONS	. 7
3.3 TEMPLATE FOR FINAL REPORT FOR PILOT TESTED COOPERATION MODEL	2
IN PARTNER REGIONS	2
4 REFERENCES	4







1. INTRODUCTION AND SCOPE OF THE TASK

Deliverable D.2.1.1 Carbon farming business model approach guide is related to work package 2, which is focused on testing carbon farming cooperation model in 9 Central European countries. The testing of cooperation model will be used for the development of transnational carbon farming business model procedures and to upscale the business model approach.

With identification, development and testing different types of cooperation model, the project would like to reach farmers, SMEs, NGOs, public institutions (schools, health, environment...), decision makers and agriculture support institutions. The ultimate goal for involving these target groups, is to influence on behaviour of stakeholders and to apply carbon farming cooperation model for carbon sequestration.

An increase in adaptation of carbon sequestration techniques in land management can help to reverse:

- can help to reverse soil degradation biodiversity
- is crucial for food security and
- climate change mitigation.

At the moment the effectiveness of carbon sequestration, to improve soil fertility, water retention and mitigate climate change, is mostly demonstrated in scientific papers, but rather limited in practice. The next step to enable further transition would be by upscaling and demonstrating.

Developing and testing carbon farming cooperation model can be used as an example and source of inspiration for similar future initiatives. The dissemination of these examples to the different economic actors, authorities and consumers will increase their awareness of the potential of carbon farming once incorporated in the agrifood production process.







2.APPROACH FOR IDENTIFYING AND DEVELOPING CARBON FARMING COOPERATION MODEL

2.1 IDENTIFYING POTENTIAL METHODS RELATED TO SETTING-UP CARBON FARMING COOPERATION MODEL

Through identifying, developing and testing carbon farming cooperation model, different methods can be addressed and achieved. Some examples below:

- Setting-up a market for crops that are beneficial for soil quality and carbon sequestration (CS) techniques
- Raising awareness of consumers related to sustainable food production towards consumers to create an added value of the produced products
- Government incentives for farmers based on actual reduced amount of carbon emissions due to adjusted practices
- Developing a compensation system with carbon credits that can be traded among stakeholders
- Tax incentives provided to farmers due to practising sustainable land management
- Processing food companies within agri-food chain. paying higher prices to farmers who are producing in a sustainable way
- Carbon farming tools and methods as part of farm advisory service.

2.2 IDENTIFYING COOPERATION MODEL

Taking into consideration a potential set of methods and based on the "INITIATOR ROLE", the following types business model can be formed:

1. FARMER LED cooperation model (Carbon farmers-consumers)

Concept of the cooperation:

Farmers are key initiators of this type of model, using the carbon storage techniques to make their products more sustainable. In most cases, farmers focus directly on consumers, explaining and communicating to consumers about used sustainable farming techniques (for example ways to increase carbon storage in their soils). Using the "awareness approach", farmers expect that environmentally responsible customers will be willing to pay more for sustainable products.







2.Cooperation model WITHIN the AGRI-FOOD CHAIN (farmers-food industry)

Concept of the cooperation:

In this type of cooperation, the agrifood sector companies are initiators of the cooperation with the purpose to make their business more sustainable. To achieve their sustainable goals, they set-up business cooperations with low-carbon farmers. Companies use their products marketing campaigns to explain to their customers how they are contributing to climate mitigation in the agrifood sector and at the same time increase awareness among consumers about more sustainable food production. The added value to their products then partly flows to the farmers receiving a higher price for their products or receiving a direct payment for their additional efforts.

<u>3.Cooperation model OUTSIDE the AGRI-FOOD CHAIN (farmers and other industries & companies, organizations).</u>

Concept of the cooperation:

These cooperations can connect carbon farmers with several other industries and sectors, for example:

- Cooperation between carbon farmers and environmentally responsible non-food companies (event sector, green tourism sector,...);
- Cooperation between public sector and carbon farmers upon green procurement public sectors purchasing locally produced carbon neutral food;
- Cooperation between civic society and carbon farmers to contribute to societal environmental goals and to build a common carbon neutral future.

More and more companies and organisations focus on including climate and sustainability goals in their business models. Many are already increasing their efforts in terms of sustainability, but sometimes it is impossible for them to become climate neutral due to inevitable emissions. Some of the companies are looking for alternatives to compensate for these emissions. Known practices include planting trees or investing in more sustainable energy production/use. However, there are also opportunities on a local scale within cooperation of the agrifood sector.

4.Government led cooperation: (government-low carbon farming)

Concept of the cooperation:

Climate mitigation and environmental goals are high on the agenda of national and regional governments. Also, many municipalities and cities are developing climate action plans to compensate for their emissions.







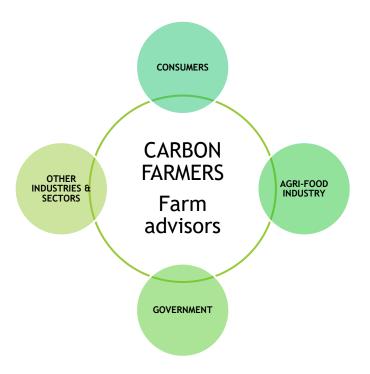
Carbon farming techniques are often actively promoted by government institutions. National and local governments can support the carbon farming practices in two ways:

- Governments can pay farmers directly for the ecosystem services they are providing as a result of their sustainable farming techniques or develop tax incentives supporting sustainable agriculture.
- Governments can introduce carbon credit trading to support the efforts of farmers to store carbon. That way farmers can gain carbon credits, which they can sell to companies, organisations looking for alternative ways to compensate their carbon emissions.

5) Project led cooperation (Knowledge transfer oriented)

There are many examples worldwide, when various partners join to implement a targeted "climate-project", which aim to establish a climate protection / carbon farming scheme with the goal of sustainable operation after the development phase as well. They usually support local communities with sustainable development benefits as well, like providing safe drinking water, protecting forests, improving health or creating local jobs etc. At the EU level, examples include the ones under the H2020 (ClimateSmartDemo, ClimateSmartAdvisor, etc), with the background of various AKIS actors - research, advisory services, academia - who lead the process of project development. There are also many other projects which are based on the financial model of carbon credits.

Overview of cooperation model between carbon farmers and other stakeholders:









3. START-UP & FINAL REPORT TO IDENTIFY, DEVELOP AND TEST PILOT CARBON FARMING COOPERATION MODEL IN PARTNER REGIONS

3.1 METHODOLOGY FOR PREPARATION OF DELIVERABLE

Deliverable will be coordinated by PP2 Institute for sustainable solutions. Project partners will provide requested data upon identified, set-up and monitored 1(one) PILOT cooperation model in their region.

For each identified and monitored cooperation model in partner region, partner will gather data requested in the two provided REPORT TEMPLATES.

For monitoring cooperation model development and testing, two templates were prepared:

- Template for START-UP REPORT for pilot cooperation model in partner regions
- Template for FINAL REPORT for pilot tested cooperation model in partner regions.

Time schedule:

TASK	TIMELINE
PP2 ISD provides DELIVERBALE templates for start- up and final report	
PP provide their data and information for START-UP business model report	
PP provide their data and information for FINAL business model report	







3.2 TEMPLATE FOR START-UP REPORT FOR PILOT COOPERATION MODEL IN PARTNER REGIONS

TITLE/ NAME OF THE COOPERATION MODEL:
Issues addressed within identified cooperation model and concept of solution (4-5 sentences):
Type of cooperation model (Choose one type of model)
☐ Farmer led cooperation model
☐ Cooperation model WITHIN the AGRI-FOOD CHAIN
☐ Cooperation model OUTSIDE the AGRI-FOOD CHAIN
☐ Government led cooperation
☐ Project led cooperation (Knowledge transfer oriented)
<u>'</u>
Short presentation of key partners/actors involved (provide short business scope of each partner, 4-5 sentence
per partner)







Expected goals of each partner/actor (each actor defines at least one goal)	
Planned cooperation activities to set-up, develop and test the cooperation model	
Planned set-up activities:	
Activities to develop the cooperation:	
Activities to test the cooperation:	
receives to test the cooperation.	







esentation of the method of monitoring and evaluation of cooperation model						







dentified pot e mitigated)	tential risks re	elated to mode	el developme	nt and testing	g (describe pot	ential risks an	d how they ca
· ······g-··-· ,							
xpected env	rironmental, e	conomic and s	ocial impacts	(status quo, c	hange due to p	partnership)	

COOPERATION IS CENTRAL







Planned carbon farming techniques, which will be practiced and tested						







3.3 TEMPLATE FOR FINAL REPORT FOR PILOT TESTED COOPERATION MODEL IN PARTNER REGIONS

Summary of interests for setting-up and testing the model (5-6 sentences)	
Summary description of involved partners and how the partnership was developed and t sentences)	ested (10-15
Sentences)	
Summary of lessons learnt (Cons/Barriers and benefits of the model)	
Cons/Barriers of cooperation	
Benefits of cooperation	







Summary of Carbon farming practices used and tested			
<u> </u>			
Comments of anyironmental accommis and social impacts			
Summary of environmental, economic and social impacts			
Assessment of potentials for tested model sustainability and transferability (characteristics to become good practice and could be transferable to other business)	has the	cooperation	the







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