Deliverable C4/1
Proposal for Private and public sector cooperation (PPC) model

Third Steering Group Meeting
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Association Baltic Coasts

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EU LIFE Programme project
"Demonstration of climate change mitigation potential of nutrients rich organic soils in Baltic States and Finland"

PPC model aim and target 1/2

Aim

Develop a support model for the **assessment of the costs and impact** on GHG emissions and CO2 sequestration, of the climate change mitigation measures implemented under the LIFE OrgBalt project.

The model is meant as a microeconomic model, to be used at farm level as business planning tool. At the same time it will also generate optimal public funding amount.

The main goal is to **provide a tool to landowners / managers to work with their specific plot of land**, understand how much the implementation of the chosen measure will cost, what the required loan amount is, and what will be their return on investment and necessary amount of public investments.

Data

The model will **be applied for all partner countries**

PPC model aim and target 2/2

Needs analysis

- **Lack of traditional investment** and **high risk** for private owners
- Stakeholders will not be encouraged to adopt CCM practices if the proposed **trade-offs** have a negative impact on farm or forest productivity
- **Private-public partnership financial initiatives** will encourage farmers and forest owners to implement measures that have high initial implementation or maintenance costs

Primary target audience:

- landowners / managers, rural support services, farmers' and foresters' associations

PPC model guiding principles

Model guiding principles:

The model is designed to allow the user to assess the performance of organic soils depending on the planned land use type (scenario), based on land use performance criteria:

- **Financial return** of organic soil use scenarios from the implementation of climate change mitigation measures;
- **Economic returns** of organic soil use scenarios (based on GHG emission reductions and other factors such as employment);
- **Financial deficit** and the **optimal amount of public funding** for land use scenarios that give a positive economic return, but the implementation of which is not economically profitable for businesses;
- **Reduction of GHG emissions**, incl. CO2 sequestration indicators.

PPC model methodology and format

Methodology

The model calculates the benefits of land use scenarios for the following six different periods: 5 years, 10 years, 25 years, 50 years, 100 years, 200 years, according to a defined set of indicators.

The model can be flexibly implemented in all partner countries by changing data entry parameters.

Format

The PPC model is developed using MS Excel (with a user-friendly interface)

The PPC model in practice

Users will be able to choose the type of land (e.g. agricultural land, forest land) and then will be asked to enter a series of relevant data. The model will return economic and financial data to evaluate the return on investment and the potential GHG reduction of the selected scenario.

Implemented tasks 1/2

- Conducted analysis:
  - Existing methodologies and data
  - Constrains that could discourage stakeholders from adopting climate change mitigation practices
  - Identification of tangible benefits and improvement in productivity that the adoption of CCM practices could bring

- Identification and definition of the data to be included in the model:
  - **Parameters** to be assessed for each land plot (agricultural land and forest land)
  - **Investment costs** needed to prepare the rural land use activities planned
  - **Maintenance and production costs** that are relevant to the scenarios related to economic activities (eg forestry, berry growing)
  - **Expected financial and economic benefits** - determining both potential productivity, revenue and GHG emission reductions.
  - **Potentially available and received support** for the existing type of land management (area payments, subsidies)
  - Other socio-economic and / or environmental benefits (employment, etc.)

Implemented tasks 2/2

- **Meetings –** several internal meetings took place as well as meeting with partners to discuss the model development and possible overlap risks between activity C4 and activity C5.
- **January 2021** - the structure of the **private-public partnership cooperation model** has been **applied** to a first land management scenario:
  - Rewetting and cultivation of fruit trees and berries, including blueberries and cranberries

The inclusion of this first data is important in the initial phase of the project implementation to **evaluate how to improve and adapt** the model structure.

This will allow a smooth and correct **integration of data and climate scenarios** during the whole project.

Tasks to be implemented 1/2

- **March 2021** - the structure of the **private-public partnership cooperation model** will be completed and two further land management scenarios will be included:
  - Retaining of low groundwater level and management of an area as pastures or grasslands
  - Rewetting to initially high groundwater level and management as pastures or grassland

The model principles and methodology will be described in guidelines to instruct administrators on how to include data for the remaining scenario once available. Guidelines will be developed for final users.

The analysis will include proposals on potential existing support from the Rural Development Program to finance the identified mitigation measures.

Tasks to be implemented 2/2

The **remaining scenarios** (14) will be added before the end of the project when data on GHG emissions will be available.

- Meetings with partners will continue for data allignment and to train administrators on how to use the model and update / complete its database.

- **July 2021** - public communication with the main stakeholder groups to present and demonstrate the model.

Thank you!

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