

# Carbon Farming Project

Fostering Knowledge Co-production for Sustainability Transformations

## Overview

[Mistra Environmental Communication](#) is a 4-year (2020-2023) research programme that aims to reframe environmental communication by mainstreaming an advanced and inclusive understanding of environmental communication in research, policy, and practice. The aim of work package 3 (WP3) is to examine the capability of environmental communication in embracing diverse ways of knowing through knowledge co-production to support the co-design of pathways to sustainable futures in the face of wicked sustainability challenges. Carbon farming is one of the focus areas in WP3.

Knowledge co-production is increasingly recognised as a more legitimate means to support sustainability transitions under conditions characterised by complexity, uncertainty, and urgency. Following this approach, the scientific peer group is diversified to include a rich diversity of perspectives, values, and interests from multiple stakeholders from different sectors, as well as actors from different societal intersections, to support creative, inclusive, and meaningful collaborations. This type of transdisciplinary, collaborative and often risk-taking research is at the core of a much wider and longstanding debate about how new knowledge, scholarship, ideas, and practices should and could be produced today. This debate includes questions about how new ideas can be nurtured and who has the expertise and knowledge to make changes.



## Background

In Sweden, there is a growing recognition that carbon farming can play a crucial role in reducing greenhouse gas emissions and reaching negative emissions. Presently, no public or formal carbon farming framework exists to provide adequate incentives for farmers to change from conventional to climate-smart practices. It is likely that a formal policy framework for carbon farming will take a long time to establish. However, a window of opportunity exists for other actors (e.g. businesses, NGOs, etc.) to create a voluntary scheme or platform (such as [Svensk Kolinlagring](#)) that provides the support and incentives for farmers to adopt carbon farming practices as well as access to a network with organisations both in and outside the agri-food chain (e.g. in the form of climate compensation). In order to support action needed for equitable transformations, such schemes need to be designed and implemented in a way that attends to multiple benefits, such as biodiversity, food and water security, and rural development, instead of a single objective (carbon sequestration).

## Aims

Our aim is to support the development of systemic practices and legitimate monitoring and verification approaches that guide the design and implementation of carbon farming in complex, urgent and uncertain situations. This will be done through iterative cycles of learning and reflection on the feasibility of action-based and result-based certification schemes to meet the demands across multiple scales within a *community of practice* on carbon farming.

Knowledge co-production processes facilitated through exploratory methods, such as serious game co-design and storytelling will be used to support the establishment of the community of practice. These methods aim to create a safe and inclusive space for collaborative learning, communication and change processes.

The following theoretical lenses will be used to examine to what extent the community of practice enables systemic cognisance and action, including *equity* (whose knowledge counts), *systems thinking* (what elements count in the big picture), and *anticipation* (what visions of the future guide practice).



## Impact, outcomes and outputs

Impact	Outcomes	Outputs
Impact on knowledge, understanding and attitude (conceptual impact)	A broader and more systemic understanding of carbon farming	Blog posts Popular science articles
	A renewed and nuanced understanding of science, data and evidence	Conference presentations Seminars
Impact on policy change and practice change (instrumental impact)	The research will inform the development of the Swedish agriculture and climate policy	Policy dialogues/ learning workshops Policy briefs
	The research will inform the development and scaling of the Svensk Kolinlagring platform	Partner dialogues White papers
Impact on enhanced capacity to enact changes (capacity development)	Enhanced anticipatory and systemic competences in addressing sustainability issues	Serious gaming workshops
Impact on strengthening existing networks and building new networks (enduring connectivity)	Existing collaboration will be strengthened, and new connections will be forged	Partner dialogues Serious gaming workshops

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Project Partners

