Department for Environment Food and Rural Affairs

NATURAL ENVIRONMENT INVESTMENT READINESS FUND

Environment Agency

NATURAL ENGLAND

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This is one of a suite of case studies of NEIRF funded projects, to highlight efforts to protect and enhance the natural environment, while generating revenue from ecosystem services.

Yorkshire Dales

SOIL ASSOCIATION: AGROFORESTRY CARBON CODE

HIGH LEVEL SUMMARY OF PROJECT

GOVERNANCE

Agroforestry Carbon Code (ACC) secretariat

EXPLORING A POSSIBLE FRAMEWORK FOR AN AGROFORESTRY CARBON CODE

Conducting a feasibility assessment for a voluntary certification standard to verify carbon units produced by agroforestry in the UK (i.e. by trees and forests within farmed landscapes)

SELLERS

Farmers and landowners

BUYERS

Carbon units could be inset into farmer/landowner supply chains or sold to organisations that want to offset their carbon emissions, such as private businesses

Habitat and geographical location

Farmland

Six pilot sites in England across Nottinghamshire, Yorkshire, Essex, Devon and Somerset (and two others in Scotland)

SOIL ASSOCIATION: AGROFORESTRY CARBON CODE

PROJECT OVERVIEW

Trees deliver many environmental benefits, such as helping to mitigate climate change through the sequestration and storage of carbon.

The carbon storage of trees can also deliver financial benefits to landowners and farmers, for example through the sale of carbon units on ecosystem service markets, or by insetting them into the farmers' supply chains to meet their climate targets. When this forestry is combined with crop or pastureland, it is known as 'agroforestry'.

The verification of carbon units produced by forestry is done through rigorous voluntary certification standards in the form of codes which help to reassure buyers and other external bodies that the units are real, verifiable and permanent.

While the Woodland Carbon Code (WCC) offers a way to verify the carbon sequestered by some woodland-based agroforestry systems such as certain shelterbelts or riparian buffers, in-field agroforestry (i.e. silvoarable and silvopastoral systems) are currently excluded from the WCC.

Therefore, to explore the potential for verifying carbon sequestered by in-field trees i.e. agroforestry carbon units, the Soil Association, with support from the Woodland Trust, Scotland's Rural College, Finance Earth, Scottish Forestry and the Organic Research Centre, worked with six pilot sites across England (and two in Scotland) to explore the viability of an Agroforestry Carbon Code (ACC).

The project used the NEIRF funding to:

- Conduct a comparative analysis of other codes to develop an initial view of the requirements for a potential agroforestry carbon code (ACC) and to identify which parts of other codes, or the tools they use, the ACC could apply.
- Develop a draft methodology for carbon measurement for in-field trees, using tree growth and allometric modelling to predict carbon sequestration. This methodology then informed data collection from pilot sites.
- Assess the financial feasibility of the approach i.e. of in-field tree carbon sequestration modelling of and carbon unit verification using an ACC. For each of the 5 pilot sites in England, the project gathered detailed information around projected or actual costs, management and cashflow projections, and farm-level information (e.g. of any other projects on-farm that might sequester and store carbon) to understand overall investment potential.
- Develop a set of potential requirements for agroforestry carbon projects to ensure high integrity in an ACC code (for example developing options for a possible durability requirement for carbon, based around a minimum 30-year commitment).
- Assess the demand for a code by exploring the attitudes of pilot sites' farmers or land managers towards carbon finance and towards the proposed high integrity requirements.


North Devon

CONCLUSIONS

At the conclusion of the project's NEIRF investigations, evidence pointed to limited commercial viability for standalone carbon trading of agroforestry systems due to the cost effectiveness of the administration involved for individual projects wishing to transact agroforestry carbon. This pointed to a need to assess a means for greater efficiency for individual project transactions, and the potential for further exploration of aggregated or whole-farm approaches to agroforestry carbon unit verification and trading.

The possible next steps to take forward the project's work include:

- Considering how the project's high integrity project requirements might apply to the development of other carbon codes.
- Examining the scope for other codes (such as the Woodland Carbon Code) to verify carbon units from agroforestry projects using the methodology developed by the project. This may be complex due to differences in the way that woodland and agriculture/agroforestry are regulated, and specific ways that woodland carbon unit permanence is protected.
- Considering whether carbon sequestration by in-field trees could be inset to help farms to achieve net zero status, and whether this could then support the sale of higher-priced net zero farm produce.
- Considering the potential for aggregated agroforestry carbon projects, for example the viability of landscape-scale or farming cluster approaches, or of a whole-farm approach whereby in-field trees could be just one of a portfolio of a farm's carbon opportunities.

WOULD YOU LIKE TO KNOW MORE?

If you would like to learn more about the Agroforestry Carbon Code project, please visit the Soil Association's website here where you can find the project's reports. For questions regarding NEIRF, please contact **NEIRF@environment-agency.gov.uk**.

This case study was produced by Ecorys.