Outputs

All written outputs will be placed on the project web page. These will include surveys and papers on:

- implications of the CBD for agriculture in all EU Member States:
- Kyoto Protocol commitments for the EU and potential agricultural implications;
- GHG reduction policies and agriculture measures in Member States;
- GHG mitigation options, potential, abatement costs and the technical feasibility of mitigation options and production chains;
- carbon sequestration profiles of alternative forestry measures and bioenergy options;
- impacts of the Kyoto Protocol on forestry in the EU;
- recommendations for appropriate measures in the forestry, agriculture and bioenergy sectors, their integration into the CAP and interaction with the CBD; and
- a cost-benefit analysis of technical GHG mitigation options in agricultural production and bioenergy production chains.

A final report will be drafted and discussed with stakeholders at a meeting in Brussels in autumn 2006. On the basis of this consultation a final set of policy recommendations will be developed.

Project Consortium

The project is being led by the Institute for European Environmental Policy (www.ieep.org.uk) in co-operation with the German Federal Agricultural Research Centre (www.fal.de), German Institute for Energy and Environment (www.ie-leipzig.de), Alterra in the Netherlands (www.alterra.wur.nl), Czech Institute of Forest Ecosystem Research (www.ifer.cz), Italian Fondazione Eni Enrico Mattei (www.feem.it), European Forest Institute (www.efi.fi) and Humboldt University of Berlin (www.hu-berlin.de), with input from the Scottish Agricultural College (www.sac.ac.uk).









April 2004 - March 2007

Specific Targeted Research Project

on 'sustainable management of Europe's natural resources: modernisation and sustainability of agriculture and forestry.'



Sixth Framework Programme (2002-2006)

The MEACAP project

MEACAP is a three-year research project (2004-2007) looking at a potentially crucial issue for agricultural policy in Europe.

How can two of the most important international environmental agreements which the EU has ratified be adequately reflected in the Common Agricultural Policy (CAP)?

Nine research institutions are involved in identifying the best means of meeting commitments under the Kyoto Protocol and the Convention on Biological Diversity in the agriculture and forestry sector. Through a process of screening, technical and policy measures, the project will progress towards a strategy for making necessary adjustments to the CAP. There is a multidisciplinary approach, with specialists from agricultural, environmental and forestry institutes working together in a range of countries. The primary source of funding is the European Commission within the Sixth Framework Programme for Research.

Project Background

Climate change and loss of biodiversity are increasingly recognised as priority environmental concerns. In response, the European Community (EC) and all individual Member States have signed binding international environmental commitments such as the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol and the United Nations Convention on Biological Diversity (CBD). The EC has taken a leading role in promoting these agreements in the international community. Meeting them will require significant changes in many areas of human activity, including agriculture.

Agriculture is amongst the economic sectors that contribute most to climate change and declines in biodiversity, although some relatively cost effective means of addressing problems and delivering solutions appear available. Many modern agricultural practices, such as the autumn sowing of cereals in monocultures, frequent applications of artificial fertilisers and pesticides, intensive rearing of livestock and large scale irrigation have significant negative impacts on Europe's natural resources. Such practices have resulted in declines in wildlife species, loss of habitats and declines in the genetic diversity of agricultural plants and animals. Some practices are implicated in climate change because they result in the emission of greenhouse gases. It is possible, however, to adapt agricultural practices to reduce these negative impacts and, in many instances, to deliver positive benefits for the environment. Agricultural land can act as a sink for greenhouse gases or be used to produce biofuels in place of fossil fuels, for example. Conserving farm habitats and adopting rotations including spring sown cereals can lead to increases in farmland biodiversity.



Overall Objectives

In order to comply with global environmental agreements major changes will be required in EU farming policies and practices over the next decade and beyond. The project will contribute to this by assessing current policies, identifying the most desirable changes in agricultural practice and identifying policy measures needed to deliver changes in practice. Development of the CAP, both in terms of the First Pillar direct payments and the Second Pillar rural development measures will be considered.

agreements and EU policy.

Detailed objectives

Clarify how agriculture could contribute to meeting Kyoto Protocol and CBD obligations relative to other land uses and sectors of the economy, especially forestry.

Analyse appropriate agricultural measures, changes focusing on efficiency, effectiveness, compatibility with other objectives and constraints. Consider afforestation and forest management issues alongside agricultural adaptations and review interactions between CBD and Kyoto Protocol driven measures.

Assess how far changes at farm level and upwards require alterations in national or EU agriculture or rural development policy, as well as environmental, forestry and other policies.

Complete and disseminate an integrated strategy for implementation of the two agreements in the EU agricultural sector, including concrete policy recommendations applicable at a European level.





While some specific policies concerned with biodiversity have already been introduced into the CAP, for example agrienvironment measures, relatively little attention has been paid to climate change issues. This project is an opportunity to consider the two priorities together and redress the balance. It aims to contribute to research on the interaction between international