



Integrated Management Options for Agricultural Climate Change miTigation

For project ENV.B.1/ETU/2009/0052: The climate change mitigation potential of an EU farm: towards a farm-based integrated assessment

The *IMPACCT* Software

The *IMPACCT* software has been developed as part of an EC funded, Europe wide, research and development programme, and provides both farmers and policy makers across the community with a valuable new prototype tool.

The importance of agriculture in mitigating climate change both by reducing emissions of greenhouse gasses, and increasing carbon sequestration, has been increasingly recognised in recent years. Yet it is often difficult for farmers on the ground to evaluate their options, and initiate actions that will have the desired environmental impact, without affecting their ability to operate effectively as a business.



The two *IMPACCT* tools are based on the philosophy that the same science and underlying data should be used by all stakeholders in the industry, ensuring that everyone is 'singing from the same hymn sheet'. The *IMPACCT* team have striven to ensure the credibility of the emission and sequestration assessments made, drawing on the considerable skills of an international team of researchers from across Europe.

IMPACCT Farm Tool

As far as agricultural practitioners are concerned, the focus has been on providing the concepts and tools required to facilitate effective decision making on the farm. The *IMPACCT* system allows users to define the specific characteristics of their business and calculate a bespoke emissions and sequestration profile for it. However, the *IMPACCT* team are firm believers in the need to provide solutions rather than just identify problems, and have been at the forefront of knowledge transfer in the sector for many years. Consequently, *IMPACCT* identifies suitable (based on the farm profile data provided) options for reducing greenhouse gas emissions and/or increasing carbon sequestration, and allows the user to determine the impact of implementing those changes.

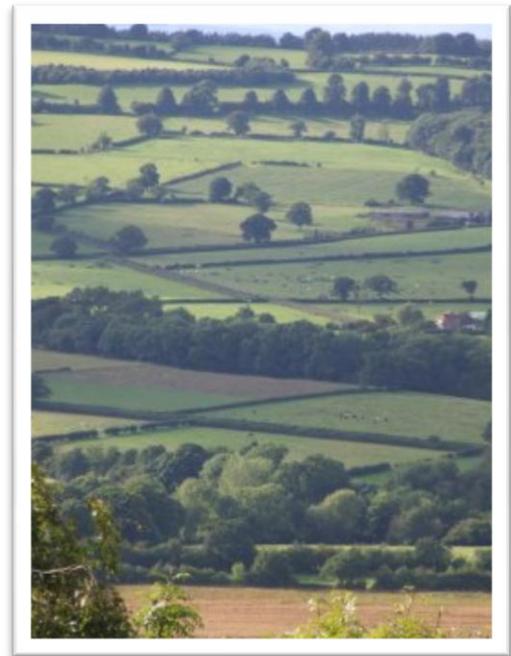
Unlike many other carbon calculators available to the agricultural industry, *IMPACCT* also takes into account other environmental issues. It recognises that farming is intrinsically linked to the

environment, and that as such a holistic approach is vital if 'impact trading' is to be avoided. Therefore, the potential for impact in other areas (positive or negative) is flagged. Economic aspects too, are of vital importance to all farming businesses, particularly in the current economic climate, so **IMPACCT** provides a general indication of the costs involved in action implementation and any potential savings that might be achieved as a result (figures will vary across Europe). The **IMPACCT** methodology therefore, ensures that farmers have the information they need to make financially sound, balanced environmental decisions, and allows them to play an active role in climate change mitigation.

IMPACCT Policy Tool

The **IMPACCT** Policy Tool allows users to assess future scenarios with respect to baseline situations, and in doing so allows local, national and international policy makers and regulators to both assess the impact of agricultural and environmental measures being introduced, and plan future policy tools for climate change mitigation.

Baseline situations can be established at a range of scales, in terms of the management practices being utilised and the relevant quantities (livestock numbers, etc.). These factors can then be adjusted to define any number of future policy scenarios. The **IMPACCT** software can then calculate the change in emissions between the baseline and future situations. Other environmental impacts are also taken into account and economic data displayed in the results, allowing the early identification of potential barriers to the adoption of identified policies and practices.



The **IMPACCT** software is a valuable new tool for European governments, regulators and other policy developers. As such it has the potential to ensure that the European drive for climate change mitigation measures is not achieved at the expense of either other environmental problems or the financial viability of the sector.

Access the **IMPACCT** Software Today

The Beta version of the **IMPACCT** software can be downloaded free of charge from the **IMPACCT** website (www.herts.ac.uk/aeru/impacct), together with installation instructions and a video demonstration. Software development is however, an ongoing process, so the team will be happy to hear from you if you have any comments or questions, as it is hoped to develop updated and extended versions in due course.

This can be done through the contacts page of the **IMPACCT** website, where you can also sign-up to receive information on future **IMPACCT** developments.