How to get C Trading to Work? (S05-gaunt164311-Oral)

Authors:

- J.L.Gaunt Rothamsted Research, Harpenden, UK
- J.M.Duxbury Cornell University, Ithaca, NY
- J.Lehmann Cornell University, Ithaca, NY
- G. Yaron GYA Associates Ltd.

• D.S.Powlson - Rothamsted Research, Harpenden, UK

Abstract:

It is estimated that realistic changes to agricultural practices could result in the sequestration of between 3 and 40 Tg C yr-1 in soils across Europe. This corresponds to 0.3%-3% of the total CO2-C emissions from European fossil fuels in 1990. Emissions in 1990 are important since they provide the benchmark for the EU's commitments in the Kyoto Protocol - 8 % reduction by 2008-2012. Such scenarios do not, however, consider whole-system efficiency in the cycling of C. We will thus consider both the potential to sequester C and to improve C efficiency. Further, we present a framework for the socio-economic analysis of the costs and benefits of C management options. An initial result from a case study in the UK suggests that the main benefit perceived by farmers relates to improved crop establishment. Feedback from the case study will be provided to participating farmers so that the way in which opportunities to internalize the external environmental costs - perhaps through carbon trading - might change their perspective on soil management. Finally, the implications - in terms of prospects for developing appropriate indicator systems for soil C status - will be outlined.

Corresponding Author Information:

John Gaunt phone: 44 1582 763133 Rothamsted Research fax: 44 1582 760981

IACR Rothamsted, West Common, e-mail: john.gaunt@bbsrc.ac.uk

Harpenden AL5 2JQ

UK

Presentation Information:

Presentation Date: Monday, November 11, 2002

Presentation Time: 3:45 pm

Keywords:C Trading, Wholes system C efficiency, Socio economics