Workshop on Environmental Burdens and Resource Use in the Production of 10 Agricultural and Horticultural Commodities

Who should come?

• Policymakers, researchers, environmentalists, farmers, producers, policy appliers, purchasers.

Why?

- Hear about the latest work analysing the burdens of producing our food by comparing alternative production systems.
- Pre-launch demonstration of the new software tool
- Question the researchers about the model
- Feed back strengths and weaknesses to the project team
- Use results from it to inform decision making
- Challenge and debate

What is covered?

- 10 commodities
- Wheat, Rape, Potatoes, Milk, Beef, Sheep meat, Pig meat, Poultry meat, Eggs & Tomatoes.
- Conventional and Organic production systems

What is included?

- Presentations on theory, background and the working model itself
- Specific break out groups for detailed evaluation of commodities and production systems
- Opportunity to feedback ideas

There is no charge, but spaces are limited.

Please reply by **1**st **May 2005** with a minimum of: Your name, E-mail &/or postal address (further information will be emailed unless you ask for it to be posted), affiliation, job title and any special dietary requirements.

Replies to: Dr Adrian Williams, Operational Research Group, Silsoe Research Institute, Wrest Park, Silsoe, BEDFORD, MK45 4HS. 01525 860000 (Ext 2290) 01525 861697 (Fax) E-mail: <u>adrian.williams@bbsrc.ac.uk</u> <u>http://www.sri.bbsrc.ac.uk/science/bmag/lca.htm</u>

The final programme will be sent out in June.



Environmental Burdens and Resource Use in the Production of Agricultural and Horticultural Commodities in Britain

Stakeholder Workshop

Featuring

Pre-Launch Demonstration of New Software

12th July 2005

Silsoe Research Institute, Bedford

Project and Workshop Sponsored by Defra





Draft Programme

- 9:30 Registration, Coffee
- 10:00 Introduction (Donal Murphy-Bökern, Defra)
- 10:10 Outline of LCA (Eric Audsley, SRI)
- 10:25 Industry perspective & data sources (Rosie Bryson, Velcourt)
- 10:40 Outline of LCA model for analysing crop and animal commodities (*Adrian Williams & Daniel Sandars*, SRI)
- 11:00 Collect coffee or tea
- 11:10 Split to smaller groups for detailed interactive demonstration of the model toolkit. **Challenge and debate** the model. Case studies will be used to analyse the ten commodities analysed. Groups will focus more on either animal or plant commodities, but there is much crossover between sectors.

Plant: Wheat, Rape, Potatoes, Tomatoes

Ruminants: Beef, Sheep meat & Milk

Non-ruminants: Pig & Poultry meats; Eggs

- 12:25 Summary of main points from groups
- 12:40 Final discussion
- 12:55 Concluding remarks
- 13:00 Lunch & informal discussions. The team and software will be available for most of the afternoon.

What is LCA all about?

Life Cycle Assessment (LCA for short) has been defined by the Society of Environmental Toxicology and Chemistry (SETAC) as a process to evaluate the environmental burdens associated with a product, process, or activity by:

- Identifying and quantifying energy and materials used and emissions released to the environment the Life Cycle Inventory.
- Assessing the impact of those energy and material uses and releases to the environment.
- Identifying and evaluating opportunities to effect environmental improvements.
- The assessment includes the entire life-cycle of a product, process, or activity, encompassing extracting and processing raw materials; manufacturing, transportation and distribution; use, re-use, maintenance; recycling, and final disposal.
- In agriculture, important resources include land use, phosphate and water as well as fossil energy. Important emissions include nutrients and greenhouse gases. Of particular significance to agriculture are the value of crop rotations, reductions in soil quality, the value of by-products and the use of manures.

The project team and main specialisms

SRI Operational Research Group: Overall project leaders with specialist knowledge of LCA and agricultural modelling
IGER: Grassland, the environment and ruminant milk & meat
Velcourt Ltd: Contemporary farm practices (mainly arable)
Elm Farm Research Centre (EFRC): Organic farming practice and science
Rothamsted Research (RRes): Arable crop science
rlconsulting: Poultry and eggs
MLC: Pigs

Hayman Horticultural Consultancy: Tomatoes









