Round Table on Organic Agriculture and Climate Change

Life Cycle Assessment (LCA) - methods, models and databases with focus on GHG emission and sequestration potential of organic farming systems and organic food

Expert Workshop & RTOACC Meeting
21 September 2010

(held back-to-back with 'VII International Conference on Life Cycle Assessment in the Agri-food Sector', 22-24 September) Università degli Studi di Bari, Palazzo Ateneo, Salone degli Affreschi, Piazza Umberto I, Bari, Italy

Expert Workshop - 21 September 2010

Background: Some of the methodological challenges in LCA methodology are specifically problematic when applying LCA to organic agriculture.

Estimating and accounting for changes in soil organic matter (soil carbon sequestration), accounting for nutrients and environmental load from imported manure and for crop rotation effects and land use to name a few.

Moreover, the sector is relatively small which gives challenges in securing representative data.

Objectives: to exchange in-depth scientific knowledge on improved Life Cycle Assessment (LCA) methods, models and databases focusing on GHG emissions and sequestration potential of organic farming systems and organic food to be used by organic sector organisations and operators for the development of certification of energy and carbon labels and for improvement of the organic sector's climate impact.

Expected Outcome:
- Agreement on common research agenda for development of LCA methodology and inventories consistent to organic farming systems.
- Substantial inputs to a comprehensive report on LCA method development and databases and LCA research agenda to close the current gaps.

Invitees: Selected LCA experts (max 20), and RTOACC members

RTOACC: The workshop is part of a series of meetings under the new FAO supported initiative "Round Table on Organic Agriculture and Climate Change" RTOACC.

Please find more on:
http://www.organicandclimate.org/about-rtoacc.html

The principal objectives of RTOACC are to:
- Initiate, support and facilitate research on organic agriculture and climate change.
- Advise the international community on organic agriculture and climate change issues,
- Develop a measurement method to enable reliable quantification and certification of carbon sequestration in organic agriculture.

Round Table on Organic Agriculture and Climate Change

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DRAFT Programme

10:00: Welcome and introduction to programme and tasks

10:15: Current status on LCA as applied to the organic food chains: results, knowledge gaps and methodological challenges – Dr. John E. Hermansen, University of Aarhus, Denmark.

10:45: Characteristics of low-input and organic farming systems in tropical countries of importance for crediting climate mitigations – speaker(TBC)

11:15: State-of-the-art concerning carbon sequestration in organic agriculture versus emission of GHG and potential for climate mitigation compensation – Report by Andreas Gattinger, FIBL (TBC)

11:45: Land use changes and manure import versus self reliance of feed and energy in organic agriculture speaker (TBC)

12:15 Comments and discussions and agreement on overall list and structure of problematic issues/sub-topics for the group discussions

13:00: Lunch

15:00: Group discussions (topics are preliminary; Discussion Leaders and – Reporters TBC)

a) Knowledge and gaps of relevance for LCA application to Organic food systems in tropical and temperate conditions –
b) Carbon sequestration and soil organic matter increase
c) Relative GHG emissions from organic agriculture systems
d) Land use and self reliance in organic systems as part of LCA

The four group discussions will focus on selected core problematic issues and will try to answer the following questions:

- What is status of knowledge
- What are comparative advantages/disadvantages of OA compared with conventional agriculture within this specific sub-topic?
- List the 3 most important methodologies and data source challenges for documenting this sub-topic of OA with LCA

17:00: Plenum
18:00: Closure