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Moving beyond the food versus fuel debate

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The food versus fuel debate (FvF) is as old issue that refuses to go away. It has been plagued with many and often trivial arguments, and ethical, moral and policy considerations rather than by a solid scientific debate. This specific session will try to move beyond this old debate and focus on the “food and fuel” argument, in light of new evidence given the many and intertwined considerations that affect biofuels. In particular this session will consider the following:

- Food Security and its wider implications for food production and biofuels
- Agricultural modernization and impacts on biofuels
- Land use changes [direct (DLUC) and indirect (iLUC)]
- Sustainability issues (environmental, social and economic)

Biomass for energy plays, and will continue to play, a major role in global energy supply. We need to improve our understanding of the wider implications and interactions. For example, the argument of undernourishment and the expansion of biofuels must be seen within the context of huge food waste, poor agricultural productivity, and lack of infrastructure, obesity, diets changes, and social injustice. As for environmental sustainability, it often overlooks the impacts of fossil fuels, failing to apply the same principle to all energy sources, with too much emphasis on GHG. In the case of social sustainability, now required for all biofuels, it deals with neither underlying fundamentals e.g. applying the same principles to food production or with wider social and policy implications. DLUC also needs to be re-visited, particularly iLUC in light of new evidence. There are many and diverse models dealing with iLUC with a wide range of solutions given the nature, dynamism, and complexity of land use changes. In the specific case of iLUC it is very difficult, almost impossible, to model such effects because of the innumerable unproven assumptions; and hence it is often a case of just mere observations. Also, modelling has focused primarily on GHG in detriment of many other factors. DLUC/iLUC suffers from a restricted and incomplete analysis which has resulted, in most cases, in a negative assessment of biofuels. A more complete assessment could show a very different outcome. iLUC in particular needs to move forward to deal with this high degree of uncertainty to attract new investment on biofuels.

Biography

Frank Rosillo Calle has done PhD in Biological Sciences and Policy, in the year 1985 from University of Aston. He has been working in the area of biomass for energy for more than 30 years. His areas of interests are: Biomass resource assessment, biomass energy (production, conversion and use, biofuels), agriculture, biofuels and food security implications. He has published about 100 research articles in the respective area. He is also the Editorial Board Member and advisor of various scientific journals. He has worked on EU funded Projects on Biomass Energy since early 1990s. He also acted as Consultant in biomass energy for over 30 years which include Rockefeller Foundation's Global Environmental Leadership Programme 1991-1992, BUN, FAO, The Beijer Institute/SEI, UNDP/CSD, Shell International, WEC, OTA of the US Congress, DTI, SOPAC-South Pacific Applied Geo-science Commission, etc. He also acted as Coordinator of a British Council/CESPES project in Brazil-Kings College London (KCL)/BUN, 1996-1999, Coordinator of British Council, KCL- Jos University, Nigeria, Higher Education Exchange, 1999-2002. He has been UK Representative of the IEA Bioenergy Task 40 from 2004 to 2012. He has taught biomass energy-related subjects to PhD and MSc level at Universities of Campinas and Manaus, Brazil, King Mongkut's University of Technology Thonburi, Bangkok, Thailand; and Basque Country (Bilbao), Oviedo and Vigo, Spain.

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