

Impact of the Food Production and Consumption on Climate Change
Claude Aubert, ENITA-Clermont, France

Abstract

It is estimated that in France agriculture is responsible for 20 to 24% of the greenhouse gas emissions, more than transport. If we add the manufacture of fertilizers and pesticides, the transport of agricultural products and food, the distribution of food, and cooking and refrigeration at home, we realize that our food is responsible for about one-third of all greenhouse gas emissions. We know that organic agriculture is able to mitigate the emissions of agriculture, mainly because it doesn't use chemical fertilizers, it dedicates more space to grass production than conventional agriculture, and it sequesters more carbon in the soil, thanks to organic fertilization and food crops, particularly legumes. Moreover, we know that livestock is responsible for 18% of all greenhouse gas emissions worldwide, and that the production of beef contributes 20 to 30 times more to global warming than the production of the same amount of proteins in the form of legumes. Therefore, our food habits, in particular the place given to meat and other animal products, have an important impact on greenhouse gas emissions. The transportation of food for thousands of miles, sometimes by plane, is another contribution to global warming that could, to a large extent, be avoided.

An International Conference on "Organic Agriculture and Global Warming" is organized on April 17–18, 2008, in Clermont-Ferrand (France) by ENITA-Clermont (Agricultural Engineers' College of Higher Education), Asafi (Association of the French members of IFOAM), and Abiodoc (national organic agriculture documentation center), in collaboration with ITAB (Technical Institute of Organic Agriculture) and INRA (National Institute of Organic Agriculture). The aims of the conference are:

to take stock on what we know about the ability of organic agriculture and changes in our food habits to mitigate greenhouse gas emissions and to adapt to climate change;

to identify the techniques to implement in order to enhance the mitigation potential of organic agriculture on climate change; and

to identify the needs for research in terms of reduction of emissions and of adaptation.

The conclusions of this conference, in which many international experts are participating, will be presented in the workshop "Agriculture and Climate Change."