



Conference on Agroecology for Sustainable Food Systems in Europe: A Transformative Agenda

Organisers	Date
Centre for Agroecology and Food Security at the Coventry University (CAFS, UK) European Network of Scientists for Social and Environmental Responsibility (ENSSER, Germany) Fondation Sciences Citoyennes (FSC, France) Groupe Interdisciplinaire de Recherche en Agroécologie du FNRS (GIRAF, Belgium) International Federation of Organic Agriculture Movements (IFOAM EU, Belgium)	26. - 27. June 2013
	Venue
	26. June 10:00 - 13:00 European Parliament (Belgium) Rue Wiertz, Brussels 26. June 14:30 -18:00 & 27. June Université Libre de Bruxelles (Belgium) Hall H, Room H2215 http://www.ulb.ac.be/campus/solbosch/plan-H.html
Scientific Partner	Contact & Registration
TP Organics (Belgium)	http://www.ensser.org/increasing-public-information/agroecology-conference/ office@ensser.org
Hosts	ENSSER AGM
Laboratoire de Lutte biologique et Ecologie spatiale Penser la Science both Université Libre de Bruxelles (Belgium)	for members and invited guests only 28 June 2013 Université Libre de Bruxelles (Belgium) Hall K, Room K.3.201 http://www.ulb.ac.be/campus/solbosch/plan-K.html

What is the problem and why a transformative agenda?

The social and environmental impacts of Europe's agriculture are increasingly harmful. Industrialised agriculture has become progressively more costly in terms of fossil fuel energy (inorganic synthetic fertilizers, pumped irrigation, and mechanical power), human and environmental health (pesticide and toxic contamination, soil erosion and salinisation, eutrophication of land and water, loss of wildlife). On a global scale, the ecological footprint of European agriculture is dis-proportionately high and increasing. Industrial agri-food systems are major contributors to environmental change - including climate change, biodiversity loss, desertification, and disruptions in the Earth's water cycle and other biogeochemical cycles. Similarly, the EU's economic policies for food and agriculture are driving farmers and rural people off the land on an unprecedented scale - both here in Europe and also in its trading partner countries on different continents (Africa, Asia, Latin America). Last, private - public sector partnerships, funding patterns, patents and other intellectual property rights all ensure that agricultural research in Europe selectively favours the production of knowledge and innovations that reflect and reinforce existing industrial model of agriculture and, thus, the interests of agri-food corporations (e.g. hybrid seeds, proprietary technologies, subsidiary system modelled in compliance with neoliberal policies).

Those deep multiple crises in Europe and elsewhere in the world have prompted many voices to call for a fundamental 'paradigm shift', a 'transition' and a 'transformation' of agro-food systems towards more equitable, sustainable pathways. Such voices include organisations such as IAASTD, SCAR (EU), UNCTAD, WBGU (Germany).

This conference will identify key elements in policies, research, and social processes required for the spread of agroecological models of production, towards a fundamental transformation of the agro-food system in Europe.

Pathways to more sustainable food systems

Our current way of providing food involves industrialized systems that are linear, centralised and globalised. In the linear approach, it is assumed that at one end of a system there is an unlimited supply of energy and raw materials (which there isn't), while at the other the environment has an infinite capacity to absorb pollution and waste (which it hasn't). The inevitable result is resource shortages on the one hand and solid waste, climate change and air pollution problems on the other.

An alternative to the current linear 'extraction' paradigm

is to develop productive systems that minimise external inputs, pollution and waste (as well as risk, dependency and costs) by adopting a circular metabolism. There are two principles here, both reflecting the natural world. The first is that natural systems are based on cycles, for example water, nitrogen and carbon. Secondly, there is very little waste in natural systems. The 'waste' from one species is food for another, or is converted into a useful form by natural processes and cycles.

Agroecological approaches are particularly relevant here. At the heart of agro-ecology is the idea that agro-ecosystems should mimic the biodiversity levels and functioning of natural ecosystems. Such agricultural mimics, like their natural models, can be productive, pest resistant, resilient and nutrient conserving. Similarly, the cyclical nature of nutrient and water flows in ecosystems provides new models for more circular economies in which nutrient loops are closed and wasteful consumption of all resources is minimised -- through designs that integrate the production of food and energy with waste and water management.

This comprehensive, ecological approach to agro-food production challenges policy makers and research to look beyond the farm. Changing models of agricultural production *per se* is not enough, especially given the emerging context of peak oil, climate change, food and water scarcities, and economic recession. The challenge for Europe is to radically transform the *entire* food system, its support infrastructure (energy, water, waste sinks, resource recycling) and socio-economic incentives.

How do we get there?

What needs to change? How do we overcome roadblocks on the way towards more sustainable agriculture and food systems? Many far-reaching changes will have to occur simultaneously and be mutually supporting to ensure a coherent approach for transformation towards sustainable and equitable agricultural and food systems in Europe. The changes required are perhaps greater than those involved in Europe's post-WWII paradigm shift for agro-food systems. Throughout the global South, agroecology has been linked with food sovereignty - 'the right of each nation to maintain and develop its own capacity to produce its basic foods respecting cultural and productive diversity'. This linkage has been extended to Europe, sometimes at a regional level. Agroecology needs societal change at three immediately related levels - agronomic practices, scientific knowledge and citizens' support networks.

Conference participants will identify policies and research priorities for transformation towards agroecologically-based food systems in Europe.

Key conference topics and questions

1. Towards sustainable models of agricultural production

The IAASTD (2008) called for significantly increased policy and research support for sustainable agriculture based on local innovations combined with the science of agroecology. Likewise 'Approaches that promise building blocks towards low-input high-output systems, integrate historical knowledge and agroecological principles that use nature's capacity and models nature's system flows, should receive the highest priority for funding', argued SCAR's 3rd Foresight Report (SCAR 2011). How can those agendas be translated into well-funded research programs in Europe? And more specifically:

- What is needed to support agroecological R&D through the participatory, transdisciplinary approaches to blend farmer and local knowledge with the sciences of dynamic complexity?
- To promote those approaches, how should Europe's agricultural science policy and the public research system be re-organised (procedures, staff skills, reward systems, public participation)?
- Are there examples from Europe in which farmers have set agroecological research priorities and actively participated in the development of new knowledge and innovations (e.g. ecological pest management, soil fertility management, agroforestry and intercropping systems, farm machinery, breeding new seed varieties, etc)? What can be learnt from such examples? How can they be scaled up and by whom?
- What are the research priorities and ways of working that will best contribute to enhancing the *in situ* conservation and use of biodiversity and other natural resources in organic & biodynamic farming, agroecology based systems, permaculture in rural and urban areas, local economies based on short food chains that link producers with local consumers?
- How - and under what policy conditions - can research in agroecology contribute to the transformation of food systems to enhance food sovereignty, equity, and socio-ecological resilience in the face of uncertainty, climate instability and rapid change?

2. Equitable rights of access to land and other natural resources

A large scale shift towards agroecology and transformed food systems requires a more equitable re-distribution of rights of access and use over resources - including land, water, forests, seeds and the means of production. For example, agroecological innovations depend on unrestricted access to a diversity of non-proprietary seeds and livestock breeds in order to develop biodiverse farming systems that are resilient to

change, including climate change. Some key conference questions here might include:

- What can be learnt from the various strategies used to access and re-distribute land throughout the world? What new alliances and actions are required to promote large-scale re-distribution of land and more equitable tenure rights over land and other natural resources in Europe?
- How can farmers' collective rights over seeds and livestock breeds be asserted and exercised both within and outside official legal frameworks regulating access and management of biodiversity important for food and agriculture?
- What are the constraints faced by policy makers when they seek to change rules and norms that currently limit or cancel the rights of peasants/farmers to produce, reproduce, and exchange seeds and livestock breeds in Europe?
- What strategies and policy innovations would allow newcomers and young people to access the land needed to farm and sustain their livelihoods?

3. A shift to re-localised food systems based on circular economy models

Agroecology's emphasis on the use of resources internal to the system, recycling, and closing nutrient loops all invite us to look 'beyond the farm' to the connections and possible synergies with the wider landscape. Circular systems that mimic natural ecosystems can be developed at different scales, from individual farm plots to entire cities, by using agroecology principles, functional biodiversity, ecological clustering of industries, recycling and re-localised production, and short distribution chains between producers and consumers. There is growing evidence that sustainability goals can be achieved by shifting from the current linear, extractive and globalised systems towards locally controlled circular systems that re-integrate and re-localise food and energy production with water and waste management.

Past and present examples of such circular systems from Europe will be presented and case studies will be discussed at the conference. Particular emphasis will be put on the extent to which such re-localised and decentralized circular systems can: i) increase food, water and energy security; ii) reduce fossil fuel use and emissions; iii) create jobs; iv) boost local incomes; v) promote more resilient and self-reliant communities in rural and urban areas; vi) enhance direct democracy and citizen-led forms of governance.

Conference participants will aim to identify other changes in policies, legislation, and research that are needed in Europe to enable a transformation towards more equitable and resilient circular systems that combine food and energy production with water and waste management in rural and urban contexts.

Reforms in the EU's Common Agricultural Policy, Rural Development Policies, and investments in public goods (e.g. infrastructure) will be of particular relevance here.

4. Rethinking economics, trade and markets for agroecology and food security/sovereignty

The existing macro-economic, trade and markets framework may offer some space for inclusion of small and medium sized producers in the global economy, thereby enhancing their incomes and livelihood opportunities. Throughout Europe, agroecological approaches have been made economically more viable by short food supply chains (*circuits courts*): consumers learn about the environmental benefits, as a basis for their willingness to pay more for food, while producers gain more of the value that they add to food and the wider environment. But such alternatives still come under competitive pressure from supermarket chains. Agroecological approaches are being fit into niches within the dominant political-economic system and so remain vulnerable and inevitably limited. Even worse, current policies for growth in food and farming are eliminating unprecedented numbers of farmers and rural livelihoods in Europe (e.g. Poland) and in developing countries (in Africa, Asia...) with which the EU is structurally linked through trade and markets for food and agriculture. Moreover, research institutes and policymakers mostly emphasise market-based solutions, whereby more 'efficient' inputs (especially from the Life Sciences) will supposedly help farmers to adapt to global competitive pressures, as the means to fulfil food and other human needs. The dominant focus on money-based markets undermines more plural forms of economic exchange (subsistence based markets, barter, solidarity economy).

As an essential way forward, then, the dominant economic model needs to be transformed to fit with and sustain agroecological approaches. New innovative economic models will entail changes away from the current unsustainable assumptions of limitless growth and linear productivity to a recognition of resource limitations/ scarcities of eroded ecosystem services.

Conference participants will discuss fundamental changes in economic concepts and policies that are needed to spread sustainable, equitable food systems based on agroecology and circular economy models. Some key questions for discussion are:

- How can theoretical debates on alternative economics (solidarity economy, de-growth) inform processes of large-scale transformation towards agroecology and sustainable food systems in rural and urban areas?
- How can the history of past and present alternative economic practices help rethink economics for agroecology and food sovereignty?

- Under what conditions can organisations (of farmers, citizens and their federations) develop forms of economic exchange that are fair and controlled by farmers and communities?
- What policies and research questions need to be addressed to develop more plural, equitable forms of economic exchange that transcend current neo-liberal thinking and practice?

5. Transforming research and science policies

Farmers who want to grow their crops and rear their animals using agroecological approaches often need very different knowledge to that currently offered by the formal agricultural research system. Both the IAASTD and the SCAR reports argue that fundamental changes in research policies and priorities are needed for a shift towards sustainable food systems. The SCAR 3rd Foresight exercise recommends that substantial financial investments be made in research to re-design and create 'radically new farming systems' that "balance the various dimensions of sustainability from the beginning. The resulting systems must, of necessity, differ in significant respects from current mainstream production systems." This will result in "different approach to farming practices and the natural environment, the use of scarce resources, food markets and the ecological systems in which the farming systems are operated." Generating transformative knowledge and knowledge transformation are key challenges here.

Conference participants will focus on how science policy and research priorities should be re-oriented and redefined for a shift towards agroecology based food systems. Key questions are:

- What deliberative and inclusive methods and processes can be used to enable food providers and consumers to define upstream strategic research priorities and decide on funding allocations for agro-food research in the natural and social sciences?
- What institutional innovations are needed to ensure that elected decision makers take into account the outcomes of citizen deliberations on agro-food research, including farmer/citizens' recommendations for national science policy, research priorities, and resource allocations?
- How and under what conditions can cooperative research and co-inquiry ensure the meaningful inclusion of farmers, food workers, and food consumers in the production and validation of agro-food knowledge?
- What are the changes in policy and practice needed to encourage new models of democratic governance and greater citizen oversight over science & technology research priorities and sustainability assessments in Europe?

IAASTD (2009) Agriculture at a Crossroads: Synthesis Report

http://www.agassessment.org/index.cfm?Page=IAASTD_Reports&ItemID=2713

SCAR (2011) Sustainable Food Consumption and Production in a Resource-Constrained World

http://ec.europa.eu/research/agriculture/conference/feg3_en.htm