



1st April 2016 – Valencia Polytechnic University

WORKSHOP 7: ENVIRONMENT, AGRO-ECOLOGY, SOIL, WATER, CLIMATE CHANGE

Translated from French by George May, Translators Without Borders (TWB)

EVALUATION

The dominant agricultural model, based on the abusive and destructive use of natural resources, leads us into a health, social, ecological, climatic, economic and cultural impasse.

In the North as in the South a regulatory arsenal limits the rights of peasants to exchange and reproduce their seeds. The privatization of seeds, the first link in the food chain, and the growing control over them by multinational companies seeking to increase their monopoly by imposing hybrid seeds and GMOs poses a threat to global sovereignty and food security.

The water crisis is global despite water's abundance. Its poor governance, that is, its grab by a few farms at the expense of others, spreads the water stress on crops across wide areas. Intensive irrigation agriculture wastes and contaminates water resources and threatens the sustainability of aquatic ecosystems.

The first challenge facing global agricultural production is to nourish humanity in quantity but also with sufficient quality. The belief that agro-ecology is not productive enough to meet the world's food needs is wrong. The productive possibilities of agro-ecology are proved in particular by studies of the potential of organic farming. The agro-ecological mode of production allows yields equivalent to those of non-ecological agriculture in the short and medium term. In the long term it is even more effective because of its reduced use of fossil fuels and non-renewable resources. The nutritive quality of foods derived from agro-ecology is clearly superior to that of food derived from conventional agriculture.

In the face of the current ecological crisis, agriculture in the 21st century must also produce sustainably. It must limit its greenhouse gas emissions and other damage to the environment while adapting to climate change. The aim is to promote agro-ecologically intensive agriculture, using the renewable resources of solar energy, atmospheric CO₂, soil (and what it contains, living organisms and organic materials / humus) intensively. Soil fertilization through agro-forestry, planting of nitrogen-fixing legumes (which are also a source of proteins for humans and animals), incorporation of green waste and animal waste, diversification and crop rotation to reduce pests and pathogens are all agro-ecological techniques that enable production to be intensified without simplifying it, while preserving the environment and the resources of a given natural environment.

Agro-ecology relies on the diversity of the natural environment to reinforce its performance and resilience, in contrast to large-scale capitalist agriculture, which is based on the simplification of the environment and interventions (monoculture, mono-breeding, etc.) to satisfy its internal imperative of short-term financial profitability. Large-scale agricultural and forestry production on a large scale, in the process of generalization, standardizes rural areas. It threatens biological and cultural diversity and, in particular, the practices honed for millennia by peasants and communities and tested in the geo-ecological and climatic conditions of each terroir.

Agro-ecology requires a larger and more complex investment of work, more like a handicraft production. The development potential of agro-ecology lies, therefore, in smaller, more numerous and diverse production units. For this reason, it can respond to the challenge of mass unemployment which is affecting our societies, and boosting the economy by relying, in particular, on valorising products through more direct delivery paths (*AMAP*¹s, local markets, etc.). But, in the face of current developments in rural development that are contrary to it, agricultural, food, trade and research-training policies are necessary to preserve, develop and generalize agro-ecology.

¹ Association pour le Maintien d'une Agriculture Paysanne (Association for the Maintenance of a Peasant Agriculture), a form of organization developed in France and in many other countries under other names (e.g. Community Supported Agriculture, CSA), that links small producers and final consumers.

PROPOSITIONS

Some of the proposals identified by the participants relate both to citizen actions and public policy measures (for the implementation of concrete practices and exchanges between producers and with the general public, for example). Others relate specifically to legislative/regulatory measures and public interventions. However, their adoption and implementation require significant citizen rights' movements, which first and foremost must be amplified. All these proposals are grouped around three objectives.

Promote the circulation of agro-ecological knowledge - invest in training

- Develop **exchanges between peasants**. They must be at the heart of the process of developing agro-ecology. [*Citizen actions and public policy measures*]
- Finance the development of vocational training in agro-ecology. Put in place a system of aid to facilitate access to these training courses, with a particular focus on women, who undertake the bulk of the work on small family farms. [*Citizen actions and public policy measures*]
- Rethink the relationship between farmers and agricultural technicians. Agricultural technicians must learn how to incorporate farmers' views into agro-ecological development projects and learn from them about agro-ecology. [*Citizen actions and public policy measures*]
- Promote the development of agro-ecology training modules in agricultural education, including them in schools for agricultural engineers [*Citizen actions and public policy measures*]

Ensure fair remuneration for farmers and a better quality of life in rural areas

- Remunerate the work of agro-ecological farmers to match the benefits of general interest that it generates. For agro-ecology to remain attractive to new generations, it is essential that its farmers receive a fair income allowing them to live with dignity. This can be obtained through remunerative pricing (producer pricing in general: see Workshop 8, or even specific premiums contingent on the practice of agro-ecology), guarantees of commercial opportunities and the fight against unfair competition from conventional agricultural products with negative impacts on the environment and health (see next objective). [*Public policy measures*]
- Invest in quality public services in rural areas to combat poverty and rural exodus. [*Public policy measures*]

Support and encourage the consumption of organic, local and seasonal products

- Promote direct marketing channels through various methods of support, such as establishing aid for the creation of farmers' markets, AMAPs/CSA (see footnote 1), or shops that sell agricultural products through direct selling [*Public policy measures*]
- Incorporate the external costs of industrial agricultural production into final prices (costs of environmental and health damage not assumed by producers and industrial intermediaries). Including the environmental costs in food prices would allow organic foods, for example, to no longer suffer unfair competition from industrial foods. A public debate informed by scientific knowledge must determine whether the internalisation of damage is acceptable or whether regulatory measures must be taken to ban certain practices. [*Public policy measures*]
- Sensitize the general public on agricultural and food issues by highlighting their links with cross-cutting themes such as health, well-being, job creation, social ties and climate resilience. [*Citizen actions and public policy measures*]
- Prohibit GMOs and fight the privatization of seeds, the common good of humanity. Protect farmers' rights to produce, reproduce and exchange their own seeds. [*Legislative and public policy measures*]. Increase and promote peasant seed exchange initiatives. [*Citizen actions and public policy measures*]
- Establish public and community management of water and aquatic ecosystems, key elements to guarantee food sovereignty. [*Public policy measures*]
- Immediately remove from the market those chemicals that are the most polluting and destructive of biodiversity, such as neonicotinoids, "bee killer" pesticides. [*Public policy measures*]
- Recognize and develop Participatory Guarantee Systems (PGS) in organic farming. PGS are certification schemes in which producer groups, sometimes in association with consumers, carry out their certification themselves, verifying the application of organic farming specification standards through cross-visits to agricultural activities. PGS enable control and certification costs to be reduced, strengthening alliances between producers, engaging and sensitizing consumers, revitalising rural areas and boosting confidence in organic farming. [*Citizen actions and public policy measures*]

Finally, for many peoples, agriculture meets the goal of food production, but it is also inseparable from their spiritual relationship with the land. This spiritual dimension must be fully considered in any debate on the choice of agricultural models.

INTERVENTIONS

The following list is not exhaustive. We apologize to any speakers at this workshop and participants who cannot find their names, and invite you to contact us at the following address to allow us to publish a new version of this summary with a complete list: secretariat@landaccessforum.org

Introductory interventions:

DUFUMIER, Marc, Emeritus Professor, Agroparistech, France,
ARROJO, Pedro, University of Saragossa, New Water Culture Foundation, Member of the Spanish Parliament (PODEMOS), Spain
UGAS, Roberto, International Federation of Organic Agriculture Movements (IFOAM), Peru
MORENO, José Luis, Spanish Society of Ecological Agriculture (SEAE), Spain
KOOHAFKAN, Parviz, President of the World Agricultural Heritage Foundation, Iran

Interventions from participants:

BA, Sidy, National Council for Rural Concertation and Cooperation (CNCR), Senegal
BA, Elhadj Mamadou, Mauritanian Association for Self Development (AMAD), Mauritania
CLEMENTE ABAD, Juan, Coordination of Farmers' and Breeders' Organizations - Autonomous Community of Valencia (COAG-CV), Spain
CRUZ, Artemio, Chapingo Autonomous University, Mexico
DEL POZO FERNÁNDEZ, International Solidarity and Autonomy (SAIn), Spain
FAYE, El Hadji, Natural Crop Protection and Environmental Development Action in the Third World (ENDA PRONAT), Senegal
I MOBIN JINNAH, Shah, Community Development Association (CDA), Bangladesh
KARIYAWASAM MAJUWANA GAMAGE, Thilak, Sri Lanka Nature Group, Sri Lanka
KEMANDA, Bienvenu, Centre for Pygmy Children and Women, Central African Republic
MONREAL GAINZA, Borja, Food and Agriculture Organization of the United Nations (FAO), Spain
MORA, Francisco, Polytechnic University of Valencia, Spain
NDIAYE, Ndeye Tabara, New Field Foundation, Senegal
NÉSPOLO, Nelsa Inés, Centre for Cooperatives and Solidarity Enterprises (UNISOL), Brazil
NEVES, Vitor Carlos, Centre for Cooperatives and Solidarity Enterprises (UNISOL), Brazil
RAVINDRA GUNAWARDANA, Center for Environment and Nature Studies, Sri Lanka
SEGBENOU, René, Coalition for the Protection of African Genetic Heritage (COPAGEN and JINUKUN) Benin
SOMBOLINGGI, Rukka, Aliansi Masyarakat Adat Nusantara - Indigenous Peoples' Alliance of the Archipelago (AMAN), Indonesia
SORENSEN, Neil, Land Portal, France
SOUSA DE ALMEIDA, Simone, National Federation of Agricultural Workers (CONTAG), Brazil
THOMSON, Frances, University of Sussex, United Kingdom
TOURÉ OUATTARA, Mariamé, New Field Foundation, Burkina Faso
VETTRAINO, Jean, Secours Catholique Caritas France

Moderator:

LOYAT, Jacques, Agronomist Association for the Taxation of financial Transactions and Citizen action (ATTAC), France

Rapporteur:

CABALLERO, Edurne, Centre for Rural and Agricultural Studies (CERAI), Spain