Who contributes to this issue?

Some 500 French and CGIAR agroecology scientists and experts from around 100 national and international universities and research organizations from France (among others CIRAD, INRAE and IRD) and abroad and from all CGIAR Centers. This Dossier is not meant to be exhaustive, the research examples presented reflect the diversity and dynamism of scientific and technological research at national and international levels.

Why this Dossier?

The urgency of agroecological transformation of agrifood systems linked to SDGs will be one of the game changers discussed at the UN World Food Systems Summit this year. Clearly the diversity of agriculture on this planet heralds the way to a variety of agroecological transition pathways (different baselines, input usage levels, socioeconomic contexts and particularly different labour costs and availability), and also a diversity in terms of means for public action (subsidy levels that could be reoriented to incentivize change, research and extension, etc.). There are also similarities in terms of understanding the biology, ecology and socioeconomics of farming agroecosystems and their functioning, and how to manage risks, including those triggered by climate change.

Lessons are also to be learned from past trajectories in the Global North and other parts of the world. Such insight could help avoid the simplification levied by conventional agricultural models, while shedding light on pitfalls to elude when considering power asymmetries and developing cooperative systems. Indeed, in some parts of the world where inorganic input usage is generally low and sometimes nonexistent —such as fertilizer use in many African countries— the priority is often focused on increasing access and usage of these inputs to boost production and productivity. Agroecological concerns are relevant, even under these conditions, and any decisions to increase such input use must strive to strike a balance between short-term productivity gains and long-term environmental health and sustainability gains. The linkage between sustainable intensification and agroecological transformation emerges here as a point of analysis.

These issues have led researchers from CGIAR and French research organizations to work together in compiling this Dossier to showcase their expertise at the disposal of policymakers, extension services, NGOs and farmers’ associations committed to promoting the agroecological transition. They must be ready to take on the responsibility of exploring new ways of conducting research based on systemic and transdisciplinary approaches, implementing inclusive participatory methods, the solution-based theory of change, fostering partnerships with national agricultural research systems, while enhancing orchestration of research efforts to converge towards sustainable food systems!
When?
It has been published for the UN Food Systems Summit (New York, September 2021).

What is in this Dossier?

Part 1 - AGROECOSYSTEMS
1. Increasing the efficiency of practices in order to reduce the use of costly, scarce or environmentally damaging inputs
2. Substituting intensive external input use by biodiversity-derived ecosystem functions
3. Redesigning agroecosystems on the basis of a new set of ecological processes from farm and landscape

Part 2 - FOOD SYSTEMS
4. Identifying and overcoming constraints within food systems to achieve agroecological transitions at scale – reconnecting producers and consumers
5. Building a new global food system based on equity, participation, democracy and justice

Part 3 - KEY PROCESSES, METHODS AND TOOLS FOR AGROECOLOGY

How?
The French Commission for International Agricultural Research (CRAI) and Agropolis International, on behalf of CIRAD, INRAE and IRD and in partnership with CGIAR, has produced this new issue in the ‘Les dossiers d’Agropolis international’ series devoted to agroecology. This publication has been produced within the framework of the Action Plan signed by CGIAR and the French government on February 4th 2021 to strengthen French collaboration with CGIAR, where agroecology is highlighted as one of the three key priorities (alongside climate change, nutrition and food systems).

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