Food and Agricultural Systems: toward a radical transformation to sustainable and resilient models

The High Level Panel of Experts on Food Security and Nutrition (HLPE) defines food systems as “all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, distribution, preparation and consumption of food, and the outputs of these activities, including socio-economic and environmental outcomes.”

Within the framework of the C2A’s systemic approach to agricultural and food issues, we believe it is also essential to consider non-food agricultural production, such as agrofuels. These non-food agricultural systems have big impacts—positive or negative—on people’s food security. We have thus used this notion of “food and agricultural systems” to adopt a systemic approach that considers all forms of production, processing, packaging, storage and consumption having to do with agriculture, livestock, fisheries, and non-wood forest products.

Our current food and agricultural systems are unable to feed the world’s population in terms of quantity, quality, and diversity of products. Nor can they cope with the increasingly frequent crises that the world is going through (food, economic, and cultural crises, etc.). And because they have impact on all levels of society, food and agricultural systems often contribute to the emergence or intensification of these crises. And while new technologies are sometimes presented as a solution, their positive impact is quite mixed. The costly and risky solutions they propose are far from sufficient. That’s why it is crucial to transform our agricultural and food systems in depth.

1. HLPE, Report 12, Nutrition and food systems, September 2017, p. 11.
2. FAO/CIRAD/EU, Food systems at risk. New trends and challenges, 2019, pp. 91-93.
There are many different types of agricultural and food systems. These include family farming, agro-industry, combinations of systems, and others. They can be categorized in several ways (see for example the work of the HLPE3 and CIRAD4). They vary according to cultures and to economic or geographical contexts. Some are quite local, others globalized, and not all of them value the same aspects of food and agriculture (e.g., food systems using the community-supported agriculture model or certain labels). They thus do not all have the same secondary consequences (positive or negative) on the structural factors of hunger (inequality, poverty, climate change, etc.), or the same level of resilience or responsibility when it comes to dealing with the growing number of crises. While sustainable and resilient food systems do exist (e.g., agroecological systems), agro-industrial and other systems are the source of many increasingly documented negative impacts.

Yet, agro-industrial systems are a major contributor to the environmental crisis, notably through their role in the collapse of wild and cultivated biodiversity9 in soil depletion,10 and in water pollution.11 While climate change impact is the main threat to global agricultural and food production,12 agro-industrial systems are responsible for almost a third of greenhouse gas emissions of human origin13 (mainly through the industrialization of animal production and processing systems14). Food systems bear heavy responsibility for the climate crisis, but at the same time they are directly impacted by its consequences.15

Agro-industrial systems also have health and nutritional effects. These may be due to the risks associated with unbalanced diets and the consumption of ultra-processed foods, the multiplication of zoonoses due to intensive breeding and the destruction of natural environments16, or they may be linked to emerging risks such as endocrine disruptors, nanomaterials or antimicrobial resistance.

The agro-industrial model also has disastrous social impacts. It encourages concentration of power, capture of value in value chains, and volatility in prices, all of which lead to economic instability for small-scale producers, reduction in need for labor, and unequal distribution of added value. This model undermines the food sovereignty in many countries and fuels the structural inequalities that can be responsible for rural poverty.17 It has turned out to be incapable of feeding people sustainably. Indeed, in 2019, there were 690 million people suffering from hunger, a figure that is on the rise.18

The dominant agro-industrial agricultural and food system is at a dead-end. In-depth change in our forms of agricultural production, processing, and consumption is needed more than ever. This is why the C2A proposes three major orientations, whose goals are to achieve any possible transition to agricultural and food systems that are fairer, more sustainable and resilient, and that encourage consumption of healthy and nutritious products that are accessible to all.

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6. IPES FOOD, From Uniformity to Diversity, June 2016, p. 57.
13. IPCC, Special report on Climate Change and Land - Summary for Policymakers, August 2017, p. 11.
14. GRAIN, Emissions impossible: How big meat and dairy are heating up the planet, July 2018.
15. HLPE, Food security and climate change, June 2012.
16. UNEP, Preventing the next pandemic: Zoonotic diseases and how to break the chain of transmission, July 2020, p. 11.
Looking at the structural causes of hunger and the impact that food and agricultural systems have on those causes, a sustainable and resilient system could be characterized by the following:

- Production based on small-scale and local farming that seeks to maximize its ecosystem benefits
- Ensures farm resilience
- Is a source of sustainable employment for local people
- Less processing of its products
- Distribution through channels based on fair trade relations that guarantee producers a price that covers at least their production costs and a margin, as well as long-term contracts.

### 1. Initiate in-depth transformation within French and European Institutions

France and the European Union have already made strong commitments to transforming food systems. In France, these commitments are embodied in the Orientation and Programming Law on Development and International Solidarity and the Law on the Future of Agriculture, Food and Forestry of 2014. The EU has also recently adopted a number of strategies along these lines, such as the EU Biodiversity Strategy and the Farm to Table Strategy.

France and the EU have substantial financial and legislative means available, allowing them to become significant drivers in making food systems adopt sustainable and resilient models. They must commit to changing course and recognize that marginal changes are not good enough: in-depth and radical change in our food systems is required, and France and the EU must do everything to achieve this.

To this end, we advocate several measures, covering production, distribution, trade relations, and consumption. The impact that food and agricultural systems have on those causes, a sustainable and resilient agricultural and food system, in particular projects that support transition toward agroecology.

- Recognize the right to adequate food as closely linked to other human rights such as the right to water, to health, to a healthy environment, the rights of women and children, the rights of peasants and other rural workers, the rights of workers and the rights of indigenous peoples.
- Develop strong safeguards against conflicts of interest in the governance of agricultural and food systems, especially when public investment and research issues are concerned.

Putting public interest and human rights at the heart of agricultural and food systems, in particular the right to adequate food, would help make headway toward models that are fairer, more sustainable, and resilient. This transition must involve greater regulation of the dominant agro-industrial sector, given its role in governance and its internal concentration of power. In their approach to the fight against hunger, France and the EU must address the issue through the following actions:

- Channel public funding so that food sovereignty, the concretization of the right to food, fair remuneration for food-sector stakeholders, environmental preservation, and the fight against the climate crisis are at the heart of French and EU agricultural and trade policies.
- Channel official development assistance to agricultural and food projects that promote real transformation toward sustainable and resilient agricultural and food systems, in particular projects that support transition toward agroecology.
- Promote consumption of diversified local foods with little processing and high nutritional value, support the relocational of their production by means of public procurement, and limit the consumption of ultra-processed products by imposing a framework on their marketing.
- Assess the impact of EU policies on human rights and developing countries, through systematic and independent impact assessments and evaluations.

### 2. Give preeminence to public interest and human rights

Agricultural and food systems are made up of a myriad of stakeholders. Small-scale producers must be supported. Conversely, the role, influence, and investments of the agro-industry must be controlled. This type of private player is characterized by aggressive commercial policies, expansion strategies harmful to workers, and a tendency to monopolize productive resources. Their priority on pursuit of profit leads to a weakening of food sovereignty and to numerous violations of human rights, including the right to food. This phenomenon is exacerbated by the vertical and horizontal hyper-concentration typical of the system.

## Notes

23. European Commission, From Farm to Fork: Our food, our health, our planet, our future.
24. Coordination Sud, The Notes of SUD No. 11 - CAP and EPAs: are they coherent with the development of family and peasant farming in the South?, p. 3.
3 PUT FARMER-BASED AGROECOLOGY AT THE HEART OF THE FOOD SYSTEM TRANSFORMATION

Farmer-based agroecology is an alternative to the many limitations common to the dominant industrial food and agricultural systems. This model is supported not only by researchers but also by farmers’ organizations and NGOs.

Farmer-based agroecology provides many co-benefits that address the issues of hunger and poverty, education, food sovereignty, gender equality, decent work, economic growth, economic inequality, responsible consumption and production, climate action, soil biodiversity, and peace and justice. For peasants and smallholders, it also facilitates their secure access to land, promotes respect for their fundamental rights, strengthens their autonomy, and gives new value to their knowledge and their role in society. That’s why governments must put farmer-based agroecology at the heart of the transformation of agricultural and food systems when developing public policies (on financing, legislation, etc.), recognize it as the preferred path, and invest fully in it. Governments must take several measures along these lines:

• Recognize a far-reaching definition of farmer-based agroecology in all international mechanisms. This definition should take into account the three main complementary fields of agroecology: a science of agricultural systems, environmentally friendly agricultural practices, and a social movement to defend sustainable and fair agricultural and food systems.

• Recognize agroecology as a set of productive agricultural systems capable of generating stable and sustainable income (especially for farmers but also for other stakeholders in the value chain) and of providing adequate food to final consumers in terms of quantity, diversity, regularity, and quality.

• Make farmer-based agroecology the basis of any transformation of agricultural and food systems. This can be done, for example, by redirecting public aid to companies working in the fields of agroecological production and distribution, or by regulating the false technological “solutions” often put forward to fight hunger (GMOs, agricultural growth corridors, etc.) but which ultimately do not act at all on its structural causes, or which even worsen it by keeping the agro-industrial system in place.

28. HLPE, Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition, July 2019.
29. HLPE, Public Policies to Support the Agroecological Transition, July 2019, p. 43.