

Declaration "The role of Agroecology on the future of agriculture and the food system"

'The Call from Brasilia' September 2017

Members of the Latin American Scientific Society of Agroecology (Sociedad Cientifica LatinoAmericana de Agroecologia-SOCLA) and its North American chapter (SOCLA-NA) met in Brasilia on Monday 11 September 2017 prior to the VI Latin American Congress of Agroecology. At this meeting scientists and researchers from other organizations such as 'Brazilian Association of Agroecology'(ABA), 'IFOAM - Organics International', 'The Institute for Food and Development Policy' (Food First), 'Agricultura Familiar e Agroecologia' (ASPTA), 'Cuba-US Agroecology Network' (CUSAN) and Universities from Canada, USA, Netherlands, Sweden and Spain were present and endorsed this Declaration. Members of the 'Via Campesina' and 'Agroecology Europe' contributed to the discussions that led to the final text.

Context

The Green Revolution, the symbol of agricultural industrialization, not only failed to ensure safe and abundant food production for all people but also put current farming and food systems on an unsustainable path of multiple crises, including environmental pollution, soil degradation, overexploitation of water resources, extreme biodiversity loss, weakened ecosystem services, the erosion of rural livelihoods and the expropriation and loss of peasants, indigenous peoples and family farmers. These impacts affect surrounding terrestrial and aquatic systems through water and aerial contamination. Moreover, industrial agriculture contributes with about 25-30% of GHG emissions, further altering weather patterns and compromising the world's capacity to produce food in the future.

The agrifoods industry foments hunger by undercutting the prices farmers receive and destroying the economic viability of local food systems. Extractivist economic activities like commercial mining, fracking and others, as well as armed conflicts, exacerbate the problems in the countryside. In addition, this system increasingly offers processed food of poor nutritional quality, high in salt, sugar and fats, with an emphasis on excessive amounts of meat and dairy products, all of which contribute to the epidemics of diet-related diseases and obesity currently affecting billions of people.

In light of climate change, corporate and financial concentration, and increased energy costs, we can expect a continuation of food price volatility, malnutrition and hunger. This situation is compounded by the fact that by 2030, 60 % of the world's urban population will live in cities, while more than 56 % of the world's poor and 20% of undernourished people are concentrated in cities. Today, for a megacity with 10 million people or more, over 6,000 tons of food must be imported every day, traveling an average of 1,000 miles.

The monocultures promoted by industrial agriculture have expanded dramatically worldwide—only a handful of crop species and varieties dominate the 1.5 billion hectares of the planet's agricultural land. The drastic narrowing of plants and animal diversity has put world's food production at great risk, due to the extreme vulnerability to pests, diseases and climatic variability associated with genetic uniformity. The globalized industrial food system is not sustainable or equitable and not only unable to meet the food needs of the poor, it has lost the trust of northern consumers.

Despite these developments, the champions of the Green Revolution invoke a neo-Malthusian fear of over-population to justify agricultural intensification and industrialisation by claiming that 'Feeding nine billion people in 2050 will require a 70% increase in global food production'. This position ignores the fact that we *already* produce enough food for 10 billion people, yet over one in seven are going hungry. No less than 50% of the world's food is provided by small scale food producers on less than 25% of the arable land. Most of the food consumed today in the world is derived from 5,000 domesticated crop species and 1.9 million local plant varieties grown by peasants without agrochemicals or genetically modified seeds. This context creates a 'momentum' for the development and scaling up of agroecology as practiced by peasant and family farmers. There are a growing number of studies and reports that suggest that a transition to agroecological agriculture would not only provide rural families with significant social, economic and environmental benefits, but would feed the world, equitably and sustainably.

Agroecology in dispute

Agroecology emerged as an alternative to energy and input intensive conventional agriculture by applying ecological concepts and principles (many derived from the study of traditional farmers) to the design and management of sustainable agricultural systems. Early on in Latin America, NGOs felt the urgent need to combat rural poverty and to conserve and regenerate the deteriorated resource base of small farms. Agroecology provided a new approach to agricultural research and resource management strategies, and lent itself to a more participatory approach for appropriate technology development and dissemination. Today agroecology has been taken up by rural social movements and is seen as a transformative science, practice and movement that is explicitly committed to a more just and sustainable future by reshaping power relations from farm to table.

Multilateral aid agencies, governments, research institutions and academic organizations first ignored, and then opposed agroecology. Today, however, the shortcomings of industrial agriculture are pushing them to embrace a watered-down, corporate-friendly version of agroecology stripping it of its historical, social and political dimensions. Mainstream institutions and the private sector try to reduce agroecology to a set of techniques to be adopted alongside biotechnological options to fine-tune and mitigate the destructive aspects of industrialized food production. New names have been coined such 'climate smart agriculture', and 'sustainable-' or 'ecologicalas intensification' for strategies aimed at easing the sustainability crisis of industrial food production, without challenging the structure of monocultures and the power relations that maintain it. These are not alternatives to the industrial food system, since they are based on monoculture, external inputs and the weakening of the autonomy of agroecosystems. It is intended to maintain agriculture as a vast market for suppliers of inputs. Thus, this new "Doubly Green Revolution" retains the same proprietary genetic and market-orientation as the original Green Revolution, but has added transgenic technologies, global markets, environmental concerns, and a leading role for the private sector.

On the contrary, social rural movements and progressive NGOs and academics do not consider agroecology to be a tool for the industrial food

production model, they see it as the essential alternative to that model, and as the means of transforming how we produce and consume food, while contributing to local economic and resource circulation and inclusive, equitable food systems. Agroecology, as we define it, is not based on recipes, but on principles applied in a different way to each reality, so that, despite many attempts, real agroecology is relatively invulnerable to attempts at cooptation. Agroecological food systems are widely diverse, shaped by context, and achieved through multi-actor planning in rural, peri-urban, and urban areas. They call for a fundamentally different vision of food systems that runs counter to the current large and globalized food systems that are based on specialization, industrialization, and short term economic considerations.

Millions of small farmers and peasants practicing agroecology throughout the world constitute a major barrier to the expansion of capitalist agriculture. Family labor, small farm size, diversified farming and knowledge systems, and smallholder's pluriactive livelihood strategies preserve peasant farming systems, and when linked to consumers through local solidarious markets, can bypass the hegemonic food system.

Scaling up and out agroecology for the transformation of food systems

A common criticism of agroecology is that if it has such great potential to address the multiple challenges facing agriculture, why it is not adopted more widely by farmers? Very few resources have been devoted for agroecology research and extension and almost no policy support has been directed to agroecology. Despite this neglect, millions of smallholders have adopted and spread agroecology farmer to farmer. These initiatives have been implemented with less than 10% of the funding devoted to the 15 international research centers of the CGIAR. Nonetheless, agroecology has had a tangible, positive impact on crop yields, resource conservation and food security. By growing a diversity of different locally adapted crops, farmers provide for a range of nutritional needs at the household and community level, and reduce risks from variability in weather and dependence of external expensive inputs. Moreover, agroecology reduces farmers' costs and debts and enhances their autonomy and control over their territories and means of production.

We call for increased support to document and learn from successful agroecological experiences—particularly in ways that enhance our understanding of the principles and processes that underlie their sustainability and resiliency— as this will help spread agroecology.

Academics and NGOs have been suggesting ways to overcome the barriers to scaling up and scaling out agroecology. A long list of suggestions ranging from creating an enabling environment, providing the right incentives to farmers, creating special markets, fund more research and education on agroecology can be found on a number of recent reports on agroecology. We agree that there is an urgent need for reforms in policies, institutions, and research and development agendas to ensure that agroecological alternatives are adopted widely, made equitably and broadly accessible. But we must also address the structural 'lock-in' preventing a transition to agroecology that lies in the political-economic control of food systems, seeds, technologies, information outlets and even research agendas in public national and international research systems by what has been termed the corporate food regime.

We call for more grounded initiatives that will lead to the amplification of knowledge about agroecology principles among farmers and allies, integrating practice and science for soil and biodiversity regeneration and water conservation at the farm and landscape level, and creation of grassroots agroecology schools and seed banks of locally adapted germplasm. Our call is also for the transformation of the corporate food regime, which requires a major shift from societies embedded in the market economy to a greater reliance on alternative food networks that reduce the distance between producers and consumers, while ensuring that food is healthy and accessible to all people and that more wealth and jobs are created and retained within local economies. Food sovereignty depends on making agriculture more productive, but also on scaling up agroecological strategies that make rural livelihoods diverse, interconnected and adaptable. In the struggle to achieve food sovereignty incorporating agroecology as a fundamental pillar, gender equity and the empowerment of women are a priority.

This is why an increasing diversity of actors (farmers' organizations, progressive academics, NGO people, consumers and environmentalists) are forming transnational agrarian and food justice movements that oppose the corporate-dominated global agri-food system, under the banner of food sovereignty. We call on agroecologists to build strategic alliances with radical food sovereignty struggles, as this is a way to strengthen the countermovement to the corporate food regime. A strong countermovement could generate considerable political will for the transformative reform of our food systems. The livelihoods of smallholders, the elimination of hunger,

the restoration of the planet's agrobiodiversity and agroecosystem resilience would all be better served under this scenario.