

editorial

Food sovereignty and agrobiodiversity

At a time when the media is sounding the alarm on high prices and shortages due to the war in Europe, even if there is not always an exact correlation, we are once again questioning the information that places large corporations as the suppliers of most of our food. Anchored to this fabricated image, the industrial agri-food system pushes a new assault on agriculture with the digitalisation of its processes, promotes “carbon sequestration” based on so-called “nature-based solutions”, continues its drive to control and regulate supply chains to benefit its interests, and even seeks to supplant the attempts of peasants in many parts of the world by sponsoring an “agroecology” that is now promoted by the same corporations and investment funds that for centuries have stripped peasants of the possibilities of an independent agriculture.

We are therefore committed to defending our Food Sovereignty: the possibility of being able to reproduce our seeds on our terms and in our spaces, i.e., in full freedom, and to maintain our total independence in producing our own food. For this, it will remain crucial

Colour drawing on amate bark-paper by the artist Abraham Mauricio Salazar. Reproduced for informational purposes from the book *El ciclo mágico de los días*, by Abraham Mauricio Salazar and Antonio Saldivar. CONAFE, Mexico, 1979

to challenge land grabbing and to insist on autonomy and on the defence of peasant and Indigenous territories and even urban spaces of popular self-management within neighbourhoods.

IPC for Food Sovereignty, FoEI and GRAIN

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who we are

In the last years hundreds of organisations and movements have been engaged in struggles, activities, and various kinds of work to defend and promote the right of people to Food Sovereignty around the world. Many of these organisations were present in the *International Nyéléni Forum 2007* and feel part of a broader **Food Sovereignty Movement**, that considers the Nyéléni 2007 declaration as its political platform. **The Nyéléni Newsletter is the voice of this international movement.**

Organisations involved: AFSA, ETC Group, FIAN, Focus on the Global South, Friends of the Earth International, GRAIN, Grassroots International, IPC for Food Sovereignty, La Via Campesina, Marcha Mundial de las Mujeres, Real World Radio, The World Forum Of Fish Harvesters & Fish Workers, Transnational Institute, VSFJusticia Alimentaria Global, WhyHunger, World Forum of Fisher People, WAMIP.

now is time for food sovereignty!

in the spotlight 1

Agricultural biodiversity and agroecology: peasants, families, artisans and Indigenous People's relationship with nature

Peasants, farmers, pastoralists, forest dwelling people, artisanal fisherfolk, Indigenous Peoples and other small-scale rural and urban food providers are considered a part of our global biodiversity. According to many ancestral worldviews, nature, Mother Earth, maintains a mutual nurturing relationship with human beings as a family - we are not separate from her. This ancestral relationship of mutual interaction shapes our existence in a type of "co-evolution". Peasant practices that care for our biodiversity are not only determined by food and material needs, but also by spirituality, culture, health, and emotion.

Despite the pressures associated with modernisation, where traditional worldviews and practices are still in place, biodiversity continues to respond to this mutual nurturing. In places where these practices had been lost and are now being reclaimed, biodiversity is being revived in new forms. These practices and the caring of farming communities and families - the systems of knowledge of small-scale food providers - are at the heart of what the international community refers to as "biodiversity".

This agricultural biodiversity supports - and is the fruit of - ancestral peasant strategies for subsistence, health, and autonomy. It manifests the creativity and knowledge of peasants and their relationship with the natural environment. As a tapestry of dynamic relationships, agricultural biodiversity embodies a constantly changing mosaic between people, plants, animals, and other organisms, water, the forest, and the "environment". Agricultural biodiversity can be seen as the result of the interaction - in all ecosystems and over thousands of years - of cultural diversity and biological diversity. Some agricultural production systems exhibit an extraordinary variety of crops, animals, and associated species. Small-scale food providers not only develop and sustain most of the planet's biodiversity, they also provide most of its food.

Despite the challenges posed by the powerful trend towards the homogenisation of lifestyles and food habits, and the strains on territories, there are significant local actions of resistance. There are a wide range of initiatives such as improving the diversity of household gardens in rural and urban areas, undertaking agroecological cultivation, restoring mangroves, developing sustainable fishing protocols, and managing waters. These and other practices contribute to promoting food and nutritional sovereignty, and conserving and protecting ecosystem functions.

Peasant-led, agroecological agriculture, practised by small-scale food producers, is an essential tool for building Food Sovereignty and defending Mother Earth. Communities committed to producing food for themselves and others in an independent, non-corporate way know that caring for biodiversity and practising agroecology is a way of life and is the language of nature. It is not a mere combination of technologies or production practices, nor is it universally applicable in all territories.

Agroecology is based on principles that are similar everywhere, but which require specific features and careful respect for the local environment and culture. Thus, agricultural biodiversity is fundamental to autonomy and agroecology. The food autonomy that a peasant agroecology allows for displaces the control of global markets and promotes collective self-governance.

In this way, Indigenous Peoples and peasant communities reduce the consumption of purchased products, which come from outside. As the people who feed the world, having control over their native seeds is fundamental to Food Sovereignty. Millennia-old connections between people and crops perpetuate innovation, research, selection and breeding of their own crops and livestock. Communities like this do not produce raw materials or commodities for export, but are the ones who produce the majority of food, and care for biodiversity and territories.

Fundamental to this is:

- Respecting the collective rights of everyone who maintain and enhance peasant agricultural and food biodiversity, and uphold their knowledge and the integrity of their crops through the use of agro-ecological principles and the exchange, breeding, and above all self-reproduction of their own seeds, livestock breeds, and fish.
- Strengthening our interconnected and collective rural-urban food systems and networks and local markets, promoting agricultural biodiversity and agroecology.
- Promoting comprehensive agrarian reform.
- And the most important thing is to promote and ensure the self-determination of rural and urban peoples, communities, and collectives that care for biodiversity and the integrity of their territories, and ultimately a life of justice and dignity.

Food Sovereignty, a healthy environment, and above all our future, depend on it all.

in the spotlight 2

Biodiversity's planned dispossession

The Green Revolution established the ascent of corporations in their push for control over the growing of food. It urged peasants in different parts of the world to boost "agricultural productivity in what is today the global South". The promoters said they were concerned with "filling hungry stomachs", and insisted that traditional agriculture was redundant.

Corporate executives and government policy makers disregarded the enormous amount of work, and the centuries-long continuity involved in the careful relationship peoples have with Nature, with their land, forests, and waters, with seeds and their infinite transformation. This relationship is responsible for "the incredible biodiversity and cultural prowess that brought us crops like wheat, maize, rice and potatoes".¹

The promoters of the Green Revolution replaced all the above with "radically standardised, so-called high-yielding types. The new seeds, as farmers would come to learn, required a package of chemical fertilisers, pesticides, and irrigation to grow well".²

Of course, all this move was not taken lightly and "met deep resistance from peasant farmers, local communities and civil society at large".³

But although there was resistance, the damage was done. The era of research institutes assuming the role of international agricultural crop and seed developers substituted the millenary knowledge and strategies of thousands of real life agricultural communities in the world and pushed a corporate narrative that is still in place: that peasants do not know what they do, that their cultivation strategies are wrong, that their yields are extremely poor. This opened space for hybrids and even GMOs. The effects were devastating for the peasant population and for small farmers. For anyone that relied on native seeds and traditional methods of growing food or taking care of their animals.

Industrial agriculture went to impose techno-fixes to raise the yields with a lot of agrochemical toxic substances involved. It diminished the varieties and even the species involved in growing food, and the livestock breeds that before were normal.

According to FAO's figures, since the 1900, some 75 percent of plant genetic diversity "has been lost as farmers worldwide have left their multiple local varieties and landraces for genetically uniform, high-yielding varieties... Today, 75 percent of the world's food is generated from only 12 plants and five animal species".⁴

The Green Revolution is not the only culprit, although there were huge sudden losses during its implementation. Free trade agreements, intellectual property rights, the incisive attitude of contract farming, luxury fashions in export crops (berries, avocados, agaves, tomatoes, and other greenhouse varieties) are also to blame. Now synthetic biology wants to substitute the whole agricultural process. Resisting industrial agriculture and its monocultures involves enormous efforts if communities want to remain independent. But it is crucial for biodiversity to stop these schemes.

1, 2, 3 - GRAIN, *Funding industrial agriculture vs agroecology: not a simple binary*, <https://grain.org/en/article/6870-funding-industrial-agriculture-vs-agroecology-not-a-simple-binary>

4 - FAO, *What is happening to agrobiodiversity*, <https://www.fao.org/3/y5609e/y5609e02.htm>

box 1

Community-based forest management: historical practice for transformation and resistance¹

Community Forest Management (CFM) is a way of life and a cultural and spiritual - thus historical - practice developed by Indigenous Peoples and local communities to politically control and manage, in an organised and planned way, the land and its natural assets and resources. It is a political process that, through horizontal decision-making mechanisms, including transparency and accountability to the rest of the community, achieves conservation and sustainable use of Nature as well as social, environmental, cultural, and economic benefits.

CFM also involves aspects of appropriate technology, ancestral knowledge, and community practices of planning and organised resource use, but goes beyond simple technical management, such as in so-called sustainable forest management (advocated for by popular forestry science), which often destroys forests and biodiversity in favour of corporations.

CFM is closely linked to Agroecology. They are both broad, holistic, dynamic, and diverse approaches that respond and adapt to the geographical, ecological, and cultural conditions of each territory, its shared goods, and associated traditional knowledge. While agroecology focuses on the central elements of food, such as soils, seeds, goods on which harvesting peoples or artisanal fishing communities depend, waters and fishing or grazing areas, among others, CFM directs its actions towards the other natural and cultural goods managed, used, and protected in forests, such as trees, forest seeds, wood, fibres, fauna, and even the health of the ecosystem.

It is important to measure the immense number of people and families who carry out agroecology within the framework of the CFM in order to reaffirm the importance of forests for the right to food.

1 - Article based on FoEI's article, *Community Forest Management and Agroecology. Links and Implications*, available at: <https://www.foei.org/wp-content/uploads/2018/03/foei-cfm-agroecology-EN-WEB.pdf>



voices from the field

1 Peasant seed systems and the implementation of farmers' rights in national legal framework

Alimata Traore, COASP, West African Peasants' Seeds Committee, Mali

Our farmers' seeds are freely reproducible and thanks to our practices and know-how, we are able to select them by reseeded them each year in our fields. Thanks to their diversity, they evolve and adapt to our needs, our fields, and our techniques. Our farmers' seeds are our identity, they are our life.

Our farmers' organisations provided information and training on farmers' rights. After analysing the status of their implementation in our national laws, we held discussions with our government representatives on the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) and Convention on Biological Diversity (CBD) focus points.

Together, in 2017, we created a national consultation framework with a mandate to ensure that peasant seed systems and farmers' rights are recognised and implemented in national legislation. This is chaired by the Ministry of Agriculture and the secretariat is provided by the National Coordination of Farmer Organisation (CNOP). The basis of our proposals was as follows:

1. A clear definition of the varieties of seeds (including traditional and local).
2. The recognition of specific regulations that guarantee the quality of our peasant seed systems, and ensure the protection of peasant knowledge through collective rights defined by the community according to its habits and customs.
3. The right of farmers to sell their seeds without the obligation of registration in the official catalogue.
4. The right of farmers and their organisations to participate in decision-making with mechanisms to ensure transparency.
5. Supporting and strengthening farmers' seed systems, farmers' seed houses¹, farmers' seed festivals and markets.

1 - Seed houses in West Africa are places where seeds are collected and sorted, identification sheets are made, storage and conservation techniques are improved, practices are exchanged and training is provided.

2 We need diverse livestock breeds to combat future pandemics

Tammi Jonas, Australian Food Sovereignty Alliance

Australian farmers produce 93% of the food we eat, even while exporting some 70% of what is grown, and the export focus is framed within a moralising discourse that Australian agriculture is 'feeding the world'. Yet, the reality is that exports are directed not to countries suffering widespread food insecurity, but rather the 'highest value markets in developed economies and to the middle classes in developing countries'.¹

This productivist paradigm has led to a steady decline in breed diversity in Australia and globally, and in the Global North, 90% of cattle belong to just six breeds, with 20% of livestock breeds at risk of extinction.² A decline in breed diversity means a loss of livestock adapted to local conditions and a life on pasture, and also the danger of creating what Rob Wallace calls 'food for flu' – because 'raising vast monocultures removes immunogenetic firebreaks that in more diverse populations cut off transmission booms'.³ The incidence of COVID-19 globally, Japanese Encephalitis Virus further south in Australia than ever before, and now Foot and Mouth Disease becoming a growing regional threat, make it ever more obvious that we must stop narrowing the genetic diversity of livestock and crowding them in unhealthy conditions.

In Australia, there is a growing movement of smallholders growing heritage and rare breed livestock to reverse this trend, collectivised within the Australian Food Sovereignty Alliance (AFSA) and supported in their in situ conservation efforts by the Rare Breeds Trust of Australia. In a pandemic world, moves to conserve and promote diversity at the genetic, species, and ecosystem levels will literally save lives.

1 - Muir 2014: 5

2 - FAO 2019

3 - Wallace, et al. 2021: 195

3 To manufacture food or to grow it? The new and old GMOs of Europe, a battle spanning over 30 years

Antonio Onorati, ECVC – European Coordination Via Campesina, Italia

The European Union, the world's largest exporter of agricultural products and the world's largest importer, boasts an agricultural system that relies on small farms, 77% of which are less than 10 hectares in size and 69% of which have an economic size of less than €8,000.

But 4 of the 6 companies that dominate the world seed market are European, the largest of which has a sales volume three times greater than the second largest. The market power of the companies in the seed market - which is already highly concentrated - increases when one moves from the conventional seed market to the GMO seed market, and from the GMO seed market to the market for the control of digital sequence information (DSI).

In this context, the strategy of the farmers' movement, also shared by many environmental movements, can only be articulated on a number of levels. From mobilisation with direct actions of disobedience, such as the mowing of fields sown with GMOs - old or new - to legal action and recourse to the courts, such as the action at the European Court of Justice,



voices from the field



→ which is currently blocking any attempt to avoid applying the current legislation on “new” GMOs (new genomic techniques [NGTs], products with CRISPR or in vitro mutagenesis¹). In addition, there is the construction of useful legislation to protect the farmers’ seed systems and prevent the cultivation of GMOs (as in Italy, a country with “GMO-free” agriculture since 2000, or in France).

How a society wants its food to be produced is a purely political issue. This is why mobilisation must continue.

More info at <https://www.eurovia.org/publication-incorporating-peasants-rights-to-seeds-in-european-law/> and <https://www.eurovia.org/european-petition-against-new-gmos/>

1 - <https://www.eurovia.org/wp-content/uploads/2017/09/2017-09-EN-ECVC-STOP-new-GMOs.pdf>

4 Agroecology, agroforestry and community-based forest management: powerful tools for defending peoples’ rights, livelihoods, and the natural assets of forests

Nuie anak Sumok - Residents’ Association of Sungai Buri, Sarawak, Malaysia

Known to her friends as Superwoman for her work ethic, Nuie anak Sumok fights for her family, her community, and the environment by farming on her roadside plot in Sungai Buri, northeast Sarawak, Malaysia.

With the women’s group and the Residents’ Association of Sungai Buri on the northeast coast of Sarawak, we have been strengthening our resistance to the imposition of palm oil monoculture through agroecology, agroforestry and community-based forest management. Through these practices, we have also been reversing the damage caused by this monoculture and forest destruction, and challenging the destructive development model.

We do not have the luxury of planting just one crop, we have to do what is most beneficial for us. And no one can tell us what to do.

We have chilli, pineapple, courgette, bananas, native forest species, daun long... and the forest gives us seeds, fruit trees, other food, water, wood, fuel, shelter, biodiversity, honey, medicine. and animal feed. Also, materials to make our crafts. We do our best to help the community to plant local species of trees.

With sister organisations in Marudi, Long Miri and Long Pilah we set up a seed exchange scheme where different groups collect seeds from their locality - merbau, jelayan, rattan, engkabang, meranti - and fruit trees such as durian and langsung, and our nurseries are enriched.

Through this work we also protect our rights and those of all communities as well as our livelihoods and the natural assets of the forests”.

1 - More information at: <https://www.foei.org/nobody-can-tell-us-what-to-do-agroecology-as-resistance/>

5 The Latin American Agroecological Institute under construction and the role of agroecology

Aldo González, IALA - Latin American Agroecological Institute, Mexico



Nowadays, more and more young people from Indigenous and peasant communities have the opportunity to study. Many receive scholarships and leave the community to go to university, in most cases the idea of progress gets into their heads: the city offers them modernity, and many do not return, school has taken away their identity.

Faced with this panorama, the organisations that make up La Via Campesina in Mexico decided to set up the Latin American Agroecological Institute (IALA-Mexico), with the aim of going beyond simple technical training.

At the IALA we are interested in contributing to the strengthening of struggles in defence of territories, cultural identity, and Food Sovereignty.

For us, agroecology is a way of life, based on principles that recognise that there is a diversity of territories and that these generate a diversity of cultural relations between human beings and nature. This care, rooted in ancestral peasant traditions, is based on common principles that must take into account ecological, cultural, and economic aspects that respect Mother Earth.

These relationships have generated forms of family and community organisation that allow us to survive. For example, the guelaguetza or guzun that is practised among the Zapotec Peoples of Oaxaca, has its similarities among many peoples of Mexico and the world, and is based on reciprocity in order to get the “milpa” ready (as agricultural fields are called in Mexico), build a house, hold family or community celebrations, etc. The IALA is interested in strengthening these forms of organisation.

Our farming systems, such as shifting cultivation, wrongly called “slash and burn”, are ways of farming that were developed in the past and are important to reclaim from agroecology. Sustaining life in the soil, recycling nutrients, and conserving energy from the local to the global are principles that have been practised in traditional agriculture and that we will continue to promote.

We are heirs to a great biodiversity, as well as the wealth of knowledge associated with it. However, the science produced by our peoples is disqualified by research centres; in spite of this, it is urgent that we establish a dialogue from our own corners with Western science that will allow us to combine the knowledge that we safeguard for the good of humanity and thus generate new knowledge that will be put at the service of the peasants of Mexico and the world.

Digitalization of agriculture and food systems

We increasingly hear that the digitalization of all aspects of life is an inevitable future that we must gladly accept. In the case of agriculture and food, there is talk of the 'Digital Food Chain' being the only option for solving hunger and climate problems. Digitalization, they say, will enhance agroecology, strengthen communities, and promote independence. In reality, the digitalization of agriculture opens the door to an even more extreme commodification of nature by the same old toxic agribusinesses, now in league with Big Tech giants. This includes the use of digital tools in the design of new transgenic crops, financial speculation relating to the carbon in agricultural soils, and "sustainable intensification".

The digitalization of agri-food systems is defined as the "application of digital tools, strategies and business models to food and agriculture." But this innocent-sounding definition hides the fact that increasing dependence on Big Tech's digital tools can exacerbate corporate extractivism and displace human labour; that digital strategies are built on the looting of information, spying on communities and manipulating consumers; and that digital business models are about achieving more control of biodiversity and production systems and human deskilling, through data grabbing and automated and digital processing technologies (from robots to artificial intelligence). Corporations' aim is to be in control of what is grown, how the harvest is processed and who gets to eat it, and what is destroyed in the process.

Nature Based Solutions: a corporate smokescreen that won't stop biodiversity loss

The concept of Nature Based Solutions arose from large conservation organisations as a way to promote funding for their vision of protected areas. Despite using the word "nature", the vision of NBS promotes the idea of "natural capital" i.e., a capitalist approach of paying for services provided by ecosystems. This often goes hand in hand with the commodification and financialisation of nature.

More recently, the driving force of NBS comes from the need for nature to be a climate solution. This is driven by the escalation of so called "net-zero" climate targets where the "net" is carbon emitted minus the carbon removed from the atmosphere. So, trees, soils, and lands are needed to provide carbon offsets and carbon removals to enable fossil fuels, agribusiness and other corporations to expand their emissions and extraction heavy plans. This comes with several dangers: land grabbing, further commodification of carbon and nature, enclosures of land, failure to stop climate chaos and the destruction of nature. It can also allow corporations to profit from new nature based market schemes.

Just the scale of land required for NBS to be a climate solution is a danger for biodiversity. The most influential paper on 'Natural climate solutions'¹ advanced the claim that "nature based solutions"² could help mitigate up to 37% of greenhouse gas emissions by 2030. The calculations in the paper on closer inspection appear to be technically problematic, implausible, and politically unrealistic.³ For example, it suggests that an area of 678 million hectares is potentially available for reforestation. This is twice the area of India, or more than two-thirds of the United States! The paper also suggests up to 10 million hectares of new tree plantations, to make NBS profitable and therefore worthwhile for companies to pursue.

Even if only a fraction of the corporate net zero pledges are pursued through "nature based solutions", it will significantly deepen and expand corporate control over land. This is because of the sheer scale of emissions released by the corporations and therefore the need for them to find forests and lands to claim they are offsetting their emissions.

NBS is a vaguely defined term with very little political analysis behind it. Therefore, anything can be defined as a nature based solutions, from monoculture plantations to agroecology. Brazilian company Suzano, the biggest producer of pulp is just one of those taking advantage of vaguely defined NBS to promote their genetically engineered plantations as achieving nature based solutions to climate change.

Conservation organisations and corporations are also rebranding discredited REDD+ schemes which do not value the role of local communities and Indigenous Peoples in managing forests and have caused huge divisions, and displacement of forest communities as NBS.

1 - Griscom et al, 2017, *Natural climate solutions*, PNAS, October 31, 2017. vol. 114. no. 44. 11645–11650, <https://www.pnas.org/content/114/44/11645>

2 - The Nature Conservancy calls them Natural Climate Solutions.

3 - REDD - Monitor, *Offsetting fossil fuel emissions with tree planting and 'natural climate solutions': science, magical thinking, or pure PR?* 2019, <https://redd-monitor.org/2019/07/04/offsetting-fossil-fuel-emissions-with-tree-planting-and-natural-climate-solutions-science-magical-thinking-or-pure-pr/>

