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The agroecological movement. A panoramic view

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ABSTRACT

This article offers a panoramic view of the agroecological movement, led by several peasant and indigenous organizations around the world, and by different kinds of allies. The agroecological movement is defined as a diverse, decentralized coalition of movements, organizations and collectives, widely dispersed in urban and rural spaces, focused on contesting the hegemony of the agrifood system while taking action to radically transform it. We offer a classification that attempts to show the size of the movement and the characteristics of the diversity of experiences that exist in the world today.



KEYWORDS

Social movements;
agroecological scaling up;
civilizational
transformations;
civilizational crisis

Introduction

Agroecology, besides being science and practice, is a social movement (Wezel et al. 2009) whose political proposal is to radically transform the agrifood system and many of the adverse realities faced by rural and urban communities. It has become an important political movement that brings together diverse grassroots efforts to address distributive injustice, environmental degradation, lack of food security, hunger, and the impoverishment of rural and urban life. As a social movement, agroecology aims to challenge power structures, create linkages between rural and urban popular classes to promote food sovereignty, and put control of the means of production, of which land, water, and seeds are the most important, in the hands of the people (LVC 2013, 2015; Nyéléni 2015). In its broadest political sense, agroecology proposes a project of class justice in defense of peasant ways of life, which fuels the struggle for comprehensive agrarian reform and, more recently, seeks to be part of the strategies to decolonize and de-patriarchalize the territories. More than just a set of practices for agricultural production, agroecology today is an enormous apparatus that brings together many emancipatory objectives (Giraldo and Rosset 2022), and an essential reference point for anti-capitalist struggles and proposals for civilizational transformations.

The agroecological movement is made up of peasant families, indigenous and other rural populations, urban collectives, local, regional and international organizations, non-governmental organizations (NGOs), independent academic sectors and scientific societies, among other allied actors. The movement proposes a 'life' project in opposition

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to the 'death' projects of agribusiness, latifundia and capital, disputing the hegemony over agriculture and agrifood systems (Giraldo 2019). Its goal is to form multiple territorialities made up of millions of peasant plots, interwoven with urban and peri-urban plots, which follow agroecological principles (Altieri 2002) and create solidarity economies through exchanges of use values with low energy consumption.

Although this movement has been gaining strength, there has been no comprehensive analysis of its scope and character, nor of the social base on which its political project is built. Although case studies of local and national agroecological experiences with a broad territorialization have increased considerably in recent years, and there have been efforts to document the agroecological revolution in Latin America (Altieri and Toledo 2011), there is still a conceptual gap in classifying them and, therefore, a lack of a panoramic view of the agroecological revolution on a global scale. This absence may be due to the difficulty of undertaking this objective, given the immense heterogeneity and geographical dispersion of the movement. Another possible reason is due to a characteristic that distinguishes it from other social movements: to address it adequately, it cannot be reduced to reactive forces against agribusiness projects and the hegemonic food system. The agroecology movement is not exclusively a mobilization expressed in protests, public demonstrations, collective actions of boycotts, road closures, takeovers of public institutions, and all the repertoires of collective action that could be explained by the sociological theory of social movements (Staggenborg 2016; Tarrow 2022; Tilly and Wood 2015; Touraine 1985; Diani 1992). Beyond that, it should be analyzed as a multitude of collectives and organizations in motion (Zibechi 2022) that, while saying 'no' to the system they oppose, also build the multiple 'yeses' that make these other worlds possible in practice.

I propose then to define the agroecological movement as a coalition of widely dispersed movements and collective efforts; as a plural and decentralized movement that brings together a multiplicity of organizations and collectives in multiple urban and rural spaces, focused on contesting the hegemony of the agrifood system while taking action to radically transform it. The agroecological movement is a political mega-movement spread across many self-organized processes such as cooperatives, associations, peasant organizations, community assemblies, peasant networks, coalitions, platforms, coordinators, agrarian unions, rural women and youth collectives, indigenous organizations, agroecological schools, ecclesial communities, civil associations, intentional communities, networks of consumers or urban farmers, among other organizational forms, which, together with allied sectors, are, on the one hand, waging struggles in the institutions of power, and on the other hand, undertaking creative and assertive actions to realize in concrete spaces those other worlds for which the movement fights (Giraldo 2022).

Analyzing such a heterogeneous movement is not an easy task. However, in this article I propose a classification as a heuristic exercise that will help us to see it as a whole, to measure its scope, and to understand what kind of forces it has woven to carry out its political project. I draw on the proposal of the work of Rivera-Núñez, Fargher, and Nigh (2020), in which they suggest classifying the movement into three categories: (1) agroecologies at the limit (or of return), (2) emerging agroecologies, and (3) historical agroecologies. I will illustrate each case with some of the most representative examples studied in the literature, some of which we have systematized in a collective research program on the massification

of agroecology¹, which has focused on documenting successful cases of agroecological territorialization led by peasant and indigenous organizations, mainly members of La Via Campesina, but also other organizations from Cuba, El Salvador, Brazil, Nicaragua, Mexico, Colombia, Venezuela, Guatemala, Puerto Rico, Mozambique and India.²

Agroecologies of return

Rivera-Núñez, Fargher, and Nigh (2020) call these *agroecologies at the limit*, but I prefer to call them *agroecologies of return*. They occur as a response to events, often abrupt, that trigger the need to transition to agroecology through collective action. There are also agroecological irruptions in contexts of chronic crisis. Some arise from the environmental effects of monocultures or because of disasters that reveal the vulnerability of simplified agricultural systems to the forces of nature (i.e. Holt-Giménez, Shattuck, and Van Lammeren 2021). There are cases that emerge after socio-environmental conflicts triggered by mega-projects in mining, hydrocarbons, dams, land grabbing, and the different effects of territorial dispossession that awaken repertoires of social mobilization, which often include agroecology (i.e. de Castro 2020). There are also experiences arising from the deterioration of health, such as intoxication by pesticides, skin pathologies, cancers and other chronic diseases linked to chemical inputs and industrialized food (i.e. Abreu 2018). Others emerge as a response to economic crises (i.e. Meek and Khadse 2022), and, in the most politicized movements, we can name those that emanate as a collective dissatisfaction with dependence, or as a mode of resistance to the policies and modes of production of capitalist development, dispossession and neoliberal globalization (i.e. Hernández, Perales, and Jaffee 2020). Whatever the case, the search for agroecology in this block is a response to a specific crisis that motivates the return to agroecology (Mier y Terán et al. 2017).

For the sake of simplicity, I classify the existing collective processes of return according to their size and scale, starting with local and community experiences, and then listing the regional ones, the multi-territorial networks, those of national scope, up to the international platforms of coordination and advocacy.

To begin, it must be said that there are an unknown number of small agroecological cases, often invisible and scattered. Since the early 1970s, many communities, aware of the enormous dangers posed by the technologies of the Green Revolution and the

¹<https://www.ecosur.mx/masificacion-agroecologia/acerca-de/>

²Organizations with which research has been conducted include: the National Association of Small Farmers of Cuba (ANAP) (Rosset et al. 2011; Bernal et al. 2023; Val 2021; 2023), the National Peasant Union (UNAC) in Mozambique (Val 2021), the Karnataka Rajya Raitha Sangha (KRRS) in India (Khadse et al. 2018), the Federation of Agrarian Reform Cooperatives (FECORACEN) in El Salvador (Murguía Gonzalez et al. 2020), the Landless Rural Workers Movement (MST) in Brazil (Fernandes et al. 2021; Borsatto and Souza-Esquerdo 2019), the Association of Rural Workers (ATC) in Nicaragua (McCune et al. 2017), the Rural Association of Independent and Democratic Collective Interest (ARIC) in Mexico (Miranda 2019), and Boricuá in Puerto Rico (McCune et al. 2019). We also documented Campesino a Campesino processes in the LVC framework at the international level (Val et al. 2019), mathematically modelled their impact compared to classical extensionism (Bernal et al. 2023), analyzed agroecological training schools in Latin America (Rosset et al. 2019) and conducted an overall analysis of lessons learned from these experiences (Giraldo and Rosset 2018; 2022). We have also systematized other non-LVC experiences: in Mexico, the Vicente Guerrero Group and the Network in Defence of Maize (García and Giraldo 2019, 2021), the Ecological Coffee of the Sierra Madre of Chiapas (Guzmán et al. 2019; Santiago-Vera et al. 2021), the school of ecological agriculture U Yits Ka añ in Yucatán (Val et al. 2019), the OCEZ-CNPA (Aiterwegmair et al. 2021); in Colombia, the case of the Native and Creole Seeds Network (García et al. 2019) and the Valley Agroecological Markets Network (Franco et al. 2022); in Venezuela, the La Alianza cooperative (Domené-Painenaio et al. 2020); in Guatemala, that of the Maya-Achi territory of Baja Verapaz (Einbinder et al. 2019; 2020; 2022) and in Brazil the Zona da Mata (Freitas 2021).

agro-industrial system based on commercial monocultures, have begun to return to traditional agricultural systems. In Latin America, these experiences were most often accompanied by civil society organizations and religious institutions (Bebbington and Thiele 2005). In more and more places, groups of peasant families and local networks began to return to their traditional farming systems in response to a particular crisis. In the region, we must highlight the role played in this process by liberation theology and Indian theology, as well as methodologies based on Paulo Freire's popular education and Orlando Fals Borda's participatory action research. Through methods based on reflection-action-reflection, seeing-judging-acting, and the liberation of the oppressed, local organizations began to design pedagogical models to make the territory remember old practices, reevaluate its worldviews, and put them in dialogue with new knowledge. The concept of *dialogue of knowledges* emerged as the basis for the territorial construction of knowledge, which was based on pre-existing forms of organization, such as community assemblies, ejidos, community action boards, cooperatives, agrarian unions and church organizations, to name just a few examples from the Latin American context.

Throughout the world, it has been common that many initiatives have been promoted by NGOs through various projects funded by international cooperation. I would like to name a few examples. The first is the case of World Neighbors in Honduras, an NGO that reported working in 2015 with more than 1,400 families located in 65 communities with the Peasant-to-Peasant methodology (Escoto and Brescia 2017). There is also the *Nourrir Sans Détruire* Association of Burkina Faso, which claimed to have organized 221 field schools, which ultimately resulted in nearly 3,000 households adopting agroforestry and associated agroecological practices. It was from this base that Peasant-to-Peasant type exchanges began to be organized for other villagers to learn from more advanced farmers. According to the association more than a thousand people from 60 villages act today as volunteer promoters and provide support to those who are starting out in agroecology (Fatoumata and Bourguou 2017). Likewise, a similar project in Northern Ghana conducted by the Center for Indigenous Knowledge and Organizational Development (CIKOD), focused on agroforestry, mentioned that in 2015 it had a base of 157 agroecological promoters (Guri and Banuoko 2017), while, in 2014, the Haitian organization *Partenariat pour le Développement Local* asserted that by that time it was collaborating with 17 peasant organizations grouping 20,545 farmers transitioning to agroecology (Jean Baptiste and Briesca 2017). Another case is that of the NGO Soils, Food and Healthy Communities (SFHC), which since 2000 has carried out various agroecological projects in Malawi, involving more than 15,000 farmers and 500 villages in the north and center of the country (Kansanga et al. 2021a; 2021b).

Such experiences abound. These are just a few examples of local and community experiences accompanied by various civil organizations. Since the 1970s, there has been a proliferation of attempts at agroecological promotion by civil associations, although not always under the name of 'agroecology'. Numerous NGOs in the territories of the Global South have helped to shape a constellation of experiences of agroecological transformation. In fact, it is safe to say that the role of these organizations has been crucial for the agroecology movement. In the Latin American context, these organizations include the ASP-TA in Brazil, IMCA and Cipav in Colombia, CET in Chile, IDEAS and CIED in Perú, and the NGOs that were part of the Latin American Consortium on Agroecology and Development (CLADES) (Altieri 1999; Altieri and Maserà 1993; Altieri and Yurjevic 1989; Alvarado and Hugo 1998; Bebbington and Thiele 2005). These organizations

played a central role in the revitalization of Latin American peasant agriculture, several of them in the context of dictatorships. These NGOs established demonstration plots as the main working method for teaching and learning agroecology, and provided the basis for what was later called ‘agroecological beacons’ as a method of agroecological scale-out.

In reality, NGOs are very diverse, and while there are some that have played a fundamental role, such as the pioneers in Latin America, it is true that there are others that are still permeated by the harmful logic of classical development and extensionism (Giraldo and Rosset 2022). Many processes have succumbed to the project-based way of thinking and its working scheme, in which an NGO obtains funds from various sources and then offers technical and financial support to peasants, sometimes through their organizations and sometimes on an individual basis. Despite so many years of failures with this type of intervention, things continue to work the same way. An article on Senegal describes the country’s dependence on external funding and NGO projects to promote agroecology. They point out that in the last five years, although hundreds of pilot initiatives have flourished in the country, these experiences are tied to the money that comes into the country as a result of international cooperation (Bottazzi and Boillat 2021). Similarly, other work in Uganda has questioned how the NGOization of agroecology has created unfavorable conditions for the emergence of social movements (Isgren 2018). An emblematic case of how these NGOs operate is a report by the NGO Groundswell, which describes a project funded by the United States Agency for International Development (USAID) carried out between 2016 and 2017, which aimed to promote agroecological innovations in more than 9,000 households in 148 villages in Mali, Senegal, and Burkina Faso (Bruil and Gubbel 2019). This experience is an example of the work that continues to be done in countries of the Global South, and it provides food for thought about how, in some contexts, they tend to be overly dependent on the ‘development assistance’ model (Sachs 1997). In addition to dependency, there is evidence that NGO agroecological projects tend to ignore local practices and knowledge while promoting foreign solutions. A well-documented case can be found in the work of Einbinder et al. (2019; 2020; 2022) on the Maya-Achi territory in Guatemala. It is true that some NGOs are changing their methods, and instead of having professionals visit plots one by one to provide technical advice, they are starting to adopt the *field school* method, in which the project promotes exchanges between peasants on a local plot. The problem is that although these schools emulate some good practices of the Peasant-to-Peasant methodology (Bernal et al. 2023; Holt-Giménez 2006; Rosset et al. 2011; Val et al. 2019), they are not run by grassroots organizations, but by the NGOs that promote the projects. Therefore, once the project cycle ends, the exchanges do not take place again.

In spite of this sharp criticism of the NGO model, fortunately, there are lessons learned and there are organizations that, though they depend on the funders, they have developed good ways of collaborating for agroecological territorialization. It is also important to mention that there is an ‘art of resistance’ (Scott 1990) by communities, in which they understand how to play the simulations to which projects subject them, while using resources to pursue their own agendas. Val (2021) in his study of Mozambique documents how there is an agroecology to show NGOs, which he calls ‘agroecology for the Anglos to see.’ This is a type of performance in which the communities theatrically show during the visits how they prepare bokachis, biopreparations and natural repellents – practices that they have learned in the project workshops but do not use in their *machambas*

(traditional polycultures) – and which serve as a sort of choreography to attract resources, given that agroecology has become one of the objectives of international development cooperation agencies. For these communities, agroecology is associated with foreign practices that demand a lot of time and raw materials. In reality, Val argues, their traditional agriculture is profoundly agroecological, so perhaps part of the external resources can be used to sustain their ancestral practices. However, there are many cases where there is a different correlation of forces, and where the peasant organizations and communities cease to grant the promoters of these initiatives the authority to manage their lives, and acquire the power to subordinate them and put the NGOs at the service of their own agenda and on their own terms (Giraldo and Rosset 2022). An extraordinary case of such linkages is the civil association Economic and Social Development of Indigenous Mexicans (DESMI) and its agroecological projects with the Zapatista autonomous communities in Chiapas.

Although local and community experiences continue to be based on the protagonism of projects and technicians, when peasant organizations and social movements have adopted agroecology as part of their agenda, they have ended up far exceeding the territorial scale of incidence of civil organizations, as we have shown in our research program (Ferguson et al. 2019; Giraldo et al. 2021; Giraldo and Rosset 2022; Giraldo 2022; Mier y Terán et al. 2017) and being confirmed by other works on the subject. This allows us to move on to a second type of experience with a greater territorial scope, such as the regional processes constituted by a cooperative or by a coalition of peasant organizations in the same territory.

There are associative forms that are often created to facilitate the commercialization of the agroecological production of their members, usually adopting the cooperative philosophy. Among the examples of large-scale cooperatives is the case of the Tosepan Titataniske in Puebla, Mexico, which brings together 48,000 families. Specifically, the *Kuojtakiloyan* agroforestry system – which in Nahuatl means ‘forest that produces’ – is an agroecological system that integrates a wide variety of wild and cultivated plants, including coffee plantations, fruit species that provide shade for coffee, pepper, beekeeping and *milpa* – Mesoamerican polyculture based on maize (Toledo 2015). The *Maseual Xicaualis* cooperative, part of Tosepan, collects and commercializes for the national and international market around 400 tons per year of organic coffee, 75 tons of pepper, honey derivatives, as well as various personal hygiene, cosmetic and medicinal products of natural origin (Ramírez 2017). Another example of a far-reaching regional cooperative is the agroecological rice of the Landless Workers’ Movement (MST) in the state of Rio Grande do Sul. According to the peasant organization in 2017, 116 families distributed in 22 settlements in 16 municipalities planted 5,000 hectares and harvested 27,000 tons of grain (MST 2017). Another case worth mentioning is *Alianza*, in the state of Laras, Venezuela, a cooperative that brings together more than a hundred peasants who supply agroecological food to Cecosolesa, one of the most important cooperative markets in Latin America (Domené et al. 2020). Also worth mentioning is the Puna Network of Northern Argentina, which brings together 1,200 indigenous families from 70 rural communities that process and market potatoes, quinoa and various other agroecological foods in the Jujuy region (Murray et al. 2020).

Regional experiences also include some that are widely territorialized due to their capacity to bring together multiple stakeholders working for agroecology in the same

region. One such case is the Yucatan Peninsula in Mexico, which is notable for the itinerant agroforestry milpa system practiced by hundreds of thousands of people, family gardens, and the presence of beekeeping organizations that bring together 60,000 Mayan families, as well as a variety of peasant organizations, agroecological schools, and networks of seed guardians. Another example is Chiapas, where there are 120 organic coffee cooperatives grouping 31,000 families, mostly indigenous Tzeltals and Tzotzils (Martinez-Torres 2006). To these cooperatives we must add the agroecological experience of the Zapatista communities, which, thanks to their network of agroecological promoters, have managed to advance in the development of food sovereignty of the support bases, particularly in their collective work (Hernández, Perales, and Jaffee 2020). In the state there are also several agroecological peasant schools, market networks, many NGOs, and various indigenous organizations promoting agroecology, of which it is worth highlighting the independent Rural Association of Collective Interest (ARIC) and its Tzeltal-to-Tzeltal process (Miranda, 2019), the Caretakers of Mother Earth in Bachajon (Álvarez 2019), as well as the network of peasant schools, the Madre Tierra pastoral, and the Mayence network of maize guardians – also in the Yucatán peninsula. The emergence of this constellation of experiences can be explained, to a large extent, by the role of liberation theology and the bishopric of Samuel Ruíz, but also by a very particular history influenced by the dismantling of state institutions in charge of coffee commercialization, the emergence of fair market networks, the influence of many civil organizations, the organizational history of the indigenous peoples and their historical agroecologies, the influence of Maoist thought, and the social and political change that the armed uprising of the Zapatista Army of National Liberation (EZLN) has meant for the region since 1994.

Other examples we can name include the Achi region in Guatemala, where despite the pernicious actions of NGOs, an agroecological process has been systematized that reaches 25 communities and more than 600 members (Einbinder et al. 2019; 2022). In China, there is the New Rural Reconstruction Movement: a movement critical of the developmentalist model that has more than 300 peasant cooperatives that carry out community-based agriculture projects (Alcock 2019). In northern Thailand, in Chiang Mai, a very dynamic movement linking networks of agroecological farmers, markets, NGOs and universities has been documented (Jung and Yoo 2023). There is also the experience of the coffee and agroforestry systems of the Agroecological Movement of Zona da Mata in Minas Gerais (Botelho, Cardoso, and Otsuki 2016), constituted by a complex network of diverse actors, such as grassroots church organizations, rural workers' unions, Puri indigenous community organizations and quilombola groups, cooperatives, the movement for rural education, the movement for the joint conquest of land, academic institutions, research centers and various NGOs (Dourado 2021). In Colombia, meanwhile, the agroecological efforts of the peasant reserve zones (Acevedo-Osorio and Chohan 2020) and the agrifood territories of the National Agrarian Coordinator (CNA) stand out (Salamanca 2019).

On occasions, coalitions and networks operate in a multi-territorial manner. This is the case of the experiences of safeguarding and exchanging native seeds, which have been formed or strengthened as a response to the processes of accumulation by dispossession of seeds. An iconic case is the movement for the defense of maize in Mexico, formed in 2001 when transgenic contamination of native maize was confirmed, at the same time that several laws were passed that shamelessly favored corporations. These events generated an resistance uprising that was consolidated with the Maize Defense Network,

made up of more than 300 peasant and indigenous organizations, in a coalition that catalyzed collective action repertoires such as the creation of guardian networks through which collective conservation actions are carried out, defense and rescue of local seeds through diagnoses, inventories, participatory improvement, and shelter in houses where peasants can access different varieties, as well as different fairs in which different types of agrobiodiversity exchanges are carried out (García López and Giraldo 2021). Another similar case is the Colombian Free Seed Network, which emerged as a rejection and rebellion against a state resolution that criminalized the safeguarding of traditional seeds, and which linked 80 peasant, indigenous and NGO organizations in six of the country's regions (García et al. 2019, 2021). This category also includes multi-territorial organizations established in discontinuous spaces. Examples of this type of organization are the Network of Indigenous Ministry Agents (EAPI) which brings together 250 indigenous and peasant communities from seven regions of the country through the Pastoral of the Land, and which has created an agroecological training center for each region, or the *Association Inter-zones pour le Développement en Milieu Rural* (AIDMR), which brings together 700 small farmers in 47 villages, and which carries out training processes in agroecology (Iyabano et al. 2022).

A group of territorial and multi-territorial experiences worth highlighting are the collectives and communities that return to agroecology as a territorial defense device against projects that threaten their living conditions, such as investments in megamining, oil wells, dams, thermoelectric plants, wind farms, construction of highways, establishment of predatory tourism, and in general, against the various types of infrastructure promoted by States in alliance with big capital. In more and more places, the peoples in their assemblies are questioning the projects of territorial dispossession, at the same time that they are questioning what their agricultural systems have become. For them, it makes no sense to reject a certain project and continue using agrochemicals and planting monocultures. The return to traditional agriculture is a political response aimed at creating autonomy, but also a tool to create communality through the recovery of collective work, reciprocity strategies, recovery and sharing of peasant seeds, and the creation of different meeting devices that serve not only for agricultural actions but also to create repertoires of gathering to create community. An example of this type of highly politicized response that seeks to defend territory and establish autonomy through agroecology, among many other strategies, are the 44 indigenous peoples who make up the National Indigenous Congress (CNI) in Mexico.³

We have already mentioned local, community, regional and multi-territorial experiences. Let us now turn to those with a national impact. The most important experience in this category is the National Association of Small Farmers (ANAP) in Cuba. Through the peasant cooperatives that make it up, they have managed to achieve the most spectacular transformation that a country has ever had towards agroecology, which began during the crisis of the 1990s special period and continues to grow stronger and stronger (Rosset et al. 2011). It is no small thing to say that thanks to the Peasant-to-Peasant movement, at present almost half of the country's peasants are in a process of agroecological reconversion, with 170,000 farms participating in the movement (Roque 2020). The Cuban

³Although there is no published systematization, we know from our own participation in different spaces the efforts of this coalition of peoples in agroecology. See: <https://www.congresonacionalindigena.org/>

case learned from the Nicaraguan Peasant-to-Peasant model promoted by the National Union of Farmers and Ranchers (UNAG) (Holt-Giménez 2006). In the Central American country, this process has 30 years of experience, and in 2015 it reported 23,000 families in agroecological transition (Saavedra, Briones, and Oyanguren 2017).

The MST is another important case of national advocacy experience. Considered one of the most important social movements in the world, the organization groups 350,000 families – about 1.5 million people – who have carried out land occupations and are distributed in thousands of camps and rural settlements. The MST adopted agroecology as a guideline in 2003, and although there is still a gap between discourse and action (Borsatto and Souza-Esquerdo 2019), there are excellent experiences in several settlements such as Lapa in the vicinity of Curitiba (Forsetto and Assis 2019), Santana near Fortaleza (MST-CE 2019), Cunha in Brasília (Frade and Sauer 2017; Almeida 2014), or Arataca in Bahia (Ferreira and Felício 2021), among many others. Although there is still no national strategy to disseminate agroecology, the movement continues to move forward with large meetings, fairs, training and research centers, with its recent campaign proposing to plant one million trees in agrarian reform settlements, and, in the northeast, it is beginning to have good results with the Peasant-to-Peasant methodology (MST-CE 2019; Fernandes et al. 2021).

The largest agroecological case in the world in absolute terms is the Zero Budget Natural Farming movement in India (ZBNF). This experience is an impressive case because of its rapid growth. The movement, which began in 2002, arose as a response to the 300,000 peasant suicides that occurred in the country's south, explained by the desperation of the farmers due to the impossibility of paying the loans contracted to sustain the agro-industrial model (Meek and Khadse 2022). The ZBNF, initially promoted by guru Subhash Palekar, is an agroecological approach without commercial inputs, using biopreparations, mulching, agroforestry, polycultures and biological pest control. Agroecological transformation found fertile ground in the workshops organized by the *Karnataka Rajya Raitha Sangha* (KRRS), a member of La Vía Campesina. Thanks to these meetings, which are often attended by thousands of people, it was possible to spread agroecological practices through a spontaneous process similar to Peasant to Peasant. Quite rapidly, a constellation of actors emerged that included peasants, volunteers from urban sectors, agroecological schools such as Amrita Bhoomi, NGOs and many other allies that made the ZBNF a movement that spread to the rest of the country (Khadse et al. 2017; Khadse and Rosset 2019). The number of participants is unknown, but there is a belief among some in the movement that the number is in the millions. Some venture to estimate that there are about twenty million people involved. The movement has attracted so much interest that in the southern state of Andhra Pradesh a public policy to disseminate ZBNF practices to over a million farmers has been implemented, and has even spread out of India, now expanding to Sri Lanka through the Movement for National Land Reform (MONLAR) and to Nepal with the Nepal Peasant Federation (ANPFA), both members of La Vía Campesina.

In Mozambique, meanwhile, there is the Peasant-to-Peasant movement of the *União Nacional de Camponeses* (UNAG). This is a 'child' of the Cuban methodology that has succeeded in creating agroecological oases amid the deserts of agribusiness. The organization does not have data, but the number of people involved can be estimated through the model based on agroecological promotion flows. Officially, 1200 promoters

have been trained – one for every 10 families – so it could be estimated that today there are at least twelve thousand people in the process of agroecological exchanges and transition. In reality there are many more, given the spontaneous processes of emulation that occur without centralized control and that make agroecology expand unpredictably (Val 2021). Also in Africa is the Zimbabwe Smallholder Organic Farmers' Forum (ZIMSOFF), an organization that brings together 19,000 peasant families distributed in four regional groups across the country who 'practice organic, traditional and agroecological agriculture' (LVC 2015, 13). Many of the members of this organization were former landless peasants who first occupied large estates and then won agrarian reform in 2002. Through peasant-to-peasant and community-to-community processes, they disseminate water harvesting and conservation practices, cover crops, organic fertilizers, minimum tillage, agroforestry systems, polyculture, traditional seeds exchange and planting. The Shashe Agroecology School has become a central link for training agroecological promoters who multiply agroecology in the recovered lands (LVC 2015).

There are many more cases in which peasant organizations are disseminating agroecology, such as the National Association for the Promotion of Ecological Agriculture in Honduras, the Assembly of the Poor in Thailand, the Boricuá Ecological Agriculture Organization in Puerto Rico, the Association of Rural Workers in Nicaragua, the Serikat Petani in Indonesia, and many others. All these examples are evidence that within the peasant movement, agroecology is spreading, growing and intensifying in more and more territories.

Following the scale, from the local to the international, we now move on to transnational coalitions. The best known is La Vía Campesina, a mega-organization representing the international peasant movement, which brings together more than 200 million peasants and indigenous peoples from 81 countries. Some argue that this organization embodies the true socialist international. The organization founded in 1993 was created as a strategy of the peasant movement on a global scale to promote a *vía campesina* ('Peasant's Way') in opposition to the 'Agribusiness Way' that destroys peoples and Mother Earth. The movement's agenda includes the rejection of neoliberal policies, the struggle for land and popular agrarian reform, food sovereignty, and, increasingly, feminism and the shaping of agroecological peasantry (Martinez-Torres and Rosset 2010). As Val (2021, 52) states,

Its multi-scale, polycentric and variegated structural plasticity enables La Vía Campesina to be at the same time fighting for a declaration at the UN, disputing the meaning of public policies with the FAO and the bourgeois States, and building autonomous territorial processes based on post-state and non-capitalist logics.

In this last respect the spaces of political articulation such as meetings, events and workshops, held in local, national and international spaces, and the processes of South-South solidarity, allow us to understand that there are Peasant-to-Peasant processes in other types of scales as well (Val et al. 2019).

Besides this organization, we can name many other international coalitions that defend agroecology, among which are the Latin American and Caribbean Agroecological Movement (MAELA), the Alliance for Food Sovereignty (AFSA) in Africa, the Network of Farmers' and Producers' Organizations in West Africa (ROPPA), the World Forum of Fish Harvesters and Fishworkers (WFF), the World Forum of Fisher Peoples (WFFP), the World Alliance of Mobile Indigenous Peoples (WAMIP), the Coalition for the Defense of Agroecology (CAA),

as well as scientific groups such as the Latin American Scientific Society for Agroecology (SOCLA) and the Brazilian Agroecology Association (ABA). All these coalitions represent cases in which localized processes and territorially located organizations are coming together to form a multisite struggle ready to confront the means of production, the common sense about agriculture and agrifood systems, in which many nodes act in multiple spaces, forming a political macrostructure aimed at disputing hegemony.

All these organizations together form an agroecological internationalism that functions as a sort of *agroecological peasant meta-subject* (Val et al. 2019): a multitude assembled in a non-linear architecture, in which multiple cooperative and independent actions create a wide dispersion of power. At this scale, the agroecological social movement can be perceived as a type of heterarchical articulation whose purpose is to question monopolies and to propose a political project in favor of life. The political power of the agroecological social movement, then, depends on two factors. On the one hand, its potential to articulate internally, connect material and immaterial territories, create collaborative processes, share knowledge and collective learning methodologies; and, on the other hand, its ability to become a political force capable of creating common sense in the apparatuses of power, such as the States and international organizations.

Emerging agroecologies

The second block consists of processes that create agroecologies where they did not exist before, as well as agroecologies that emerge as new forms of struggle. In the first case, the unviability of cities, fatigue with the poor quality of life in big cities, low wages, the economic and political crises, and the growing awareness of our civilizational crisis, are motivating a new generation to create other ways of life collectively through rural-urban migration mobilizations, and through generating urban agroecologies, and articulation with networks of localized and territorialized markets. In the second case, we can include the phenomena of re-peasantization, in which people motivated by the ecological and economic unfeasibility of the monoculture model move towards agroecology. There is also agroecologization through formal and non-formal education processes for peasants and non-peasants, and new emerging subjectivities in struggle such as feminist agroecologies, migrant networks, or the LGBTI community.

We will start with the neo-ruralists: a phenomenon that can be traced back to the hippie counterculture movement of the 1968 generation. Neo-ruralism is a global movement composed mainly of urban middle classes that, like the collectives that participated and created communities during the second part of the twentieth century, question the way of life in modern societies. The difference with its predecessors is that it emerges as a response to the crisis of civilization and energy decline, and that it takes permaculture as its main tool and philosophy of technical and political action. Neo-rural permaculture is based on the design of ecoproductive habitats that sustain the families involved (Ferguson and Lovell 2014). Thanks to this proposal, many people who come from urban areas escape from city life to build houses and comprehensive plots in the countryside that recycle nutrients, follow nature's cycles and patterns, and make the most of energy. Examples of these experiences include the cases documented by Benessaiah (2021) in Greece, Castaño (2020) in Catalonia, Censi and Victoria in Brazil, Iturralde (2018) in Argentina, and Milone and Ventura (2019) in Italy.

The most outstanding experience is that of ecovillages: a communal experiment that has been growing in recent years (Ruiz 2019). Groups of families, acquaintances or friends decide to acquire small plots to build their houses and common areas and create intentional communities in these spaces. Although the horizon of the ecovillagers is to become peasants, many of them combine professional and other activities with agricultural activities. Internet access and the transformations in the world of work brought about by the COVID-19 pandemic have made it easier for aspiring neo-peasants to combine permaculture work with telework. Ecovillages have a strong sense of spirituality, so that often the links that unite them are associated with rituals which often combine various new age type practices. The Global Ecovillage Network estimates that there are 15,000 projects of this type around the world, but this is a grossly underestimated figure, given that there are ecovillage projects that belong to other networks or that have been built silently and in isolation.

The permaculture project has also reached urban areas. This has been the case of towns and cities in transition, the eco-neighborhoods of Latin America (Coyote 2022) or post-oil municipalities arising mainly on the European continent. These are incipient but promising collective endeavors aimed at adapting small towns and neighborhoods with vegetable gardens, self-reliant energy, local markets and permaculture systems in urban contexts.

These designs for civilizational transition (Escobar 2018) are still embryonic proposals. One that has much more impact, and which belongs to the category of emerging agroecologies, is the growth of urban agriculture around the world. Although some may believe that agriculture in cities has disappeared, there are more and more experiences of vegetable gardens, food farming, fish farming and agroforestry in non-peasant spaces. In fact, it is estimated that between 15 and 20 percent of global food is grown in cities and their peripheries (Egerer and Cohen 2020). There are about 800 million human beings in the world practicing agriculture in urban areas. Multiple gardens located in backyards, on rooftops, on balconies and terraces, on walls, and in common spaces such as parks, greenhouses and gardens of residential complexes, as well as on the margins of streets where there are fruit trees and community gardens, are examples of how urban agriculture is a reality in metropolises, small cities and villages (Degenhart 2016). Admittedly, it is impossible to supply all urbanites with food produced in agro-urban systems. Even so, urban agriculture is a dietary supplement that allows for less dependence on purchased food and will become increasingly important in the context of the end of cheap food (Moore 2015). It is also true that the smaller and less densely populated cities become, the more they open the possibility of creating agroecological spaces that will make it possible to advance their residents' food autonomy. Given the space constraint in overpopulated metropolises it is easier to think of urban agriculture in small towns, which is of particular importance, as currently two thirds of the urban population live in small and medium-sized agglomerations (Smit, Ratta, and Nasr 1996).

Moreover, we must understand that people resort to urban agriculture in contexts of acute economic crises and political instability. Cuba is the best example of how urban agriculture can be crucial in a context of collapse and declining energy availability. The Urban, Suburban and Family Agriculture Program, founded during the special period, is iconic proof of the potential importance of this type of agriculture. Data from 2020 indicate that throughout the country there were one million agroecological patios and plots,

of which Havana had more than 100,000. In total by that year there were more than 9,000 hectares dedicated to the permanent production of vegetables, and 626,000 organoponic plots, intensive vegetable gardens and semi-protected crops (Minagricultura-Cuba 2020). Venezuela is also a good example of how economic and political crises induce urbanites to plant wherever they can while bartering the surplus. It is estimated that in the year 2021 there were more than 14,000 urban parcels throughout the country, covering a territory of 17,000 hectares, producing 1.3 million tons of food. There are also intensive gardens and urban organoponic gardens, which, together with parcels, could eventually cover 20 percent of Venezuelans' food needs (Minppau 2020). During the COVID-19 crisis, in more and more places throughout the world vegetable gardens began to flourish on rooftops, patios, gardens and even inside apartments, which shows, once again, that urban agriculture has become a survival strategy in acute crisis scenarios (Altieri and Nicholls 2020).

In addition to those mentioned, there are currently other agricultural experiences in large megalopolises, such as the agroecological urban supply colonies of the Union of Land Workers (UTT) in the province of Buenos Aires, the vegetable gardens in the favelas of Rio de Janeiro, or the two hundred hectares for agriculture that currently exist in Seoul, and the municipal plan to train one million urban farmers in the South Korean capital by 2024 (CGTN 2020). In addition to these productive experiences of self-sufficiency, there are networks of local agroecological markets, which are an example of urban agroecologies from the perspective of the encounter between farmers and consumers. Managed through participatory and self-managed guarantee systems, agroecological markets have become exchange spaces in cities where conscious consumers converge, mostly from the privileged classes. The Ecovida Network in southern Brazil is one of the most notable experiences. Thanks to a horizontal structure in which various actors are involved, it has managed to create and maintain nearly 200 local markets that link consumers in cities with more than 3,500 agroecological families (Perez-Cassarino and Ferreira 2013). Other examples are *Agrosolidaria* and the agroecological markets of the National Network of Family Farming in Colombia, which total at least 53 peasant and agroecological markets distributed throughout the country, as well as the Mexican Network of Organic Markets, which together with other markets bring together about 100 agroecological markets (Roldán-Rueda 2020).

The category of emerging agroecologies also includes multiple training spaces. There are experiences of formal education, from preschool to doctoral programs. Field schools in Brazil, agroecological high schools and rural teacher training schools are some examples of the multiplicity of agroecological training spaces that have been created in basic education. At the university level, there are mobilizations ranging from the struggles of the student movement for changing the curricula of agricultural programs, through the programs of intercultural universities, to the new agroecological engineering programs, and the master's and doctoral programs that are inaugurated every year in Latin America. The experience of the agroecology program at the Bolivarian University of Venezuela is a paradigmatic case of the importance of training for the political project of the agroecology movement. Between 2004 and 2016, the program had more than a thousand graduates who today lead productive agroecological projects in the countryside and the city, which has been especially useful for expanding the growing urban agriculture movement, and for participating in the many legal and institutional

advances promoted in the Bolivarian revolution (Domené and Herrera 2019). We can also name the 150 agroecology study centers established in higher education institutions throughout Brazil (Borsatto et al. 2021), which have similar programs opening rapidly throughout the region, and the Latin American Agroecology Institutes (IALA) located in Brazil, Paraguay, Argentina, Chile, Colombia, Venezuela, Nicaragua, Mexico (Rosset et al. 2019), as well as the nearly 70 similar agroecology centers in the five continents. In the case of non-formal education, there are many agroecological educational centers, peasant schools, diploma courses and virtual training spaces. Whatever the experience, we must place importance on the crucial multitudes formed in these spaces to feed the political struggle of the agroecological movement.

On the other hand, emerging agroecologies also include the processes of re-peasantization in the countries of the global North. As described by Jan van der Ploeg (2010), the phenomenon refers to the qualitative movement whereby commercial farmers convert to peasant agriculture to gain autonomy. Documented examples of this typology of processes are the Basque organization *Euskal Herriko Nekazarien Elkartasuna*, in the province of Vizcaya (Calvário 2017), the constellation of agroecological actors in Andalusia, Spain (González de Molina and Guzmán 2017), the Frisian Forests cooperative in North Friesland in the Netherlands (van der Ploeg 2021), the vegetable gardens in Bern, Switzerland, as well as many other increasingly systematized cases on the European continent (van der Ploeg et al. 2019). In the United States there are cases ranging from agroecological farmers in California (Guthman 2000) or Vermont (Caswell et al. 2021), to the popular agroecological experiences of farmworkers and migrant networks in Florida and in the different coalitions of the organizations of La Vía Campesina North America. In China, on the margins of industrialization policies, a whole generation of agroecological re-peasantization is emerging, mainly led by the youth (Tassin 2021).

We can also list the new subjectivities, as is the case of feminist agroecologies (Siliprandi and Zuluaga 2014; Trevilla Espinal et al. 2021). Inspired especially by peasant, indigenous and popular feminism (Seibert 2017), networks of women have emerged, which, through sisterhood links, create vegetable gardens, artisanal transformation workshops, training schools, and spaces for exchange and mutual support of agroecological care. There are many peasant women's organizations promoting agroecology, most of them small, though there are also larger organizations such as the Korean Women Peasants Association, Goddesses Central Cooperative in Nicaragua (Carrasco and Soto 2020), the National Rural and Indigenous Women's Association (Anamuri) in Chile, which brings together around 7,000 women from all over the country (Calitreo 2020) or the Organisation of Peasant and Indigenous Women of Paraguay (Conamuri) (Gagliano 2023). Similarly, there are feminist collectives in cities practicing urban and suburban agriculture. A very important case for the autonomous movement, due to its political relevance, are the Kurdish women in Rojava (Aslan 2021). More recently, groups of women scientists have formed, such as the AMA-AWA Alliance of Women in Agroecology (Zuluaga, Catacora-Vargas, and Siliprandi 2018), and, in addition to women's organizations, agroecological organizations of the LGBTI community have emerged in recent years, which, through the queer movement, have brought together gender diversity and peasant agriculture (Jenatton 2021).

Although it is impossible to do justice to the multitude of agroecological processes underway, the examples listed above describe a new generation of agroecologies

originating in the countryside and the city and reveal the emerging constellations that are leading agroecology in the twenty-first century.

Historical agroecologies

So far, we have dealt with the agroecology of social movements: rural and urban mobilizations that intentionally undertake the difficult task of greening their territories while creating other possible worlds. However, in addition to these agroecologies we must also consider the age-old Agri-Cultures of the peoples, which do not respond to the form of the social movement, but which are articulated through vernacular organizational modes (Rivera-Nuñez, Fargher, and Nigh 2020)). These Agri-Cultures are the creators of agroecological practices and bastions of agrobiodiversity and of the enormous biocultural heritage on which the agroecological social movement is based. Although historical agroecologies do not respond to expressions that at first sight we could think of as politicized, as Rivera et al. asserts, the truth is that they have managed to build infrapolitical tactics (Scott 1990) of collective action deployed for centuries, which has allowed them to persist under the historical onslaught of colonialism, globalized capitalism and the modernizing developmentalist machinery imposed in Asia, Africa and Latin America since the mid-twentieth century. This is a silent, stubborn and flexible disobedience, through which over the centuries people have developed mechanisms of biocultural resistance through modes that are not directly confrontational (Rivera-Nuñez, Fargher, and Nigh 2020).

Historical agroecologies often correspond to the centers of origin of cultivated plants described by Vavilov (1926), where, even today, there is still exceptional agricultural wealth. These places, which maintain landscapes of extraordinary beauty, are still repositories of an enormous genetic biodiversity of varieties and breeds of domesticated plants and animals, and they produce a large part of the world's food. After ten thousand years of biocultural co-evolution, the Vavilov centers, along with many other areas where millenary agroecological landscapes survive, are also the place of residence of an enormous number of local cultures. The close correlation between cultural diversity, expressed in the 6,700 languages spoken in the world today, and biological and agricultural diversity is well known. The 370 million people who are part of indigenous peoples live in areas with enormous biological and cultural wealth (Toledo and Barrera-Bassols 2008). A recent study by Garnett et al. (2018) documents that indigenous peoples today inhabit and hold tenure rights to no less than a quarter of the world's land surface, and that this immense amount of land represents 40 percent of the world's best-preserved areas.

These are not untouched areas. Although these well-preserved areas may appear to be pristine, there is no part of the planet that has not been inhabited and transformed by humans throughout history. People have transformed the ecosystems and enriched them, largely through agriculture. Perhaps the best example that explains the correlation between biodiversity maintenance and the presence of vernacular peoples is shifting cultivation: a type of biocultural practice that today covers 280 million hectares (Heinimann et al. 2017). Shifting cultivation, known as slash-and-burn agriculture, is a cyclical system that entails thinning forested areas with fire, followed by periods of cultivation and fallow. It is an agroforestry system that involves the rotation of transient polycultures alternating with a series of successional stages of forest (Thrupp et al. 1997). Succession refers to the multiple stages of vegetation regrowth, in secondary forests or on land adjacent to

cultivated plots. Thus, rainforest coexists with agriculture, in an anthropic arrangement that includes mature and young forest areas in conjunction with polyculture plantations, which offer useful plants for the local people.⁴ In the end, the different phases of the system's ecological succession result in the enrichment of forest biodiversity, which means that there is a much greater variety of plant and animal species in these intervened forests compared with the absence of shifting cultivation.

In addition to tropical landscapes, historical agroecologies include other types of landscapes in semi-arid and mountainous areas. Whatever the geography where they have been installed, these agricultural systems are characterized by their enormous plant and animal diversity. It is estimated that the peasants and vernacular peoples are the custodians and growers of seven thousand species of cultivated plants, including two million varieties, mainly local breeds. They also maintain 60,000 species of wild plants related to their crops, raise 34,000 species of livestock and about 9,000 creole breeds (ETC Group 2017). Among the agroecological systems that have made it possible to host this enormous biodiversity are polycultures and agroforestry arrangements, whose high complexity, use of endogenous inputs, manual and animal labor, small scale and use of techniques created and adapted to the cultural and ecological conditions of each territory, have allowed farmers to benefit from ecological interactions while protecting the planet's biodiversity. There are impressive agroecological landscapes such as the Andean terraces and flooded rice terraces of South and Southeast Asia, the subaks on the island of Bali, the chinampas in Mexico City, the waru waru of Lake Titicaca in Peru and Bolivia, the Maghreb oases in Algeria and Tunisia, the agrosilvopastoral systems of the Swiss Alps, the concentric ring agriculture of the Mossi in Burkina Faso, among many others (Koohafkan and Altieri 2010; Toledo and Barrera-Bassols 2008).

The Chinese case is illustrative of the persistence of historical agroecologies (Shiming and Gliessman 2016). Despite the impressive and devastating economic growth and modernizing locomotive of the last decades, the country, with a population of 1.4 billion people, still has 200 million traditional small farms (van der Ploeg and Ye 2016), where agroecological practices are still used based on experience going back more than 7 thousand years (Liu, Duan, and Yu 2013). In the case of rice alone, in the Asian nation there are 1.5 million hectares in which rice polycultures are planted on slopes, flooded terraces or rain-dependent slopes, where multiple rice compositions are practiced, including associations with other crops, fish and ducks (Lu and Li 2006).

On the other hand, it is important to highlight the fundamental role played by women in historical agroecologies. Their ancestral responsibility in care work – which includes feeding families and communities, among many other activities – is fundamental for the proper functioning of these millenary agricultural systems. Decisions about which plants and varieties to grow is a decision that often rests in the hands of women. Women are also often the guardians of agrobiodiversity, caretakers of water and small domestic species. In particular, home gardens and backyard agriculture are spaces controlled by women, which often contain hundreds of species of domesticated and wild plants that constitute very important reservoirs of the planet's agrobiodiversity. But

⁴A study in the Amazon rainforest found that 84 percent of Amazonian tree plants are useful to local populations (Coelho et al. 2021), while Ford and Nigh (2016) report that the Mesoamerican milpa rainforest provides 90 percent of usable vegetation for Mayan people.

traditional societies have also been transformed by the migration of men, which has resulted in the phenomenon of the feminization of agriculture. In India, 70 percent of agricultural work today is carried out by women, who hold the enormous wealth of knowledge and practices of their millenary agriculture. The important role of women in agroecological peasant economies has recently been studied in Brazil using a feminist methodology. Its conclusions show that women can generate more value to the family economy as a whole compared to the work done by men (Rody and Telles 2021).

Whatever the case may be, the millenary Agri-Cultures of the peoples constitute the support of the world food supply, and, for our purposes, the popular basis of the agroecological movement. Historical agroecologies have not been completely codified by globalized capitalism and its institutions, and their strength lies precisely in building a politics of the margin, ingenious and flexible with political conjunctures: a powerful peasant and indigenous force, which has allowed these millenary agroecologies to remain our contemporaries.

Final thoughts

It is important to mention some limitations and clarifications regarding this classification. In the first place, it can create a certain arbitrariness, since cases could be placed not only in one, but in two or even in all three categories. For example, many farmers from historical agroecologies, mainly of indigenous matrix, could be superimposed with the agroecologies of return. It is common for families to quietly return to their ancestral practices in times of crisis. In this regard, it is worth noting that this classification is only a heuristic exercise to help visualize the agroecological movement as a whole, and not a rigid box to pigeonhole experiences.

It is also necessary to emphasize that not all agricultural families included in peasant organizations or urban agriculture projects are in agroecological transition processes, and it is likely that the intensity of their practices is too early to be included as part of the agroecological movement. There are quite a few plots that are at best in input substitution processes, and others that have abandoned the transition and returned to green revolution practices. The agroecological transition is a dynamic process, often difficult, that depends on factors such as ecological restoration, organizational strength, access to markets, accompaniment, favorable political environment, among several other aspects, whose variation can modify the permanence of families in the transition to agroecology, especially in those that are in the initial stages.

Another limitation is related to the fact that many families, especially those belonging to the category of historical agroecologies, whose ancestral practices follow agroecological principles, do not consider themselves part of a movement or an emancipatory political project and do not call their agricultural systems agroecological. Likewise, there are peasant families who are oases in the desert, agroecological beacons in the midst of an environment where other families are not, and who are not part of any organization. In both cases, it would be inappropriate to exclude them as part of the broader agroecological movement. In fact, as in the case of the farmer-to-farmer method, it is likely that these farmers will become the basis for generating multiplier processes. Even within this classification, there are families who have been able to adapt their traditional, often highly diversified crop and livestock practices to the non-intensive use of

agrochemicals and have no intention of abandoning them. There are many gray areas that can generate debate about whether they are agroecological or not.

Other restriction is related to the lack of many more studies that focus on systematizing successful experiences. Although there are efforts to document experiences, such as the collective research program on which this paper is based and the independent works referenced, much more research is needed in the future to gather knowledge about these cases, to give us an idea of the amount of land under the control of the agroecological movement, the impact in terms of total production, the contribution to improving access to food, the level of family nutrition and dietary diversity, and the extent to which autonomy has been achieved with respect to dominant inputs and markets. There are still many questions about the extent to which the agroecological movement is or is not succeeding in transforming the food system and transcending agrarian capitalism.

Despite these limitations, this article aims to contribute to the understanding of the agroecological movement with a taxonomy that allows us to visualize it as a whole, and to understand that we started with a popular power that cannot be underestimated. Millions of people in the countryside and in the city, with allies from different sectors, are the basis of the global agroecological movement. We are talking about of a political force that takes the form of a multiscale, multisite, and heterogeneous social movement, composed of constellations of multiple people, collectives and organizations, acting in a privileged way, through micro and infrapolitical modes, without neglecting the fronts of struggle in the macro structures of power. In a Gandhian way, this multiplicity of organizational expressions embodies the change they want to see in the world, and at the same time they form broader organizations to hegemonize their life project in the global power structures.

Social organizations and movements have managed to build alliances with other urban movements, academics, and NGOs in order to exert more effective pressure to change policies that affect their means of production — land, water, seeds, etc. The recognition of peasants' rights, the inclusion of agroecology in the FAO agenda (Giraldo and Rosset 2022), the hegemony gained with regard to food sovereignty, and the many public policies of an agroecological nature implemented in recent years (Giraldo and McCune 2019) are evidence of this. In fact, thanks to the pressure of social movements, progress has been made in the institutionalization of agroecology and conquered ambitious programs that cover hundreds of thousands and even millions of peasant families in their respective countries, as is the case of the National Policy for Agroecology and Organic Production in Brazil (Sambuichi et al. 2017), the public instruments associated with the ZBNF movement in Andhra Pradesh, India (Veluguri et al. 2021), or the Mexican government's Seeding Life and Production for Wellbeing programs (Bartra et al. 2023). Despite, there is still a need for further critical analysis of the suitability of these policy instruments to effectively accompany the emancipatory project of the agroecology movement.

In order to design policy instruments capable of supporting and strengthening efforts such as those described above, it is necessary to draw inspiration from the innovative social processes that have been built up over decades by the agroecological social movement, in order to prevent state interventions from creating dependencies or being used for purposes unrelated to the movement (see Giraldo and Rosset 2022). It is also important that the agroecological movement knows how to articulate in a more organic way with peasants, indigenous and popular feminisms, ethnic

movements, political ecology movements against dispossession, class-based workers' movements and the massive popular uprisings of our time, so as to create a political power that does not lose its capacity to act locally but has the strength to hegemonize its positions in the bodies that govern agriculture in the world and in society as a whole. It is important not to forget that the efforts of the organizations have to emerge in a difficult context of land grabbing (Borras et al. 2011), seed monopolization (Wattnem 2016), the expansion of extractivist projects (Chagnon et al. 2022), and the cultural hegemony of agribusiness (Giraldo 2019), and therefore the importance of linking their territorial struggles with the broader struggle for structural transformations that favor the movement's goals.

Fortunately, this project does not have to be a blank slate. As I have tried to show in this article, there are a number of very important experiences in the city and in the countryside that are not only reactive but also proactive struggles, not without problems, contradictions, conflicts and setbacks, that challenge the hegemony of the agri-food systems. All these experiences, taken together, allow us to affirm that the agroecological movement is one of the most important social movements in the world and one of the most relevant emerging popular political projects to face the civilizational crisis of our time.

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