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Agroecological *Formación* in Rural Social Movements

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GUATAMALAN FARMERS' WALK

Introduction

The struggle for popular control over food systems is present in all parts of the world today. As free trade agreements have come to include food as a major export-import commodity, strong social movements have emerged to challenge neoliberal policy and defend ecological family farming (Rosset and Martínez-Torres 2012; Rosset 2013). These movements denounce the corporate agribusiness model, in which access to food, land, knowledge and nature is increasingly negotiated through exploitative capitalist relations, alienating and excluding the world's vast majority from control over their necessary means of survival. In the case of La Via Campesina (LVC), an international alliance of social movements that challenges transnational agribusiness and indeed the entire neoliberal model through peaceful protests, policy proposals, and global articulation, some 200 million families and their organizations are now working together to achieve food sovereignty (Desmarais 2007; Martínez-Torres and Rosset 2010; La Via Campesina 2013).

The industrial agriculture model is only about 60 years old, but has already contaminated water sources, replaced tens of thousands of seed varieties with a dozen cash crops, diminished soil fertility around the world, accelerated the exodus of rural communities toward unsustainable megacities, and contributed to global inequality. Additionally, the corporate food system currently contributes between 44 and 57% of global greenhouse emissions (Grain, 2011). La Via Campesina rejects the industrial agriculture model, at the same time as it rejects the predominance of the profit motive over any other principle in the capitalist structuring of global food systems. In collaboration with civil society and consumer groups, rural social movements propose distinct methods for a different kind of food system.

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Ecological agriculture, or agroecology, is an element of this broad effort to recuperate food systems from the corporate agribusiness model. Agroecology is sometimes contrasted with the input-substitution model, found in much organic agriculture in the United States, in which synthetic inputs are simply replaced by purchased off-farm organic inputs without changing the structure of monoculture and agribusiness. Applying ecological principles to agriculture, on the other hand, emphasizes internal inputs, nutrient cycling, energy efficiency, and local knowledge in the construction of greater autonomy.

Peasant organizations have increasingly embraced the idea of agroecology, in order to make themselves less dependent on costly, petroleum-based farm inputs and markets controlled by transnational capital. Agroecology also defends peasant wisdom and traditional agricultural systems, most of which have been sustainable over hundreds or thousands of years.

Member organizations of La Via Campesina have built (or are currently building) some 40 schools of agroecology—ranging from informal farmer training centers to more formal universities—all created and directed by the rural organizations themselves. Among their objectives, the schools have come to combine the tradition of popular education with the farmer-to-farmer methodology—the horizontal, “movement” form of agroecological education and promotion. Finally, the schools have the added challenge of generating intergenerational dialogue—passing along the historical memory of elders to peasant youth activists.

Popular Education, Agroecology, and the *Diálogo de Saberes*

Popular education became intensely well-known in Latin America with the work of Brazilian pedagogue Paulo Freire in the late 1960s. The challenge of creating horizontal, problem-posing educational processes—and the commitment to systemic social change led by the historically oppressed—proved to be highly important in Latin American revolutionary movements of the 20th century. Popular education is conceived from trust in all peoples' ability to think critically and act strategically if given the tools to analyze their own lives. Its commitment to forging dialogue—rather than preaching or depositing knowledge “packages”—is based on the idea that learners cannot be considered mere objects, but must be active subjects of the process of learning as discovery.

In contemporary rural social movements, the concept known in Spanish as the *diálogo de saberes* (roughly the equivalent of “dialogue between ways of knowing”) expands on popular education by suggesting that there are many equally valid “ways of knowing” the world (Martínez-Torres and Rosset, forthcoming). Given the enormous diversity of organizations and actors in LVC, the *diálogo de saberes* (DS) has characterized LVC processes of education, training, formation, and exchange in agroecology. DS takes place at the level of training centers and schools of the LVC organizations, as well as the larger scale of agricultural landscapes and peasant territories. Local peasant knowledge, indigenous and feminist ways of knowing, among others, are validated and considered on an equal basis with logical, Cartesian, historically Eurocentric knowledge. Agroecology is a field of practice and theory which challenges many of the dominant prepositions of modernism (like universally applicable practices in agriculture based on rational application of chemistry laws, the enshrinement of the urban proletariat as history's sole anti-capitalist protagonist, and the “bigger is better” approach to change) and thus provides a basis for the *diálogo de saberes* within LVC (Toledo, 1992; Rojas, 2009;

Sevilla-Guzman and Woodgate, 2013). To describe its agroecology trainings, schools, workshops, and exchanges, LVC uses the concept of *formación*, which may be roughly translated as training, although it refers to the construction of a better human being (the new man or new woman of the new society) through critical reflections and actions.

The organizations that make up LVC have increasingly developed agroecological *formación* processes aimed at accelerating historical transitions to food sovereignty. In agroecology schools, the *diálogo de saberes* takes place between scientific, peasant, rural proletarian, and indigenous ways of knowing. Over time, LVC has developed a better understanding of how schools and processes of agroecological *formación* can benefit rural social movements and create new understandings at national and societal levels. The three case studies that follow show the evolution of LVC's concept of how to structure agroecological *formación*—first as an institute (in Venezuela), then as a territorial process (in Cuba), and finally as a combination of both under the umbrella of popular education (in Nicaragua). In each case, common themes arise: the need for a *diálogo de saberes*, the pace of change (in farming, in organizations, and within people), the search for methods to create and sustain autonomous processes, and the complex interplay of factors that motivate people to learn about, practice, and transform agriculture.

Paulo Freire Latin American Institute of Agroecology (IALA) in Venezuela

After years struggling to secure publicly-financed institutions that meet the educational needs of rural families and their social movements, in late 2005 La Vía Campesina signed a groundbreaking agreement with Venezuelan President Hugo Chavez Frías (Torrez 2006). Elaborated in the context of the Bolivarian Alternative for the Peoples of the Americas (ALBA) – a regional alliance dedicated to social, political, and economic integration – this historic agreement between an international social movement and a national government laid the foundation for the LVC's Paulo Freire Latin American University Institute of Agroecology (IALA-PF). Named after Brazil's renowned popular educator, the LVC's first continental agroecological university includes the physical structures (classrooms, dorms, eating areas, etc.), farmlands, and state support (salaries, scholarships, and academic recognition) required to host food sovereignty student-activists for a five year period.

IALA-PF is the first international peasant university, a place where the daughters and sons of peasants and indigenous people are trained to be future leaders and cadre of their organizations, with political organizing and agroecological skills. Chosen by their social movements to both study in, and build, IALA-PF, its first set of students came from a diverse array of LVC affiliate organizations including the Landless Workers' Movement (MST/Brazil), the Rural Workers' Association (ATC/Nicaragua), the Ezequiel Zamora National Campesino Front (FNCEZ/Venezuela), and the Organization of Struggle for

the Land (OLT, Paraguay), to name just a few. These young land activists, over 100 when the institute was first established, were accompanied by a much smaller group of LVC cadre (5-7 adults) tasked with guiding both the political and pedagogical development of the institute. Coursework during the first year at IALA-PF includes basic university-level content such as mathematics, chemistry, biology, and ecology, as well as courses in social science on the complexity of small-scale family farming, biocultural diversity, and social ecology. In year two, students study statistics, physics, and botany while taking additional classes on ecoregions, campesino cosmologies, and agriculture in the social history of the Americas. With agroecology, sustainable agroecosystems, and food sovereignty as the permanent point of reference, this integration of the physical and social sciences continues throughout the time they study, live, and work in IALA-PF. According to Fausto Torrez, of Nicaragua's ATC and active member of the Latin American Coordination of Organizations in the Countryside (CLOC), IALA-PF was established to "instill a pedagogical and political thought committed to the social dynamics of popular struggle."



COLLECTIVE DECISION-MAKING AT IALA PAULO FREIRE IN BARINAS, VENEZUELA

To achieve the overall objective of forming cadre capable of facilitating complex rural transformations through collective thought and action, students at IALA-PF distribute their time more or less evenly between the classroom, experimental agroecological production, and community organizing for food system transformation. To ensure the university is a reflection of their own education praxis, the entire student body works through collectives of 10-12 students per group known in Portuguese and Spanish as *núcleos de base* (NBs). Borrowed from the MST's experience with land occupations involving hundreds of landless families collectively managing production, consumption, health, education, and culture, the NBs of IALA-PF meet to discuss everything from classroom content to agroecological production, and the distribution of members into different working groups based on specific needs and or initiatives. Working groups have been created, for example, to manage seed saving and sharing, to critically assess the university's academic personnel, and to create procedural guidelines to be followed by the entire IALA-PF community. Designed so that students develop

practical experience in collective decision-making, the results of discussions within NBs are taken to university-wide assemblies for ratification, thus strengthening the collective's overall commitment to the IALA-PF process. This methodology is strongly influenced by the teachings of Anton Makarenko and the MST's praxis in popular education (Tarlau 2013). Its main drawback, in the context of IALA-PF (where formal evaluations and grades pressure students to prioritize the classroom), is that it tends to limit the amount of time dedicated to community organizing, thus reducing the university's impact on local food system transitions.

As La Vía Campesina's first formal opportunity to experiment with university-level agroecological *formación*, and with local partners largely unfamiliar with LVC's prior pedagogical experiences, certain challenges arose that provided lessons for the movement. Decisions about such fundamental questions as what to study, produce, and distribute—when, how, and with whom—became objects of reflection and ideological debate in this experimental university made up of over 100 social movement activists from over a dozen different national and organizational contexts. A spontaneous *diálogo de saberes* was formed as students, professors, pedagogical leadership, and administrators brought diverse historical experiences and perspectives to the radically democratized educational space. Collective decision-making processes involved politically less-experienced peasant youth taking advantage of a rare educational opportunity for a five-year degree through their LVC affiliate organization, along with seasoned cadre of rural social movements like the Landless Workers' Movement (MST) of Brazil, and even career administrators from Venezuela's Ministry of Higher Education, in the construction of an alternative educational project. Such processes showed an enormous breadth of ways of knowing present in one institutional setting, and the result was mixed—excellent as a political-cultural exchange, highly difficult as an educational experience. The graduates of IALA-PF are widely considered within LVC to have passed a great test of character, and have been integrating into the national leadership of their organizations and movements since the graduation of the first class in 2012 [<http://ialapaulofreire.blogspot.com/>].

The *Campesino-to-Campesino* Agroecological Movement in Cuba

A persistent debate in the literature on agroecological farming, and on the impact of agricultural research in general, has been the question of scaling-out (broad adoption over wide areas and by many farmers) and scaling-up (institutionalizing supportive policies for alternatives) successful experiences (von der Weid 2000; Holt-Giménez 2001; Pachicho and Fujisaka 2004; Altieri and Nicholls 2008b; Rosset et al 2011). This is paralleled in the literature concerning the effectiveness and appropriateness of conventional agricultural research and extension systems for reaching peasant families in general (Freire 1973), and more specifically for promoting agroecology rather than the Green Revolution (see, for

example, Chambers 1990, 1993; Holt-Giménez 2006; Rosset et al. 2011).

Agroecological innovation in its "movement form"

While conventional top-down agricultural research and extension has shown a negligible ability to develop and achieve broad adoption of the practices of agroecological diversified farming, social movements, and socially dynamizing methodologies appear to have significant advantages (Rosset et al. 2011). Social movements incorporate large numbers of people—in this case large numbers of peasant families—in self-organized processes that can dramatically increase the rate of innovation and the spread and adoption of innovations.

The fact that agroecology is based on applying principles in ways that depend on local realities means that the local knowledge and ingenuity of farmers must necessarily take a front seat, as farmers cannot blindly follow pesticide and fertilizer recommendations prescribed on a recipe basis by extension agents or salesmen. Methods in which the extensionist or agronomist is the key actor and farmers are passive are, in the best of cases, limited to the number of peasant families that can be effectively attended to by each technician, because there is little or no self-catalyzed dynamic among farmers themselves to carry innovations well beyond the last technician. Thus these cases are finally limited by the budget, that is, by how many technicians can be hired. Many project-based rural development NGOs face a similar problem. When the project funding cycle comes to an end, virtually everything reverts to the pre-project state, with little lasting effect (Rosset et al. 2011).

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The most successful methodology for promoting farmer innovation and horizontal sharing and learning is the *Campesino-a-Campesino* (farmer-to-farmer, or peasant-to-peasant) methodology (CAC). While farmers innovating and sharing goes back to time immemorial, the more contemporary and more formalized version was developed locally in Guatemala and spread through Mesoamerica beginning in the 1970s (Holt-Giménez 2006). CAC is a *Freirian* horizontal communication methodology (*sensu* Freire 1970), or social process methodology, that is based on farmer-promoters who have innovated new solutions to problems that are common among many farmers or have recovered/rediscovered older traditional solutions, and who use popular education methodology to share them with their peers, using their own farms as their classrooms. A fundamental tenet of CAC is that farmers are more likely to believe and emulate a fellow farmer who is successfully using a given alternative on their own farm than they are to take the word of an agronomist of possibly urban extraction. This is even more the case when they

can visit the farm of their peer and see the alternative functioning with their own eyes. In Cuba, for example, farmers say "seeing is believing" (Rosset et al. 2011).



PEASANT-AS-PROFESSOR IN THE *CAMPESINO-A-CAMPESINO* METHODOLOGY IN CUBA.

Whereas conventional extension can be demobilizing for farmers, CAC is mobilizing, as they become the protagonists in the process of generating and sharing technologies. CAC is a participatory method based on local peasant needs, culture, and environmental conditions that unleashes knowledge, enthusiasm, and protagonism as a way of discovering, recognizing, taking advantage of, and socializing the rich pool of family and community agricultural knowledge which is linked to their specific historical conditions and identities. In conventional extension, the objective of technical experts all too often has been to replace peasant knowledge with purchased chemical inputs, seeds, and machinery, in a top-down process where education is more like *domestication* (Freire 1973; Rosset et al. 2011). Eric Holt-Giménez (2006) has extensively documented the Mesoamerican CAC social movement experiences with CAC as a methodology for promoting agroecological farming practices, which he calls "peasant pedagogy."

Cuba is where the CAC social methodology achieved its greatest impact, when the National Association of Small Farmers (ANAP), a member of LVC, adopted it along with a conscious and explicit goal of building a grassroots movement for agroecology inside the national organization (extensively detailed in Machín Sosa at al. 2010; and Rosset et al. 2011). In less than ten years the process of transforming systems of production into agroecological integrated and diversified farming systems had spread to more than one third of all peasant families in Cuba, a remarkable rate of growth. During the same time period when peasants became agroecological, the total contribution of peasant production to national production jumped dramatically, with other advantages in reduced use of farm chemical and purchased off-farm inputs (more autonomy), and greater resiliency to climate shocks (Machín Sosa at al. 2013; Rosset et al. 2011; Altieri and Toledo 2011).

IALA Mesoamérica in Nicaragua

In Nicaragua, La Via Campesina is making a synthesis of both models—agroecological *formación* as institution-

building and as a territorial process. The Rural Workers Association (ATC), a member organization of La Via Campesina, has been involved in the construction of other LVC agroecology schools, and sent several of its youth cadre to study at Venezuela's IALA Paulo Freire. Among the returning graduates, there was a feeling that although they received a formidable political and technical education, in Central America they wanted to build an agroecology institute with more organic ties to networks of farmers. IALA Mesoamérica, underway on a mountainous campus of the ATC in Matagalpa, inserts a school of political and agroecological *formación* into an ongoing *Campesino-a-Campesino* process.

A key pedagogical principle of IALA Mesoamérica is the idea that participation in a social movement is an educational process. By design, this IALA inserts rural youth into CAC horizontal communication processes, so that they can learn how best to facilitate such processes and articulate them as a social movement. The experience itself of being a popular educator is the fundamental learning tool for the young Central American participants in IALA Mesoamérica, who also study technical aspects of agroecology, cooperative organization, media strategies, and political theory. While farming families develop productive strategies and communicative skills, young movement people from LVC develop the ability to understand and guide complex social-cultural learning processes.



OBSERVATIONAL LEARNING: A FATHER AND SON ON THEIR COOPERATIVE FARM IN EL CRUCERO, NICARAGUA

Generational strategy

Countless agricultural extension programs have shown that adult farmers rarely incorporate the technical advice given to them by young—often urban—agronomists or engineers. Agroecological principles may be less alienating to peasants than conventional agronomical formulas—although not always at first—but that alone does not make hardened adults any more likely to listen to university students who have mostly studied agriculture in textbooks, classrooms, and experimental lots, often using language and terminology rejected by peasants. This is even more true when the young people, as in the case of IALA Mesoamérica, may come from different cultural contexts (Southern Mexico to Panama), and may use distinct colloquial terms for farming concepts. How then to combine an international university in agroecology with on-the-ground, territorial campesino-to-campesino processes?

To get past this dilemma, IALA Mesoamérica teaches youth activists how to *facilitate* communication *among* peasant farmers, rather than *extend* packages of content to farmers. In this way, young people in the agroecology movement are popular educators. Tasks like identifying local leaders and understanding community dynamics, assessing farms and finding local innovations, discussing agroecology in cooperative assemblies and inviting peasants to get more involved, essentially relate to the communicative skills that youth can learn through training as popular educators. Youth facilitators eventually teach farmers about the ecological principles of what they are already doing and help them use their farms as demonstrative parcels, so that they can better explain their advances to other farmers. Effective farm visits, workshops, and exchanges are essential to facilitate the spread of agroecology; these require personal knowledge of the motivations of the participating farmers, something that only can be achieved by an organization when its cadre participates in grassroots, community processes. This is why agroecological facilitators—popular educators in the countryside—are so necessary for creating autonomous movements toward agroecology. The vision of IALA Mesoamérica is for this role to be filled by youth in the Central American countries that, like Nicaragua, have a huge and growing youth population. From the position of local facilitator of a CAC process, these young people may go on to take significant responsibilities within their organizations; first, they will have been “formed” as popular educators and organizers in agroecology.



GUATAMALAN FARMERS PHOTO BY NANCY ROMER

Peasant Pedagogy and *Diálogo de Saberes* in La Via Campesina

The past five years have seen virtually every organization in LVC around the world attempt to strengthen, initiate, or begin to plan its own program for promoting, to varying extents, the transition to agroecological farming among their member families. Over the past five years LVC has given a key role to its "International Working Group on Sustainable Peasant Agriculture." Among other tasks, this Working Group (with a female and a male representative from each of the nine regions into which LVC divides the globe), under the leadership of the National Small Farmers Association of Cuba (ANAP) and the National Union of Peasant Associations of Mozambique (UNAC), is charged with strengthening and thickening internal social networks (Fox 1996) for the exchange of experiences and support for the agroecology work of the member organizations. This includes identifying the most advanced positive experiences of agroecology, and studying, analyzing, and documenting them (*sistematización* in Spanish) so that

lessons from them can be shared with organizations in other countries.

In Latin America, LVC has learned more and more about the kind of agroecological *formación* that it wants, to strengthen its organizations, their ties to one another, and the cohesiveness of the food sovereignty alternative. The foundation and development of IALA Paulo Freire in Venezuela is significant in the history of Latin America's rural social movements: it is the continent's first truly peasant university, bringing together committed youth from rural social movements in North, Central, and South America to study agroecology as a dialogue between political, technical, traditional indigenous, and revolutionary worldviews. Collective decision-making remains at the heart of the experience, yet the energy spent focused on the school's educational praxis has limited the ability of students to become effective local actors, with priority instead being given to internal organization and academic achievement.

In the case of ANAP in Cuba, an alternative structure—territorial processes of innovation and communication using popular education techniques—led to the phenomenal success of agroecological farming. However, the Campesino-to-Campesino Agroecological Movement of the ANAP is purely informal learning; it doesn't respond to any need—urgent in other countries—to create formal educational opportunities for rural youth. So it is that in Nicaragua, IALA Mesoamérica, dialectally taking from both examples, sets out to create a university for peasant youth at the same time as it connects them with territorial processes of horizontal agroecological education. If it is able to consolidate over the next few years, IALA Mesoamérica could provide invaluable lessons for peasant movements and popular educators.

In reality, the process of dialogue used to improve agroecological *formación* in LVC is quite broad, stemming from the diverse historical experiences of member organizations. In November 2013, Cuba's National Association of Small Farmers (ANAP) held a special course at the organization's school, the Niceto Pérez National Training Center in Guira de Melena, for 40 international delegates—all members of teams working on agroecology schools in LVC organizations. This methodological course allowed delegates to share stories, strategies, experiences, and ideas about how to create agroecological processes in their countries. Delegates from Nicaragua, Guatemala, Panama, Colombia, Brazil, Chile, Argentina, Haiti, the United States, Canada, Mexico, Mozambique, Mali, and Zimbabwe were on hand to share experiences and learn from the methodology of the CAC Agroecological Movement in Cuba. Essentially popular education in agroecology, ANAP's methodology represents an international high water

mark in terms of helping tens of thousands of farmers become agroecological educators.

At the same time, the vastly diverse historical experiences present at the course showed the importance of the *diálogo de saberes* for spreading agroecology around the globe. With the enormous variety of rural actors, including peasants, indigenous groups, veterans, traditional healers, churches, and migrant workers, among many others, diverse strategies become essential. No one pedagogical approach can hope to respond to the diversity of worldviews and cultural senses from which people may approach agroecology. The *diálogo de saberes* provides an educational perspective for understanding and recognizing distinct ways of knowing the world. It shares a root with popular education, but has different categories.

Popular actors, including peasants, proletarians, and indigenous and other peoples marginalized by the neoliberal model—including many educators and researchers—are increasingly coming together to build food system alternatives. Agroecology is an important “socially activating tool for the transformation of rural realities through collective action, and a key building block in the construction of food sovereignty” (Martínez-Torres and Rosset, forthcoming). Its use, as a tool and as a building block, in turn corresponds to the ability of popular actors to create spaces for dialogue, reflection, and learning.

Note: Readers interested in doing so can support La Vía Campesina International [www.viacampesina.org] and the effort to build IALA Mesoamérica by contacting [saludcampesina@yahoo.com.mx].

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