

ROUTLEDGE HANDBOOK OF FOOD AS A COMMONS

*Edited by Jose Luis Vivero-Pol, Tomaso Ferrando,
Olivier De Schutter and Ugo Mattei*

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THE ‘CAMPESINO A CAMPESINO’ AGROECOLOGY MOVEMENT IN CUBA

Food Sovereignty and Food as a Commons

Peter M. Rosset and Valentín Val

Introduction

Agroecology has played a key role in helping Cuba survive the acute crisis caused by the collapse of the socialist bloc in Europe in 1989-90 and the subsequent chronic crisis due the U.S. trade embargo, which have prevented economic normalization on the island ever since socialist trade relations were lost. Cuban peasants have been able to boost food production without scarce and expensive imported agricultural chemicals by first substituting more ecological inputs for the no longer available imports and then by making a transition to more agroecologically integrated and diverse farming systems.

This has been a process of collective transformation, based on the high level of organization of the Cuban peasantry through their national organization, the National Association of Small Farmers (ANAP), a member of the transnational peasant movement, La Via Campesina (LVC). This process has been stimulated through a horizontal, peasant-to-peasant learning and sharing methodology called ‘Campesino a Campesino’ (CAC), which helped create a national grassroots agroecology movement among peasants. This has been assisted by the perspective in Cuba in general and in ANAP and LVC, in particular, of food production as a social, public good and, in the sense of this book, of food as a commons or *bien común* produced through collective social process, rather than as a commodity (Rosset 2006a). In this sense, Cuba, ANAP and LVC are an example of what Vivero-Pol (2017 and this volume) calls the epistemological school of thought that sees the commons – food in this case – as a social construct that is defined by a collective practice by specific communities – peasants in this case. As we discuss below, this counter-hegemonic vision of food as a commons and not as a commodity (Vivero-Pol 2017) has permeated Cuba since the 1959 Revolution (Funes et al. 2002; Benjamin *et al.* 1984; Enríquez 1994).

An historical perspective on Cuban agriculture

Before the 1959 Cuban Revolution, the island was characterized by a typical *latifundio-mini-fundio* system of land distribution and tenure, with a strong presence of US capital, the production of sugar for export and a marginalized peasantry (Nova 2002). In the early years of the

Revolution, the government invested heavily in improving conditions in the countryside and carried out an extensive agrarian reform over several progressive phases. While initial policy was directed at diversifying away from sugar and export dependency, extreme hostility by the US and the opportunity to join the international socialist division of labor (Comecon) on favorable terms of trade ended up strengthening the export monocrop emphasis as well as dependency on imported food, agricultural inputs and implements (Nova 2002, Machín Sosa *et al.* 2010). By 1989, 30% of agricultural land was devoted to a single export crop, sugarcane, which generated 75% of export revenues, while 57% of all food was imported (Rosset and Benjamin 1994).

In the export-led wave, Cuban agriculture was a world-class case of modernization and of the Green Revolution (Machín Sosa *et al.* 2010), with the most tractors per person and per unit of area and the second highest average grain yields of Latin America (Rosset and Benjamin 1994). Agriculture made heavy use of chemical inputs such as fertilizer, 48% of which was imported (with a 94% import coefficient for the fertilizer that was manufactured domestically), and pesticides, 82% of which were imported (Rosset and Benjamin 1994). While this model was able to guarantee a relatively high level of food security and standard of living to the Cuban population thanks to the continuation of the favorable terms of trade with the socialist bloc, in the long run it turned out to generate a dangerous dependency on foreign trade, providing temporary food *security* but not long-term food *sovereignty*. It also proved not to be very sustainable from an ecological and productive viewpoint, as the chemical-intensive industrial monocultures experienced ever increasing pest problems; after decades of increases, yields of some key crops, like rice, began to decline in the 1980s due to soil degradation and pests (Machín Sosa *et al.* 2010). This pattern of long-term yield leveling and/or decline is found in Green Revolution-lead areas around the world (Pingali *et al.* 1997; Radford *et al.* 2001; Kundu *et al.* 2007; Mulvaney *et al.* 2009) and Cuba was no exception (Rosset *et al.* 2011).

As a consequence of this conventional model, when the collapse of the socialist bloc in Europe came in 1989 and the United States tightened the trade embargo (called ‘the blockade’ by Cubans), Cuba lost 85% of its trade relations and was no longer able to import sufficient food, or the machinery, inputs and petroleum to grow it, under the capital-intensive production model (Rosset and Benjamin 1994; Funes-Monzote 2008; Wright 2008). The 1990s saw the Cuban population face an economic and food crisis while attempts were made to recover and boost national food production. In 1990, the Cuban government declared the ‘Special Period in Peacetime’, a war-style economic policy based on austerity measures, to survive the crisis. Part of that involved the breaking up of large state farms into Basic Units of Cooperative Production (UBPCs), basically cooperatives made up of former employees with usufruct privileges on the former state enterprise land.¹ One of the motivations was that, while peasant cooperatives were quick to adopt new low external input practices, the state farms seemed incapable of such rapid change (Rosset 1997).

But perhaps the most important changes occurred in the peasant sector itself. Virtually all peasants in Cuba belong to ANAP, and almost all of them belong to one of two types of cooperatives. Credit and Service Cooperatives (CCSs) are made up of peasant families who own their own farms and work them individually, but group together in the CCS to achieve economies of scale in marketing harvests, obtaining credit, sharing farm machinery, etc. Agriculture Production Cooperatives (CPAs) are collective farms in which the land and all productive assets, like machinery, warehouses, etc., are owned collectively. In 1989, on the eve of the Special Period, 78% of arable land was in the hands of the state, 10% belonged to CPAs, and 12% to CCSs (Machín Sosa *et al.* 2010, 24).

Under the imperative to boost the production of food as a public good in the early part of the Special Period, Cuba obtained some successes with alternative farming technologies such

that, by the end of the decade, the acute food crisis was in the past and food was being produced with a fraction of the inputs and equipment previously imported (Rosset and Benjamin 1994; Funes *et al.* 2002; Wright 2008; Funes-Monzote 2008, 2010). While we agree that the Cuban experience in the 1990s with alternative agriculture was remarkable compared to other countries around the world, our vantage point in 2017 gives us a more nuanced perspective.

First, when Cuba faced the shock of lost trade relations in the early 1990s, food production initially collapsed due to the loss of imported fertilizer, pesticides, tractors, parts, petroleum, etc. The situation was so bad that Cuba posted the worst mark in all of Latin America and the Caribbean in terms of the annual per capita rate of growth of food production (-5.1% for the period from 1986 through 1995, against a regional average of -0.2%). But as the country re-oriented its agriculture to depend less on imported chemical inputs, Cuba rebounded to show the best performance in all of Latin America and the Caribbean over the following time period, a remarkable rate of 4.2% annual growth in per capita food production from 1996 through 2005 (the most recent year for which statistics are available). Interestingly, in the same period, the regional average was 0.0% (FAO 2006). However, this transition was not enough to transform Cuba from a net food importer into a net exporter, as the gap was too large to overcome.

Second, the better performance in the late 1990s was largely based on input substitution practices, like biopesticides, biofertilizers and animal traction, rather than on advanced agroecological integration. Although the initial adoption by Cuban farmers of these and other alternatives was fairly rapid, by the end of the decade it was clear to the leadership of ANAP that things were stagnating. Further breakthroughs were urgently needed, both technological and methodological, in order to speed the transition. While hindsight now shows us that the technological breakthrough that was needed was greater agroecological integration, it was the adoption by Cuba of a methodological innovation that in our view has proved key to its contemporary success. We believe that, in the typical case, in most countries most of the time, there are abundant and productive ecological farming practices 'on offer', but low adoption of them is the norm, because what is lacking is a methodology to create a social dynamic of widespread adoption.

Horizontal communication vs. conventional extension

There is an extensive debate 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). 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 are not blindly following 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. In those cases, 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.

The history of agroecological transition in the Latin American region suggests that 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 contempo-

rary 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). It, in fact, is a counter-hegemonic 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. 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, farmers say, ‘*cuando el campesino ve, hace fe*’,² which translates roughly to ‘seeing is believing’.

Whereas conventional extension can be demobilizing for farmers, CAC is mobilizing, as they become the protagonists in the process of generating and sharing technologies. In comparing CAC with conventional extension, the key question to ask is, who is the passive actor and who is active? Note that there is still a role for technical staff in CAC, but it is a *different* role. Rather than bringing knowledge to the (presumably) ignorant, the extensionist now concentrates on facilitating and supporting a process of farmer exchanges. Furthermore, CAC is a communal process that makes possible the collective transformation of reality, while the relationship in conventional extension is typically a more individual relation between technician and peasant family.

It is worth noting that Cuban peasants, like peasants everywhere, have always employed some traditional agroecological practices that are commonly held by the collectivity. They were preserved even during the heyday of the Green Revolution and made it through informality and connections to today’s Cuba (Rosset *et al.* 2011). This pool of traditional knowledge proved to be a key resource for CAC and the associated “CAC Agroecology Movement” (MACAC) in Cuba.

‘Campesino a Campesino’ in Cuba

Through a series of somewhat fortuitous events, ANAP in Cuba learned of, and learned from, the experience with CAC in Nicaragua during the mid-1990s, just about the same time as it became clear that the spread of alternative practices to produce food during the Special Period needed a boost.

After hosting a meeting of CAC delegates from Mexico and Central America in 1996, ANAP decided to try the methodology on a ‘trial’ project basis with external donor funding in the province of Villa Clara (Machín Sosa *et al.* 2010). In November of 1997, the first workshop was held in Villa Clara to train local members of the organization in the CAC methodology. The early methodology and structure were the same as in Mesoamerica. The key actors in this phase thus consisted of promoters, facilitators and peasant families who belonged to the ANAP. Success was fast and by 1999 CAC had spread to the nearby provinces of Cienfuegos and Sancti Spíritus.

Promoters are recruited from farmers who are recognized by their peers for the successful innovations and agroecological practices employed on their own farms and their desire and ability to teach others. Successful means that these innovations and practices work well in terms of productivity and in terms of the economy of the peasant family, without using toxic chemicals or other off-farm, purchased inputs. Their farms are their classrooms and other farmers visit them to learn. A principle of CAC in Cuba is that they receive no compensation other than the satisfaction of helping others and the status of being considered a good role model. If they were to be paid, people say, then other farmers would not believe in their technologies,

finding it easier to think they just use them so they will get a salary. Facilitators are in charge of the logistics of matching and arranging visits for farmers in need of solutions to promoters who have them, organizing workshops and generally keeping things running. Some of them are trained agronomists or technicians, while some are peasants and co-op members, though they share a commitment to the ecological transformation of farming, that is, they are *activists*. They are hired and paid by each cooperative that chooses to have one or more facilitator. Emphasis is placed on this latter point; if cooperative members do not feel they gain anything worthwhile from having a particular facilitator, or any facilitator at all, then they will fire them. This, people say, ensures that they do a good job for their farmer-employers.

By 2000, CAC was clearly successful at accelerating the transition to productive agroecological farming much faster than conventional extension had been able to. It was now firmly established in Villa Clara, Cienfuegos and Sancti Spiritus and had begun in the provinces of Holguín, Ciego de Ávila, Matanzas and La Habana. But the ANAP leadership was frustrated at the time it took to get CAC established in each new province, especially as the implementation was still dependent on external funding from donor agencies, which made the grant cycle the key limiting factor (CAC was being run as a *project* or *program* inside of ANAP). Although the food crisis had, by this time, eased quite a bit, there was still a strongly felt need to boost national food production more rapidly and imported inputs were still not abundantly available. In February of 2001, the First National Encounter of the Campesino-to-Campesino Program of ANAP was held. At this meeting, Orlando Lugo Fonte, the president of ANAP, put forth the radical idea that CAC should become a *movement* and stop being a *project* or *program*. This meant it could no longer depend on external financing (though such would always be welcome), but rather must cut the reins that were holding it back and unleash campesino energy and creativity to rush forward at its own pace. He said,

The vanguard movement of our organization has to be the movement of Campesino promoters. We want a thousand promoters, but beyond this first thousand, we want a thousand more aspiring to become promoters, and so on, with new *compañeros* joining the movement all the time. And speaking thusly, of a movement, in a short period of time we should see thousands of men and women working for this noble idea [agroecology].

(Machín Sosa *et al.* 2010, 41)

Reflecting on what happened at that time, Lugo Fonte later said, 'If we couldn't find external financing, the Cuban agroecological movement was going to have to emerge with our own resources, even though we had very little' (Machín Sosa *et al.* 2010, 41). While promoters were not going to be paid at all and facilitators were going to be paid by the cooperatives themselves, significant resources were still needed, as the basis of CAC rests on exchange visits, meaning expenses such as transport, fuel, food, lodging, etc. However, the ANAP was determined to cover that mainly from their own resources, plus whatever they could obtain from government agencies.³

From this point on, ANAP assumed the promotion of the henceforth-named 'Campesino a Campesino Agroecology Movement' (MACAC) as an 'organic task' at each level and in every structure of the national organization. Every cadre and every militant of the organization was to take on responsibility for facilitating and promoting the movement within their area of authority or work. As a revolutionary mass organization, ANAP had inherent strengths in movement building. It had a political organizing methodology for 'mass mobilization', a methodology which had been used successfully in earlier times to promote other internal mobilizations.

During our field work across the Cuban countryside, the international members of the team could feel the high level of political consciousness of the ANAP grassroots membership, a testimony of the on-going 'ideological work' carried out inside of ANAP. An example of this is the general belief among members of the organization that the 'historic mission' of the peasant sector is to feed the Cuban people. In their words, food is a commons, a public good for all that should be provided by Cuban peasants for the Cuban people.

ANAP exhibits an unusual degree of *organicity*.⁴ Virtually all peasants are members of cooperatives, which are the basic units of ANAP membership. Each cooperative has a general assembly and officers, and ANAP has a leadership structure in every municipality of the country, as well as at the provincial and national level. This essentially means that the organization can call on cadres with leadership experience in literally every corner of rural Cuba.

There were thus powerful forces ready to be turned to the task of promoting agroecology. In this environment MACAC rapidly took on a 'mass character', in which agroecology was blended with socialist, communitarian and environmental values. In the anonymous written words of a participant in a workshop that we held in Granma Province,

To *massify* is to move all the methods and forms possible to promote and multiply any task. Taking the practices of peasants and promoters and spreading them in training workshops, seminars, and conversations on the farm. Learn the practices by doing them. Do them in schools, with the children, in the barrio, with the community, so that all these people carry the word from mouth to mouth, to the men or women they are closest to... The need to build a great movement at the district, municipal, and national level. To consolidate the practices in an organized fashion; demonstrate that something good is happening, is being experimented with, on the farm. That nothing shall be left which hasn't been taught to others; that all of us can learn and can also teach, each according to our role.

From 2000 to 2003, MACAC spread to *all* Cuban provinces, taking the form of a movement, and ANAP began to tinker with the methodology inherited from Mesoamerica. As the farmer exchanges began taking place between provinces and over longer distances, the organizational complexity grew. It was difficult for a facilitator in a cooperative in Pinar del Río province, for example, with members who needed to solve a particular weeds problem, to know that a promoter in Cienfuegos had a good solution and then organize an exchange visit. ANAP thus created a new role in the organization and started training new actors, the coordinators. These are typically professionals, sometimes from agricultural sciences, but also include professionals in everything from public relations to administration, who, like the facilitators, are first and foremost activists. They identify and coordinate exchanges and trainings at higher levels or on broader scales. Gradually coordinators have been hired at the municipal and provincial levels, and a national coordinator was added as well. ANAP pays their salaries.

Impacts and achievements

By 2008–2009, 12 years after CAC came to Cuba, the results were quite impressive in terms of the membership growth of MACAC, the productivity of agroecological farms and of the peasant sector in general, and other variables (Rosset et al. 2011). In little more than a decade, MACAC had grown dramatically in terms of numbers of families who have formally joined the movement and numbers of promoters, facilitators and coordinators. From just over 200 families in 1999, the movement had grown to 110,000 families ten years later. By way of

comparison, in 2009 there were less than 350,000 families in the peasant sector (CCSs and CPAs) of Cuba, so this number represents about one third of families joining in a relatively short period of time, giving CAC a much faster growth rate than anywhere in Mesoamerica, both in relative and in absolute terms.⁵ There were some 12,000 farmer-promoters, 3,000 facilitators and 170 coordinators.

It is important to note that not just the families who have joined the movement are influenced by it. In fact, a lot of neighbors-emulating-neighbors takes place in rural areas and within cooperatives and non-MACAC members also adopt some of the practices that they see their more agroecological neighbors using successfully. Although it cannot totally be attributed to MACAC, this partial 'spill-over' effect nevertheless can be seen in Cuba, where typical practices promoted inside the movement are now used by more than the one-third of all peasant families who are movement members. These include the use of organic soil amendments on 64% of all peasant farms and ecological pest management methods on 82% (Machín Sosa *et al.* 2010, 51).

Productivity of agroecological farms and of the peasant sector

In data assembled by Rosset *et al.* (2011) we can see that the greater the level of agroecological integration, the greater the total value of production, measured in Cuban non-convertible pesos per year, both *per worker* and *per hectare*. This would seem to suggest that, at least in Cuba, agroecology is an effective way to intensify production and generate income for farmers. Contrary to popular belief or myth, the model does not suffer from low labor productivity. These findings are in broad agreement with those of Badgley *et al.* (2007) on a global scale and Martínez-Torres (2006) in her study of organic and conventional coffee in Mexico.

Another way to tease out the relationship between peasants, food production and agroecology is to look at production data and use of agrochemicals (Rosset *et al.* 2011). For example, the production of vegetables, which are typical peasant crops, fell by 65% from 1988 to 1994, but by 2007 had rebounded to 145% over 1988 levels. This increase came despite using 72% fewer agricultural chemicals in 2007 than in 1988. Similar patterns can be seen for other peasant crops like beans (down 77% in 1994, but at 351% over 1988 levels by 2007, with 55% less use of agrochemicals) and roots and tubers (down 42% in 1994, at 145% of 1988 levels by 2007, with 85% fewer agrochemicals). This contrasts dramatically with sugarcane, *not* a peasant crop, which saw yields fall in 1994 to 25% below 1988 levels and fall another 3% by 2007, precisely the same time period during which production of peasant crops leaped, and this even though the reduction in agrochemical use in sugar (down just 5% by 2007) was insignificant (Machín Sosa *et al.* 2010, 52).

In summary then, the data shows that more agroecological farms produce more than less agroecological farms and that the peasant sector as a whole has made dramatic strides in food production both in absolute terms and relative to other sectors over the same time period, while consuming much less agrochemicals. In more general terms, we can argue that the more collective process of agroecology based on CAC, which takes "food as a commons" as a given, is actually more effective at feeding people than the more conventional, individualistic and capitalist alternatives.

An illustrative case: CAC in the Escambray Mountains

We can illustrate some arguments with a specific example, through the voice of a key actor in the local sphere. The Escambray mountains in Villa Clara were a pioneer area in the implementation of agroecology in Cuba and an emblematic example of the close interaction between

individuals, collectivity, food and ecology. This was one of the earliest places where the CAC methodology was put into practice. The “Ignacio Pérez Ríos” Credit and Services Cooperative is a representative case of success. The members farm high-quality organic peasant coffee with the complementary production of root and tuber crops, fruit trees and farm animals, the combination of which provides food for the peasant families and products for local and even regional markets (Val, 2017).

The spirit of the members of the cooperative is manifest in the words of Genaro Rafael González Baltrón, “El Cojo”, the main agroecology promoter in the area:

Here where we are, in these hills, here, the only thing I would have to purchase from outside would be a little rice, that doesn't grow that well here, and a little salt, in terms of food. We are creating sustainable farms to preserve the biodiversity of plants and animals, to give something to us and to not harm others, not a neighbor, not a plant, nor a little animal. We seek the coexistence of all and for all. That is my idea of what agroecology is.

Food is part of a constant exchange in family and community networks of solidarity and reciprocity. Via MACAC, knowledge, practices, seeds and food circulate. Each activity, whether workshops, meetings or events, provides a special communal space to share food as a form of collective integration, a commons, that enhances the exchange and consolidates the relationships of solidarity and reciprocity (Val 2012). When they get together, the members of the community are living and experiencing the commons (i.e. *commoning*), but at the same time producing and protecting the commons as tangible and intangible goods. Framed in this process, the cooperative has become a provincial, national and international reference in the promotion of ecological agriculture that is locally adapted and environmentally sustainable.

It was precisely the strength of this type of solidarity structure that tempered the impact of the food crisis of the Special Period in the Cuban countryside. Esther, a peasant woman associated with the cooperative, reflects on that moment:

It left us a very great lesson ... There may be a very special period, there may be a very big blockade, but if a person has ideas and initiatives, the very commitment to move forward, then no blockade or special period can prevent it ... Because if you are facing a crisis, like the whole world is now in crisis, then you can grow food in every corner, in the tiniest space, food that is for your own benefit, for your family, and for your community. With every crop I sow, I am providing food for my community.

In this context, the concept of food sovereignty is manifested in the articulation of these exchange networks at the local (and sometimes regional) level of food in the present, through direct exchanges of complementary products, as well as in the future, through exchanges of knowledge, seeds and seedlings. This is not only the right to self-sufficiency, autonomy of production and availability of food for the population, but also involves the social awareness of producers and consumers for the production, demand and consumption of healthy, nutritious and accessible food, as a common good.

Likewise, food sovereignty is understood as a process of liberation and autonomy, as El Cojo tells us:

If we had thought before about how to do things in the way that we are working today, we would have much more food, much more. Beyond that, we produce healthier food

and we are more independent. We already feel freer because we have it right there, we do not have to look for it ... One has already become freer, more a master of one's own life! In Cuba almost everyone realizes that you need to grow food in every little space, be it a yard, a plot or a farm, everyone on their little bit of land, no matter how tiny. And you have to know how to care for, and how to produce. You have to try to have food to be independent. "Food sovereignty" is not that you have a pigsty or a dairy, which is what gives the most... no, it is not that. It is about how you handle everything, as you take care with everything, how you teach what you know to others. Because after you have an equilibrium established, you already have sovereignty. And that is what we have to achieve here in Cuba and everywhere.

A very important dimension of Cuban food production is that of products intended for social purposes (schools, hospitals, community centers, etc.). This work is generally taken on as a commitment of peasants to society, generating a great satisfaction to producers in terms of the destination of their crops and making them, in turn, recipients of prestige and social recognition within their communities. In Cuba, this a key way in which food transcends the limits of the individual and the local collective and becomes a commons that is produced by the many and is accessed by the many.

Once again in the words of El Cojo: "There is always food, for me and for the family. I also give to the hospital, to the day care center and I sell to the government food program. I take part to the market on the plaza. We almost always sell through the cooperative. This gives us enough to maintain the family and to deliver food to the people; healthy food, and food that is from here, without having to bring it from somewhere else." In addition to the family (in a broad sense), the village (generally referring to the non-food producing part of the population) and their animals, many Cuban peasants argue that 'the land also has to eat', thus anchoring many of the agroecological soil management practices, like the use of organic and green manure, cover crops, etc. (Val 2012).

Thus, in the hills of the Escambray, food sovereignty, agroecology and sustainability are amalgamated in a way that produces and reproduces life. Manuel "Manolo" González, president of the cooperative, clearly points out the logic that agroecological production has for these peasants: "I produce agroecologically not because I am rich or fill my pockets from agroecological production, but rather for the benefit of my family, of all the people that I sell to, that I give to as a gift, or that comes looking food. I do not want to get rich with agroecological food, on the contrary I sell it even cheaper. It's because you eat something healthy. That will not harm any human being. That is why I work for the overall welfare of the population, and not for economic well-being."

We find that the agroecological peasants of the Escambray offer a much broader, more complex and holistic conception of food than simply a production for self-sufficiency and the market that may be associated to the notion of food sovereignty. This perspective of food as a commons certainly questions the hegemonic model of agribusiness, but also proposes an interesting alternative for the production of healthy and accessible food, as well as a valuable reflection and praxis around the relationship between humans and nature (Val 2012).

This alternative order disputes meanings and discourses with the developmentalism of the Green Revolution and the postulate of food as a commodity, entails elements that represent a radical critique that transcends the immediate dimension of productive alternatives and questions the hegemonic capitalist modernity that underlies it. These elements of radical ontological, epistemic and political criticism nourish Latin American peasant struggles and form a horizon of alternative possibilities to that posed by the imperial hegemony of agribusiness, the paradigm of development and green capitalism (Val 2012; Martínez-Torres and Rosset 2014).

Lessons and challenges

We can distill some tentative lessons by comparing the more and less successful local cases that unfolded in Cuba, especially with regard to the more challenging aspects of applying CAC on a large scale and to the possibility of enhancing a food system inspired by the principles and visions of the commons. A principal challenge has been to achieve gender equality in the movement. While Machín Sosa *et al.* (2010) found that agroecology may dilute patriarchy within the family, that is not the same as gender balance in the movement itself. Although women made up 40% of coordinators in 2009, only 12% of facilitators and 8% of promoters were women (Machín Sosa *et al.* 2010, 70). In light of the implications and of the importance that equality (of gender and other forms), plays in the construction of the commons, it is clear that the movement needs to make a more concerted effort to recruit and train women activists, especially as many members of MACAC lauded the skills that women bring to promotion and facilitation.

We observed that the CAC process develops best when special attention is devoted to training and privileging the centrality of peasants (rather than technicians, political leaders, etc.) in all aspects of the process. This means that a careful balance has to be achieved between the vertical and horizontal elements of the structure of the movement. Where peasant protagonism is overly diluted by other actors, the process slows to a crawl. There have also been some cases where peasant promoters developed 'know-it-all' superior attitudes reminiscent of technicians and extension agents, with similar effects in reducing the dynamism of the overall process.

The implementation of CAC in a cooperative or municipality should be based as much as possible on resources that are already available locally. That means both human and material resources. Minimizing external dependency is the best way to build sustainable processes; where the local process has been overly dependent on the outside it has typically failed to develop. However, this does not mean that the organization (i.e. ANAP) does not need to play a large role in planning and in obtaining needed resources. When peasant promoters have been overly saddled with bureaucracy, like paperwork for reporting, the process has typically ground to a halt. Nevertheless, it is crucial that promoters, facilitators and coordinators work together closely in planning, monitoring and evaluation.

Another key to success is the achievement of absolute respect for local culture and customs in each locality as integral parts of each experience and reality. This process should better emphasize the recovering, valuing, recognizing and promoting of local knowledge, complementing it with external elements, but not overwhelming it. It is critical to avoid imbalances between technological aspects, which have a rapid dynamic, and the social methodology process, which takes time to develop. The most successful cases involved and built on the skills of and respect for local leaders, took advantage of local structures, like the cooperative assembly, and involved potential local allies, ranging from school teachers and physicians to local officials.

Another success is that of the consolidation of the political nature of agroecology and the commons. MACAC has proven to be a 'hot house', to use a phrase that was often repeated, for identifying and developing new grassroots leadership within ANAP. Peasants who become promoters receive training in popular education methodology and experience success in helping other farmers transform their production systems, gain self-confidence and gain respect from their peers. Many are soon elected to leadership positions in their cooperatives and some rise further to municipal, provincial or national leadership positions in ANAP. We could literally feel the bottom-up rise of a whole new generation of peasant leaders as a result of MACAC, some of whom eventually leave ANAP and come to occupy political offices, start to work for government agencies, etc. ANAP and MACAC activists see this as both a plus and a minus. A plus because this is providing ANAP with a dynamic new cohort of leadership, but a minus

because it means constantly identifying and training new promoters to replace those who are 'lost upward and outward'. But even this loss carries within it a plus, as the former MACAC promoters in leadership positions inside ANAP reinforce the importance given to the movement by the organization itself, and those who now occupy leadership positions outside of ANAP have proven to be key institutional allies for MACAC and for agroecology in general, (re)shaping government policies to support MACAC and agroecology.

Reflections on Campesino a Campesino, agroecology and food as a commons

The story of MACAC in Cuba provides a lot of material for reflection on a variety of issues, from a variety of perspectives. From a natural science perspective, it speaks to the productivity of more complex and more integrated agroecosystems. In this case, there is a correlation between the transition from conventional farming to simple input substitution to agroecological integration and an increase in total productivity both of land and of labor. But it is also a warning to natural scientists, technicians and extensionists; more and better technology will not alone lead to widespread ecological farming. Typically, many agroecological practices are available but not widely adopted because of the lack of a social process that encourages and drives their adoption. Thus, the limiting factor is most often not technical but social and methodological and the latter are most often under-addressed. Furthermore, even a good social process may not be successful unless structural barriers to agroecology and food sovereignty can be at least partially overcome.

From a policy perspective, it speaks to questions of achieving national food sovereignty in the face of the global economic, climate and food crises. The Cuban experience would tend to support the arguments of La Via Campesina (2010, see also Rosset 2006b) that building food sovereignty requires putting land in the hands of peasants, through genuine agrarian reform, fair prices through protection from dumping of cheap food from abroad and a transition to agroecological farming. And it confirms the arguments advanced in this volume that a true food transition requires the adoption of the paradigm of the commons. Agroecological farming breaks dependence on imported inputs in times of economic crisis (in Cuba it helped boost national food production just when the global food crisis had driven the foreign exchange cost of imported food to unacceptable levels) and increases the resiliency of the economy to ever more frequent climate shocks.

Some observers raise the issue of 'Cuban exceptionalism',⁶ arguing that experiences from the island do not apply to other countries that had not had social revolutions or had not faced food crises as severe as that faced by Cuba during the Special Period. It is, of course, important to be cautious about universalizing and generalizing particular experiences. But we would first observe that the growth of MACAC in Cuba occurred after the most difficult moments of the Special Period had passed, when the economy was experiencing some level of recovery. But, of course, there is no denying that MACAC in Cuba, and Cuban peasants in general, have greatly benefited from a facilitating and counter-hegemonic rather than a hostile state. As a matter of fact, it can be argued that the Cuban state adopts a policy that treats food as a commons, with relatively high food prices that translate into fair crop prices, land already in the hands of peasants (organized peasants) and a high 'scarcity cost' for imported farm inputs. Rather than accepting such conditions as impossible outside of Cuba, LVC and many other social movements actively struggle around the world for genuine agrarian reform, banning dangerous pesticides, protection of the national economy from dumping and speculation by transnational corporations, and other food sovereignty policies (Rosset 2006b; Martínez-Torres and Rosset 2010; Borras and Franco 2010). When we can demonstrate that certain policies function in Cuba, this is not to stress its uniqueness but to offer a powerful argument for use in other countries.

A key lesson to draw from our study is that to scale up agroecology requires a peasant organization and a socially dynamic methodology like CAC, as has been argued by La Via Campesina (2010). Peasant self-organization must be supported and encouraged, and conventional agricultural extension from the state, NGOs or the private sector is no substitute. The question of how to scale up agroecology is under debate in the literature (von der Weid 2000; Altieri and Nicholls 2008) and our results fall squarely in support of the position of Holt-Giménez (2001, 2006), that the CAC methodology is the most effective way found to date, and of Altieri (2009), that rural social movements hold the key.

From the perspective of a peasant organization searching for a way to support its member families in a transition from conventional to ecological farming, the experience of ANAP presented here is unequivocal. When conventional extension was used, the results were slow and haphazard. But a dramatic speed-up occurred through the adoption of the socially dynamic CAC methodology, with another important leap taking place when this was combined with a grassroots social movement-building methodology.⁷ From the perspective of LVC, a key lesson is that the campesino a campesino methodology can and should be applied at the international level. This would be a 'campesino organization'-to-'campesino organization' method based on exchange visits and this is something we are already beginning to carry out.

Of course, the fact that a national peasant organization using the CAC methodology under favorable structural conditions was able to achieve so much success does not guarantee that an international peasant movement will be able to use the same methodology to advance agroecology worldwide under decidedly less favorable structural conditions. That the CAC methodology is now in the hands of an international peasant federation with increasing 'organicity' would seem to be a necessary, but not sufficient, condition. First, not many organizations inside or outside of LVC boast the degree of organicity that ANAP has. Second, while in some countries conditions are becoming more supportive, those countries may still lack such a well-organized peasant organization and/or the supportive conditions may still be partially lacking. Moreover, their governments most decidedly are neither counter-hegemonic nor do they treat food as a commons.

It is clear to LVC that the internal work of strengthening member organizations is a critical priority (Martínez-Torres and Rosset 2010) and, in fact, is probably a precondition for achieving further structural and policy changes, as well as for developing CAC and agroecology on a broad scale in other countries. However, the tasks of internal strengthening and the promotion of CAC can be mutually supportive in terms of developing a grassroots leadership cadre and credibility inside organizations, as the example of ANAP has shown us. In many countries, organizations find that food, agroecology and food sovereignty are much more disputed terrains than they are in Cuba. Typically, the countryside is awash with NGOs, reformist and reactionary farmers organizations, foreign foundations and government and inter-governmental programs, which all treat food as a commodity (Vivero-Pol 2017) and tout a sometimes intentionally confusing mixture of a re-packaged Green Revolution, sustainable agriculture, organic farming, etc.⁸ Can the CAC methodology be a tool to help LVC member organizations navigate this complicated landscape and build internal strength? LVC is betting on this, carrying a wide array of exchange visits to ANAP and Cuba.

Recuperating the reflections, theorizations and practices of the Cuban agroecological peasantry leaves us with valuable lessons to advance towards a more inclusive food production that addresses the needs of all the inhabitants of this planet and of those who will come in the future: a food production that responds to people's basic needs, cultural practices and the ecological boundaries of the planet, for the participated construction of long-term economic, political,

social, cultural and environmental sustainability; a proposal that not only feeds the world, but feeds it better and in a way that is compatible with the survival of human and non-human beings; an alternative model that proposes a collective exit from the civilizational crisis (as the summation of all crises) and introduces a paradigm shift in the forms of production and reproduction of life in the logic of the food system as a common good of humanity (Houtart 2011; Val 2012; Vivero-Pol 2017; Chapter 3, this volume).

Notes

- 1 Laura Enríquez (2003) has called this repeasantization, though as stated below in the text, the transition to becoming peasants has been uneven.
- 2 In fact, this saying is the subtitle of the book by Machín Sosa *et al* (2010).
- 3 Contrary to common belief, ANAP is not funded by the Cuban government, but rather by a voluntary self-tax on farm sales by member cooperatives. While the Cuban state has historically provided a much greater degree of support (credit, marketing, crop insurance, extension, etc.) to the peasant sector than other Latin American governments, it is also true that long-term and larger investments were more directed to the state farm sector than to the peasant sector.
- 4 Among Latin American social movements, 'organicity', or *organicidad* in Spanish, refers to the degree of internal organization that a movement or an organization has.
- 5 In 2017, we now estimate that fully half of the Cuban peasantry participates in MACAC.
- 6 See Hoffmann and Whitehead (2006) for a discussion of Cuban exceptionalism.
- 7 Like many other farmer organizations, ANAP has a national farmer training school. A key lesson of the ANAP experience is that the school can play an integral role in supporting MACAC. Promoters, facilitators, and coordinators all take short courses at the school to learn methods (i.e. pedagogical and organizing methods) specifically tailored to their roles. Cooperative presidents and other ANAP cadre and leaders from all levels receive courses to sensitize them to agroecology and to the CAC methodology (Machín Sosa *et al.* 2010, Val 2012).
- 8 See Borrás (2010) for an example of how 'cluttered' the landscape can be.

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