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La Via Campesina in Action for Climate Justice

By La Via Campesina



LA VIA CAMPESINA IN ACTION FOR CLIMATE JUSTICE

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Edited by the Heinrich Böll Foundation

The authors

La Via Campesina is an international social movement of peasants, small and medium-size farmers, landless people, rural women and youth, Indigenous People, migrants and agricultural workers. It defends peasant agriculture for food sovereignty and promotes social justice and dignity. The movement strongly opposes corporate driven agriculture that destroys social relations and nature.



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Picture above: Peasant agroecology has strong feminist roots and acknowledges women as central agents of agroecological transformation.

Picture below: Through the brigades women, men, young and old work the land collectively. Brigades also include a political dimension. With boots on the ground and tools in hands, brigades become the ideal space for grassroots groups to continue the formación process within a «campesino-a-campesino» (peasant-to-peasant) format.



INTRODUCTION

Industrialized agriculture and the corporate food system are at the center of the climate crisis and cannot be ignored in discussions about pathways to a 1.5 degree Celsius world.¹ The IPCC found in 2014 that agriculture and land-use change are responsible for around one quarter of global greenhouse gas (GHG) emissions.² Yet, rather than taking immediate and far-reaching action to make fundamental change, governments and corporations promote carbon markets, geoengineering and technological fixes they say are «triple wins» for sustainability, development and equity.³

Carbon trade, genetically modified organisms (GMOs), REDD+⁴, climate smart agriculture, and geoengineering are capitalists' attempts to dominate and instrumentalize nature at the service of ever-expanding profits. These market-based «false solutions» are designed to solve the accumulation crisis, not the climate crisis.

As the global peasant movement, La Via Campesina $(LVC)^5$ is on the frontlines of the climate catastrophe. From our perspective, halting the climate crisis requires systemic change to uproot the primary cause of the crisis – the capitalist system.

This chapter outlines key aspects of system change in agriculture and gives concrete experiences of organized resistance and alternatives that are making change happen. In Part One we define La Via Campesina's perspective on the climate crisis and present evidence to show that, while the industrial food system is one of the

¹ Although the word «agriculture» was not mentioned once in the Paris Agreement, 94 percent of countries address agriculture in their strategies for combating climate change (Confédération Paysanne and CCFD-Terre Solidaire 2016).

² Smith, P., et al. (2014). Chapter 11: Agriculture, Forestry and Other Land Use (AFOLU). In: Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5). www.ipcc. ch/report/ar5/mindex.shtml

³ Karlsson, L., et al. (2018). «Triple wins» or «triple faults»? Analysing the equity implications of policy discourse on climate-smart agriculture (CSA). *Journal of Peasant Studies*, 45 (1), 150–174.

⁴ REDD/REDD+ stands for Reducing Emissions from Deforestation and Forest Degradation. Defined in more detail below, REDD/REDD+ is a carbon trading program that has social justice implications for forest dwelling communities.

⁵ La Via Campesina is an international movement bringing together millions of peasants, small and medium-size farmers, landless people, rural women and youth, Indigenous People, migrants and agricultural workers from around the world. Built on a strong sense of unity and solidarity between these groups, it defends peasant agriculture for food sovereignty as a way to promote social justice and dignity and strongly opposes corporate driven agriculture that destroys social relations and nature (https://viacampesina.org/en/international-peasants-voice).

main drivers of global warming, peasant agroecology and food sovereignty⁶ offer huge potentials for reducing emissions – including by keeping fossil fuels underground, adapting to climatic changes and realizing social justice. Peasant agroecology and food sovereignty are social, political, and ecological visions that unite multiple sectors within a single movement to challenge business-as-usual and create systems of shared control over the requirements of life. In Part Two, we highlight four La Via Campesina members' struggles for climate justice: how peasants in France, Indonesia, South and East Africa and Puerto Rico are resisting false solutions and developing pathways to the new system.

⁶ According to the *Nyéléni Declaration*, «[f]ood sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations. It defends the interests and inclusion of the next generation. It offers a strategy to resist and dismantle the current corporate trade and food regime, and directions for food, farming, pastoral and fisheries systems determined by local producers» (Nyéléni Declaration, 2007, https://nyeleni.org/spip.php?article290). See also: ECVC. (2018). *Food Sovereignty Now! A guide to Food Sovereignty*. www.eurovia.org/wp-content/uploads/2018/01/FINAL-EN-FoodSov-A5-rev6.pdf

Industrial agribusiness vs. peasant agroecology

To fully understand the climate crisis as it relates to agriculture requires distinguishing between two agri-food systems:

- industrial agribusiness carried out by a small set of increasingly large corporations seeking to expand private profits (including through the financialization of nature);
- 2. peasant agroecological farming practiced by peasants and other small-scale food producers, and with support from their urban and rural allies. Together they seek to meet human needs by working with nature.

This analysis is important because it unmasks the power relations shaping the agrifood system. It enables us to more clearly assess which systems will support a just transition away from climate crisis and towards climate justice.

Industrial agribusiness

As a whole, between 44 and 57 percent of all GHG emissions come from the industrial food chain. This includes emissions from deforestation, agriculture, processing, packaging, retail, transportation, refrigeration, and waste (see Figure 1). Each link of this food chain is controlled by a small number of very large and highly integrated global corporations.⁷ The decisions they make have a profound influence on local communities and environments, and on the global climate.

One quarter of the transportation worldwide is dedicated to supplying this long-distance commercial food chain.⁸ The industrial food chain as a whole promotes the consumption of processed food, instead of fresh local food. This requires the use of energy-intensive processing, packaging and refrigeration in order to longer conserve the products shipped all over the world. A globalized food market runs under the logic of overproduction. This means throwing away «up to half of the food that it produces, in its journey from farms to traders, to food processors,

⁷ IPES-Food. (2017). Too Big to Feed: Exploring the Impacts of Mega-Mergers, Consolidation, and Concentration of Power in the Agri-Food Sector. www.ipes-food.org/images/Reports/Concentration_FullReport.pdf

⁸ Eurostat. (2011). From farm to fork – a statistical journey along the EU's food chain.

to stores and supermarkets.»⁹ Furthermore, this system is responsible for expanding the amount of lands used for industrial agriculture worldwide, risking the existence of savannas, wetlands, cerrados, and forests through land-use change. Soy, sugarcane, palm oil, maize, and rapeseed plantations for the industrial production of food commodities are the main culprits of deforestation in the world today.¹⁰

At the United Nations (UN) climate meetings, industrial agribusiness corporations are using their significant lobbying power to exert influence over climate policy in agriculture.¹¹ We are not tricked by the corporate discourse. So-called «climate smart agriculture» is «part of a larger process of ‹green› structural adjustment projects required by an economic system and the political elites in distress, because they have exhausted other places for enormous speculative financial investments and now see agriculture and agricultural land as the new frontier.»¹² The Paris Agreement is part of this arrangement. It provides a global framework for the expansion of carbon markets.¹³ The Paris Agreement is a «carbon trade agreement» that further commodifies Mother Earth and dispossesses peasants and Indigenous Peoples of their territories.¹⁴

Carbon markets have serious consequences for peasants and local communities. In a grand gesture of greenwashing, private corporations, governments and other players seek to restore, develop and fund «carbon sinks» in agriculture. Agriculture and healthy soil carbon initiatives are used as a means to compensate for corporations' continued excessive GHG emissions. Meanwhile, peasants, Indigenous Peoples and other rural people live on and use these so-called carbon sinks, which represent their livelihoods. Once the carbon stored in the lands, forests and waters is given market value, agriculture and food security uses by rural communities become secondary. As the profit value of the land increases, land grabbing is more likely.¹⁵

⁹ GRAIN. (2016). The Great Climate Robbery. GRAIN/Daraja Press.

¹⁰ GRAIN, 2016, loc. cit.

¹¹ Corporate Accountability, ActionAid, ETC Group, APMDD, and Corporate Europe Observatory. (2017). Polluting Paris: How Big Polluters are undermining global climate policy. www.corporateaccountability.org/wp-content/uploads/2017/10/PollutingParis_COP23Report_2017.pdf

¹² LVC. (2014). Unmasking Climate Smart Agriculture. https://viacampesina.org/en/un-maskingclimate-smart-agriculture

¹³ Article 6 of the Paris Agreement enables country specific (unique) cap-and-trade markets to be globally integrated, especially by allowing countries to transfer a portion of their agreed-to voluntary GHG reduction commitments (called Nationally Determined Contributions [NDCs]) to another country, opening more policy space for promoting carbon trading and carbon colonialism. See also: IEN-CJA, 2017, in Footnote 14 below.

¹⁴ IEN-CJA. (2017). Carbon Pricing: A Critical Perspective for Community Resistance, p. 31. Indigenous Environmental Network and Climate Justice Alliance. www.ienearth.org/wp-content/uploads/2017/11/Carbon-Pricing-A-Critical-Perspective-for-Community-Resistance-On-line-Version.pdf

¹⁵ Confédération Paysanne and CCFD-Terre Solidaire. (2016). *Our Land is Worth More than Carbon.* www.eurovia.org/cop-22-our-land-is-worth-more-than-carbon



44 to 57 %

These agribusiness corporations claim that their power and profits are justified because they will feed the world and solve the climate crisis.¹⁶ However, the industrial food system provides food to only 30 percent of the world's population. It does so while using a massive 75 percent of the agricultural resources.¹⁷ The corporate food chain has contributed to hunger and poverty.¹⁸ In addition, the industrial agribusiness system is particularly harmful for women and youth. Women are the first to suffer from the impacts of land dispossession, climatic changes and disasters.¹⁹ The corporate competition for land and water is producing conditions for massive migration, especially of young people, as well as land grabs, social conflicts and wars.

Solving the climate crisis requires transforming the power relations at the foundation of the capitalist system. Peasant agroecology offers some important starting points for elaborating collective solutions to these serious, life-threatening problems in agriculture.

Peasant agroecology

For generations, peasants and indigenous communities have worked with nature to produce food at very low risk to and in harmony with the Earth. In recent decades, the term agroecology has come to be used by social movements seeking to defend peasants' and small-scale food systems and expand alternatives to agribusiness.²⁰ At the same time, many multilateral institutions, some national governments, corporations, and some academics and NGOs use the concept of agroecology in different

With carbon market projects, women experience a serious decline in their quality of life. Research shows that in Costa Rica where communities lost access to forests due to privatization from carbon trading and debt-for-nature schemes, women from these communities were left without livelihoods and often ended up working in the sex tourist industry to secure a living (Isla, A. [2009]). Who Pays for Kyoto Protocol? Selling Oxygen and Selling Sex in Costa Rica. *Eco-Sufficiency and Global Justice: Women write political ecology*, edited by Ariel Salleh. London and New York: Pluto Press. pp. 209–210). In addition, on the whole, the agribusiness system benefits men by giving them priority access to land, wages, and women's labor. This power imbalance produces the conditions for violence against women. This is why we say that «agribusiness is patriarchal capitalism's rural strategy» (LVC. [2012]). *Stop the violence against women!* https://viacampesina.org/en/wp-content/uploads/sites/2/2012/10/Cartilha-VCSu-dam%C3%A9rica-ingles-18set12.pdf.

¹⁶ Grant in: Kowitt, B. Can Monsanto Save the Planet? *Fortune Magazine*. http://fortune.com/ monsanto-fortune-500-gmo-foods

¹⁷ ETC Group. (2017). Who Will Feed Us?: The Peasant Food Web versus the Industrial Food Chain. www.etcgroup.org/sites/www.etcgroup.org/files/files/etc-whowillfeedus-english-webshare.pdf

¹⁸ Lappé, F.M., et al. (1998). *World Hunger: Twelve Myths*. New York: Grove Press. Second edition, Chapter 5.

¹⁹ Shiva, V. (1988). *Staying Alive: Women, Ecology and Development*. London and New Jersey: Zed Books; Neumayer, E., and Plümper, Th. (2007). The gendered nature of natural disasters: the impact of catastrophic events on the gender gap in life expectancy, 1981–2002. *Annals of the Association of American Geographers*, 97 (3), 551–566.

²⁰ Altieri, M., and Rosset, P. (2017). *Agroecology: Science and Politics*. Nova Scotia and Winnipeg: Fernwood, Agrarian Change and Peasant Studies series.

ways, often to promote agribusiness which threatens smallholder producers.²¹ Proponents of the agribusiness system argue that peasant agriculture is incapable of feeding the world's growing population, blaming peasants for their own hunger and poverty. However, small-scale farmers, peasants, fisherfolk, indigenous communities, rural workers, women and youth already feed more than 70 percent of the world's population, and they do so using only 25 percent of the agricultural resources.²²

Moreover, a food system based on food sovereignty, small-scale farming and agroecology can overall reduce carbon emissions by half within a few decades. All of this can be done without commodifying carbon, and, at the same time, can contribute to resolving poverty and hunger.²³ The five necessary steps are outlined in the chart below.

Taking care of the soil		Right policies and incentives to peasant agroecological prac- tices would allow to restore soil organic matter to pre-indus- trial agriculture levels within 50 years and absorb 24–30 % of all current GHG emissions.
Natural farm- ing, instead of chemicals		Chemicals deplete the soil and pests become immune. Peas- ants' knowledge and practices improve soil fertility, prevent soil erosion and build organic matter, enhancing the produc- tive potential of the land.
Reducing food miles		Much of the food system's GHG emissions can be eliminated through local markets and fresh food consumption, away from processed and frozen food in the supermarkets. Food is not a commodity to be traded.
Giving land back to the farmers		Monocultures are notorious emitters of GHGs. Small farmers are feeding 80 % of the population in non-industrialized coun- tries, using less than 25 % of farmlands. Land redistribution to small farmers, combined with policies to rebuild soil fertil- ity and promote local markets, can reduce GHG emissions by half within a few decades.
No false solutions	and the second	Food and agriculture are main drivers of GHG emissions. Currently governmental solutions such as CSA, GMOs, geo- engineering, biofuels, carbon markets, and REDD+, don't challenge the root causes of climate change. A shift from an industrialized food system to agroecological practices based on food sovereignty is a real solution for the climate crises.

Figure 2: A food system based on food sovereignty, small-scale farming and agroecology

Illustration: Raúl Fernández Aparicio/GRAIN/LVC (In the publication «Food sovereignty: five steps to cool the planet and feed its people»)

²¹ Pimbert, M. (2016). Agroecology as an Alternative Vision to Conventional Development and Climate-smart Agriculture. *Development*, 58, 2–3, 286–298.

²² ETC Group, 2017, op. cit., pp. 12 and 17.

²³ LVC and GRAIN. (2014). *Food Sovereignty: 5 steps to cool the planet and feed its people*. https:// viacampesina.org/en/wp-content/uploads/sites/2/2014/12/Food%20and%20climate%20 poster%2007.pdf

Food sovereignty is the right of peasants and local communities to control their own food systems. Peasant agroecology is food sovereignty in action. It «is political; it requires us to challenge and transform structures of power in society. [It puts] the control of seeds, biodiversity, land and territories, waters, knowledge, culture and the commons in the hands of the peoples who feed the world.»²⁴ Peasant agroecology drastically reduces the use of external inputs that must be purchased from agribusinesses. It rejects the use of agrochemicals, artificial hormones, GMOs, synthetic biology and other corporate technologies that undermine people's well-being and food sovereignty. This system also produces for local markets thereby helping communities de-link from global corporate value chains.²⁵

In 2015 in Nyéléni, Mali, several allied social movements came together to develop common pillars and principles of agroecology.²⁶ In April 2018, in Rome, Italy, small-scale food producers and their allies convened again at the FAO's 2nd International Symposium on Agroecology, reaffirming that: «agroecology is a way of life of our peoples, in harmony with the language of Nature. It is a paradigm shift in the social, political, productive and economic relations in our territories, to transform the way we produce and consume food and to restore a socio-cultural reality devastated by industrial food production. Agroecology generates local knowledge, builds social justice, promotes identity and culture and strengthens the economic viability of rural and urban areas.»²⁷

Peasant agroecology cools the Earth. It requires less energy than industrial agribusiness.²⁸ The peasant system also helps keep fossil fuels in the ground by using less fossil fuel-based chemicals²⁹ and technologies. In addition, research has found that the wealth of biodiversity within agroecological systems makes these systems much more resilient to climate disasters.³⁰

Agroecology in the framework of food sovereignty promotes social justice and equity. In particular, peasant agroecology has strong feminist roots. It acknowledges women as central agents of agroecological transformation – on farms and within social movements.³¹ The struggle for agroecology affirms all people's shared control

- 25 LVC, 2015a, op. cit.
- 26 LVC, 2015a, op. cit.
- 27 Declaration of Small-Scale Food Producers' Organizations and Civil Society Organizations at The 2nd International Symposium On Agroecology Convened by the FAO (2018).
- **28** ETC Group, 2017, op. cit., 35.
- **29** For the most part, peasants do not use chemical inputs but, rather, use manure, so-called crop wastes and soil micro-organisms to fix 70–140 million tonnes of nitrogen per year, blocking an equivalent of roughly \$90 billion in nitrogen fertilizer sales (ETC Group, 2017, op. cit., 32).
- **30** Vandermeer, J., et al. (1998). Global change and multi-species agroecosystems: Concepts and issues. *Agriculture, Ecosystems and Environment,* 67, 1–22. Altieri, M.A., et al. (2015). Agroecology and the design of climate change-resilient farming systems. *Agronomy for Sustainable Development,* 35, 869–890.
- **31** Why Hunger. (2017). *Through Her Eyes: The Struggle for Food Sovereignty*. https://whyhunger. org/wp-content/uploads/2017/12/through-her-eyes-food-soveriegnty-agroecology-sustaina-bilty-1.pdf

²⁴ LVC. (2015a). https://viacampesina.org/en/declaration-of-the-international-forum-for-agroecology

over the essentials of life, including land.³² Agroecology gives women more autonomy and empowers them within their families and communities. The same is also true for youth and elders.³³

Part One: Industrial agribusiness vs. peasant agroecology

³² LVC, 2015a, op. cit.

³³ Research from Cuba finds that higher levels of biodiversity on farms translate into more sharing of wealth and decision-making power among all family members and contribute to a breakdown in men's patriarchal power (Machín Sosa, B., et al. [2010]). *Agroecological Revolution: The Farmer-to-Farmer Movement of the ANAP in Cuba*. Havana, Cuba, and Jakarta, Indonesia: ANAP and La Vía Campesina. https://viacampesina.org/en/wp-content/uploads/sites/2/2013/07/Agroecological-revolution-ENGLISH.pdf.

AGRIBUSINES PEASANT AG PROTECTS TH

Source: La Via Campesina

Peasant agroecology requires immediate support in order to reverse the interconnected social and ecological crises. For governments to take seriously real solutions to the climate crises, they must urgently take direction from the masses of people, especially rural peasant communities, pastoralists, small-scale fishers, Indigenous Peoples, including women and youth who are most impacted by the crisis.

as disrupts the climate

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Grassroots actions for agroecology and food sovereignty

We now turn to the experiences of La Via Campesina's grassroots peasant organizations and their allies resisting false solutions and building food sovereignty and agroecology within four areas: livestock agriculture, land and forests, social movement political training, and resilience to climate disasters. We present in Part Two further evidence of resistance involving peasant agroecological food production to feed people, build social justice, and contribute to mitigating GHG emissions while adapting to climate change.

Peasant and small-scale livestock farming reduces GHG emissions and conserves the soil

Various reports from the UN Food and Agriculture Organization (FAO), and other sources, cite livestock farming as being responsible for 14.5% of total global GHG emissions.³⁴ Together the top 20 meat and dairy corporations emit more GHGs than Germany.³⁵ Confédération Paysanne,³⁶ one of La Via Campesina's member organizations in France, has been working to expose the differences between two main livestock farming models: factory farming (rooted in industrial agribusiness) and peasant livestock farming (rooted in peasant agroecology).³⁷ This distinction is important because it dispels the myth that all livestock farming is harmful for the climate.

Contrasting models

On the one hand, factory farms are highly specialized, work with huge animal populations concentrated in single areas, produce industrial-scale animal waste, and put far too much nitrogen and phosphorus into the environment, while leaving other plots deprived of those elements. Factory farms have high demands on feed production. In order to achieve this large scale, crop growing practices are intensified and

³⁴ FAO. (2006). Livestock's Long Shadow.

³⁵ IATP, GRAIN and Heinrich Böll Stiftung. (2017). Big Meat and Dairy's Supersized Climate Footprint. www.iatp.org/sites/default/files/2017-11/BOELL_Meat%20Dairys_A4%20factsheet%20 Web_V1.pdf.

 $^{{\}bf 36} \quad www.confederationpaysanne.fr$

³⁷ Peasant livestock farming also includes pastoralists and nomadic communities.

crop rotations are simplified, especially through the application of huge amounts of synthetic fertilizers, high concentrations of manure and other external inputs. The intensive use of resources causes an increase in nitrous oxide and other GHG emissions.³⁸ Furthermore, the production of animal feed to supply factory farms is in direct competition with the production of food for humans, as well as with the conservation of intrinsically valuable nature reserves. In the Amazon, for instance, land-use change for industrial livestock production has been a major threat. 80% of all deforested land has been converted to pasture for grazing animals, while the other 20% has been mainly used to produce animal feed.³⁹

Yet animals are an integral part of agroecosystems. Peasant livestock farming involves the conservation of considerable amounts of permanent grasslands, and animal and plant biodiversity. It promotes the integration of crops with livestock. Moreover, worldwide 430 million peasant farmers work with animal traction, which represents a very important energy source for rural populations that avoids the use of fossil fuels.⁴⁰ It means that animals provide both draft power to cultivate the land and manure to fertilize the soil. The resources from this system (manure, crop residues, energy) benefit both crop and livestock production, leading to greater farm efficiency, productivity and sustainability.⁴¹ In this model, farmers avoid using synthetic fertilizers which break down the soil and lower its humus content. Animal manure contributes to maintaining humus in the soil, while humus stores CO, thus contributing to climate change mitigation. Grasslands represent important means to absorb and store carbon. One of the most detailed studies at the continental scale of Europe on the GHG balance found that European grasslands have extremely significant potential for absorbing large amounts of carbon, sequestering 2-2.7 times the carbon emissions from transport and fertilizer production in the EU. However, net sequestration of GHGs by the land surface (including forest biomass and soil, grasslands, other wooded land and cropland) may even diminish as CH_4 and N_2O emissions increase with further intensification of agriculture and forestry.⁴²

In addition, peasant and small-scale livestock farming makes use of grasslands where other crops are not planted or where grasslands are integrated in longer rotation cycles. This offers the advantage of reducing the presence of parasites and restoring soil fertility. Holistic practices of peasant agroecology also embrace polyculture-livestock farming systems that acknowledge the differences between each species and make use of their complementarity, for instance, by feeding pigs or poultry with vegetable and cereal wastes and residues, and producing natural fertilizers.

³⁸ UBA. (2014). *Nitrous oxide and methane*. www.umweltbundesamt.de/en/topics/soil-agriculture/ ecological-impact-of-farming/nitrous-oxide-methane

³⁹ Machovina, B., and Feeley, K. J. (2014). Meat consumption as a key impact on tropical nature: A response to Laurance et al. *Trends in Ecology and Evolution*, 29, 430–431.

⁴⁰ *Journal d'Uniterre, le Journal Paysan Indépendant. Véganisme entre utopie et réalité.* (2018). https://uniterre.ch/fr/thematiques/veganisme-entre-utopie-et-realite

⁴¹ Powell, J., et al. (2004). Crop-livestock interactions in the West African drylands. *Agronomy Journal*, 96 (2), 469–483. In: Altieri, M., and Rosset, P., 2017, op. cit., p. 13.

⁴² Schulze et al. (2009). Importance of methane and nitrous oxide for Europe's terrestrial greenhouse-gas balance. *Nature Geoscience*, *2*, 842–850.

Cows have been blamed as major climate destroyers due to the methane (CH₄) generated during their digestion process. Some experts say that the intensification of production would be a solution to this problem. The logic is that each animal would live shorter lives and, consequently, generate less CH₄. However, according to peasants of Confédération Paysanne this is a flawed argument. They point out that gains in productivity per animal generally go together with very negative factors: declines in animal health, simplification of crop production, destruction of grasslands, high use of fossil fuel and other types of energy for machines, transportation and refrigeration, and longer distances between producers and consumers. If all these factors are considered, factory farms have disastrous records when it comes to GHG emissions.⁴³ Furthermore, their social standards are very low; this includes labor exploitation through poor wages and working conditions, and the appropriation of large amounts of public subsides.⁴⁴ Factory farms also have many negative public health impacts including water and air pollution as well as antibiotic resistance.⁴⁵

Finally, consumption is also an important element to take into account. Advertisements by agro-industry urge consumers to buy more and more, contributing to a worldwide increase in meat consumption.⁴⁶ However, we urgently need to reduce meat consumption and improve its distribution in accordance with what is simultaneously ecologically, nutritionally and culturally appropriate. Food sovereignty provides the level of local control over food which would also address hunger because social bonds – not market forces – influence who eats, how much, when and the type and quality of the food.

French peasant livestock farmers in action

For all the above reasons Confédération Paysanne has been working for years to strengthen the food sovereignty movement, to train peasants and allies, and to advance public policies – at local, national, European and international levels – which protect small-scale livestock holders and which support a change in the industrial animal farming model. Its advocacy work seeks public support to strengthen grassland and low-external-input systems. Such policies would address many of the challenges of the 21st century.

But Confédération Paysanne's strategies go beyond advocacy work. Civil disobedience actions represent an important pillar in their resistance. Confédération Paysanne defends farmers who refuse to vaccinate or microchip their animals. They organize collective actions like the one to dismantle the milking parlor on a 1,000-cow factory farm.⁴⁷

⁴³ FAO, 2006, op. cit.

⁴⁴ Confédération Paysanne. (2015). *Animal-rearing: Small-scale solutions to future problems. Supplément à Campagne Solidaires no 312.*

⁴⁵ GRAIN. (2017). *Grabbing the Bull by the Horns*.

⁴⁶ Confédération Paysanne, 2015, op. cit.

⁴⁷ See: https://viacampesina.org/en/france-call-for-support-to-confereration-paysanne and http://en.rfi.fr/economy/20140529-farmers-arrested-protest-1750-cow-factory-farm-protest.

A considerable number of members of Confédération Paysanne have been taken to court for their acts of resistance. Some of them have even lost their public subsidies or the right to sell their products. This resistance comes with great sacrifice. At the same time, it has been essential to the continued survival of peasant farming in France, and to building greater awareness in society that peasant livestock farming has nothing in common with the industrial livestock system. Peasant farming is, rather, part of a broad movement for food sovereignty and climate justice.

Indonesian peasants defending peasant rights through resistance to land grabbing and deforestation

Indonesia has the third largest tropical rainforest on the planet. The rate of deforestation in the country is among the highest in the world. In the early 2000s in Jambi, a resource-rich province in South Sumatra, around 96,000 hectares of land were privatized through REDD+⁴⁸ in the name of being an «environmentally friendly» project. Local communities lost their food sovereignty while a corporation received a 100-year lease to access the land.⁴⁹ For the local communities REDD+ has meant a grave violation of their peasants' rights. In Mekar Jaya, a province in North Sumatra, the homes and cornfields of over 100 families were destroyed in 2016 by the police to make way for the industrial cultivation of palm oil by two corporations. The peasant communities evicted have been inhabitants and workers of that land for more than six decades.⁵⁰ In April 2018 a highway construction project by the regional government led to another massive eviction. This time, 140 peasant families from nine villages in Central Java lost their lands and homes, which caused misery for those families.⁵¹

Such deforestation and forest degradation must urgently be stopped in order to combat climate change and halt the threats to life of forest-dependent communities who are being confronted with forced eviction. The UN-sanctioned carbon trade program, REDD+, supposedly plays the role of protecting forests thereby reducing

⁴⁸ LVC. (2017b). *The future is in the hands of young peasants!* https://viacampesina.org/en/future-hands-young-peasants

⁴⁹ LVC. (2008). *Small farmers victims of forest carbon trading*. https://viacampesina.org/en/ small-farmers-victims-of-forest-carbon-trading

⁵⁰ LVC. (2017a). Peasants fighting for Justice.

⁵¹ LVC. (2018). *Law on Land Procurement & Highway Construction is resulting in peasant houses and lands being forcefully grabbed: SPI, Indonesia.* https://viacampesina.org/en/law-on-landprocurement-highway-construction-is-resulting-in-peasant-houses-and-lands-being-forcefully-grabbed-spi-indonesia

emissions coming from defore station. In reality, this scheme consolidates corporate control over territory and expands profits. $^{\rm 52}$

Indonesian peasants organized under the Indonesian Peasant Union (SPI)⁵³ have been engaged in a long-term fight against deforestation, land grabbing and the eviction of peasant communities from their territory. They have been organizing land occupations and pressuring the government for the implementation of popular agrarian reform to redistribute land in ways that put the needs of the people first.

As part of this struggle against land grabbing, SPI played a fundamental role in kick starting a global process to develop what has come to be called the «UN Declaration on the Rights of Peasants and Other People Working in Rural Areas». In 2010, as a result of several years of joint work between SPI, other members of La Via Campesina and allies, the Human Rights Council mandated an Advisory Committee to undertake a preliminary study on ways and means to further advance the rights of peasants and other people working in rural areas. In 2012, the results of the study lead to the establishment of an open-ended intergovernmental working group on the subject. As of June 2018, the Declaration is in the final stages of negotiations and is expected to be adopted by the UN General Assembly. Among its key components are measures to guarantee the rights of peasant communities to land, water and other resources, as well as other rights protecting peasants against systematic discrimination and human rights violations.

While corporations and world governments respond to the accelerating crises with business-as-usual, La Via Campesina fights for justice and human rights. SPI's struggle shows us that the defense of the rights of peasants and the protection of healthy ecosystems cannot be disconnected from one another.

Real solutions in LVC's Southern and East Africa Region (SEAf)

African smallholder farmers are especially vulnerable to climate change and, on the whole, African people are among the least responsible for historic emissions.⁵⁴ Despite this fact, the Paris Agreement includes no provisions that recognize African

⁵² REDD+ is a mechanism negotiated under the United Nations Framework Convention on Climate Change (UNFCCC) that allows international donors and private companies to pay countries to keep forests intact, the theory goes, in order to capture carbon and stabilize the climate. This carbon trading mechanism is getting a lot of international support at UN climate meetings. However, such programs negatively impact peasants and Indigenous Peoples because the forests are privatized. REDD is leading to more land grabbing.

⁵³ SPI stands for Serikat Petani Indonesia. It is the member organization of LVC in Indonesia. www.spi.or.id

⁵⁴ Althor, G., et al. (2015). Global mismatch between greenhouse gas emissions and the burden of climate change. *Nature, Scientific Reports*, 6, 20281.

countries' differing responsibilities for historic GHG emissions.⁵⁵ In the face of this injustice, political trainings and peasant-to-peasant exchanges – a core part of La Via Campesina's work – have been helping to build capacity within the Southern and East African (SEAf) region to help smallholders develop their own analysis of the problems and solutions based on their shared experiences and own expertise. At these trainings, farmers tell their stories, define their conditions and shape their priorities. As they exchange with other farmers, they learn best practices and cosmovisions from each other, and strengthen and build solidarity.

At the Juru,⁵⁶ peasant agroecology is critical to fighting climate change

During a regional training session in January-February 2018, La Via Campesina delegates from six countries in the region visited smallholder farmers and their families at Juru in Zimbabwe's Goromonzi district, Mashonaland East province.

Climate change is causing droughts in that region. Too much heat and not enough rainfall has meant that maize, the staple crop for the country, is under-producing. Farmers at the Juru Centre address the challenges of low rainfalls with agroecology. They draw on a range of techniques which include mulching, intercropping, mixed cropping, rainwater harvest, the use of terraces, planting fruit trees and agroforestry, and rain pattern recording. The farmers of Juru also grow crops that are known to withstand extreme heat, including ground nuts and beans.⁵⁷ Delegates strongly agreed on the importance of saving and using traditional or indigenous seeds that are adapted to local conditions. Their experience shows that food sovereignty and agroecology processes mitigate and adapt to climate change.

Re-defining «Climate Smart Agriculture»

Delegates to the SEAf regional meeting agreed that so-called «Climate Smart Agriculture» is not meant to benefit smallholder farmers. Rather, it is part of the package of false solutions in agriculture that helps big polluters make profits from the climate crisis at the expense of food sovereignty.⁵⁸

⁵⁵ In the lead-up to the Paris Agreement, the bullying tactics of the governments of the global North undermined the UNFCCC's principle of Common but Differentiated Responsibilities (CBDR). While this principle would have acknowledged African countries' differing responsibilities for historic emissions, this core principle for climate justice was left out of the framework for commitments outlined in the Paris Agreement.

⁵⁶ The Juru Centre is a member within the national network of the Zimbabwe Smallholder Organic Farmer Forum (ZIMSOFF), which is currently the member organization hosting LVC's general secretariat. www.facebook.com/zimsoff

⁵⁷ Although maize is an important crop for the culture and lifestyle of the people of Zimbabwe, the government is promoting maize without sufficiently supporting alternatives. Such alternatives will become necessary to secure food sovereignty for the country as climate changes loom on the horizon. Farmers will require government support to make the shift to diversified, agroecological agriculture.

⁵⁸ LVC and Afrika Kontakt. (2018). *Peasant Agroecology Achieves Climate Justice: A Primer*. https://viacampesina.org/en/wp-content/uploads/sites/2/2018/05/primer_english_print.pdf

The FAO, the Global Alliance for Climate Smart Agriculture (GACSA)⁵⁹ and other private sector and government institutions use «climate smart» to refer to any practices that promote the interests that suit their needs. In their understanding, both agroecological farming and producing with GMOs are «climate smart». SEAf members challenge this ambiguity, providing a very clear perspective: «Climate Smart Agriculture» is the massive use of chemicals and fertilizers for agricultural production. «Climate Smart Agriculture» involves the use of high technology and GMOs, and the promotion of biotechnology. «Climate Smart Agriculture» is the opposite of agroecology.

In some parts of the Teso region of Uganda, smallholder farmers reported that the cassava seeds that were distributed by government research institutes under the so-called Climate Smart Agriculture Program did not offer the anticipated solution. They were actually fast rotting and slow growing. In contrast, agroecology contributes to food security and food sovereignty by providing families with enough diversity in food crops hence providing for their needs in times of varying climate. By practicing agroecology, farmers have more food sovereignty compared to having to purchase seeds and inputs from big agribusinesses.⁶⁰ According to a farmer representative from the region, «to gain Climate Justice one needs to regain control of seed: select it, manage it, maintain it and improve it using participatory plant breeding methods. This would allow farmers to be able to plant it again and again».

Agroecology, just recovery and mutual support in Puerto Rico after the 2017 hurricanes

In September 2017, the islands of Puerto Rico experienced two back-to-back category five hurricanes: Irma and María. Peasants, farmers, farm workers and working people living in rural and urban areas were particularly vulnerable. Many months after the hurricanes, local communities, particularly in rural areas, are still without access to electricity and other basic services. The death toll directly and indirectly related to the hurricanes continues to rise while the government has yet to address the crumbling infrastructure.⁶¹

Organización Boricuá de Agricultura Ecológica de Puerto Rico is a 28-year-old organization of farmers, peasants, farm workers, and activists that practices and

⁵⁹ The GACSA, an initiative promoted by the FAO. Top multinationals Monsanto, DuPont-Pioneer, BASF, McDonalds and Cargill are also members of the GACSA. A total of 60 percent of the private sector membership of the GACSA comes from the fertilizer industry (GRAIN 2015).

⁶⁰ LVC and Afrika Kontakt, 2018, op. cit.

⁶¹ Puerto Rico's Center for Investigative Journalism originally estimated the death toll for the first few months of the storm to be in the thousands. A new study by Harvard researchers confirms at least 4,645 deaths in the first three months. The study also found that, if the pattern continues, thousands more deaths can be attributable to the government's abandonment that continues today. No number can capture those that were lost without knowledge or those that in the emergency had to be buried in the backyard never to be counted. The link to the Harvard study is www.nejm.org/doi/full/10.1056/NEJMsa1803972

promotes agroecology as the essential tool to achieve food sovereignty.⁶² After many months of living through these hurricanes and the aftermath of the devastation, Boricuá's members share four reasons why agroecology and food sovereignty are crucial to addressing the climate crisis.

Compared to conventional farming, agroecology has a high degree of resilience to climate change

The storms had a major impact on conventional farmers whose monoculture farms are dependent on external inputs. In nearly every region, the monocultures were leveled during the storms. The labor and financial investment in external inputs were lost. Over time, farmers' debt has increased because there has been no harvest to pay the bills. This loss is compounded by bad government administration that is preventing farmers from accessing insurance payments and other supports. More than nine months after the storms, conventional agriculture had still not recuperated.

The experience of agroecological farmers was somewhat different. They had significant losses. However, just like in Guatemala and Nicaragua after hurricane Mitch in 1998,⁶³ we see that agroecological farms were more resilient to the storms' powerful winds and rains. We have found that agroecological farms have been able to bounce back, largely because they have relied on a diversified farming system that protected and shared local *jíbaro-campesino*⁶⁴ ancient knowledge.⁶⁵ Many root vegetables like cassava, yam, taro and sweet potato resisted the storm. With a vast diversity of crops on farms, many members from our network were harvesting food for their families and their communities only days after the hurricanes, while simultaneously planting crops to feed people for the weeks and months to come.

The brigade methodology helps us recover and «scale up» agroecology

Boricuá's years of work on agroecology has created a network of mutual support. We have been able to draw upon this network to recover from disaster capitalism where corporations take advantage of natural disasters to advance their interests.⁶⁶ Our main strength is that we have each other: we are organized together as a family within «base groups» across diverse regions in the archipelago of Puerto Rico.

The methodology follows a decentralized, mutual support process called brigades. This methodology has been at the core of Boricuá's work for decades. Through the brigades women, men, young and old work the land collectively. We exchange seeds, we learn from local experiences, host agroecological workshops, stay in touch with each other, and move from region to region to support the network of farmers and agroecological projects. A brigade will collectively complete as much work as it takes the labor of a typical farm to complete in approximately one month.

⁶² Boricuá is a member organization of La Via Campesina. www.facebook.com/organizacionboricua

⁶³ See: Holt-Giménez, E. (2008). El huracán Mitch. Campesino a campesino. Managua.

⁶⁴ *Jibaro* is the Puerto Rican word for peasant, while *campesino* is the Spanish word for it.

⁶⁵ Some farms had less erosion, thanks to agroforestry and agroecological practices.

⁶⁶ www.democracynow.org/2018/2/19/five_months_after_maria_san_juan

Brigades also include a political dimension. With boots on the ground and tools in hands, brigades become the ideal space for grassroots groups to continue the formación process within a *campesino-a-campesino* (peasant-to-peasant) format. Participants learn from each other about the political dimensions of agroecology. The brigade is a tool to «scale up» agroecology by encouraging adoption in new areas. This work is all done without the support of formal institutions. When we work together grounded in social justice principles, we not only produce healthy food in harmony with the Earth. We also build community power.

Agroecology is a form of resistance and an alternative to capitalism

We do not rebuild the same system that created the problems in the first place. We are achieving systemic change starting from our own communities and territories. We are going to the root of the problem – the capitalist system which relies on colonialism, racism and patriarchy.⁶⁷

For us, agroecology is a form of resistance – a tool for organizing in opposition to corporate power. Agroecology cannot be defined exclusively in terms of sustainable and healthy food production. When we work together as farmers, farm workers, peasants, and food sovereignty activists, we do it to develop a strong platform to create policy, to influence public opinion, to educate each other, to mobilize against corporations that are putting our lives and livelihoods at risk. We practice agroecology to protect and share *jíbaro-campesino* ancestral knowledge, to make the struggles of rural and urban communities more visible, and to help develop a new generation of farmers. Agroecology has served as a liberating tool that enables us to be independent. We are focused on food because we are farmers but we care about every aspect of life and how it is organized.

International solidarity strengthens our movement

As a part of the global movement of La Via Campesina and other international articulations, we have received support from many of our friends who were there for us after the disaster. This international solidarity was important for us because of our colonial context. International brigades became a tool for decolonization. It is important for us to be a part of an international articulation that builds the global movement because many of the obstacles and problems we experience at the local scale are systemic and global. Fighting this requires global coordinated action. This type of international exchange brings opportunities to learn from strategies of our allies in other places, and enables joint political analysis and strategic planning.

⁶⁷ Legally, Puerto Rico is a commonwealth of the USA. In this relationship, Puerto Rico has become a colony for transnational agribusinesses including Bayer, Monsanto, Syngenta, DuPont Pioneer, and others carrying out GMO experiments on public farm land, jeopardizing the health of communities and the environment.

CONCLUSION

The industrial agribusiness system is at a critical juncture. Its continued expansion is destroying the conditions of life for present and future generations. The pathways to achieving a 1.5°C world must be radically different than the ones which produced the crisis we are in today. This chapter sought to make clear a crucial reality: while agribusiness is destroying biodiversity, local ecosystems, the global climate, live-lihoods and life itself, peasant agroecology is a vital pathway forward as it already feeds the world's people without risking the health of the planet. As the global peasant movement – La Via Campesina – and our allies state: «[R]eal solutions to stop climate change are rooted in peoples' access to and control of land and water and promoting agroecology, nature restoration and water retention landscapes.»⁶⁸ The world's peasants have the skills and experiences to build on and expand the power from below that is necessary to make this quantum leap to a new system.

The above four examples of peasant agroecology demonstrate that peasants and their organizations are not waiting for governments and corporations to take the lead. They are already defending and recreating agricultural systems that have for thousands of years nurtured life, not undermined it.

Peasant agroecology requires immediate support in order to reverse the interconnected social and ecological crises. For governments to take seriously real solutions to the climate crises, they must urgently take direction from the masses of people, especially rural peasant communities, pastoralists, small-scale fishers, and Indigenous Peoples, including women and youth who are most impacted by the crisis. As we sought to demonstrate above, peasant-led strategies to mitigate GHG emissions and adapt to climate change are the most holistic approach to reversing the climate crisis and promoting social justice in the agri-food system.

The struggle for a 1.5oC world is also a struggle for human rights.⁶⁹ To support peasant agroecological practices and build the political will to achieve food sovereignty, political measures must include the immediate implementation of human rights based processes. Those processes include the Right to Adequate Food, the International Labour Organization (ILO) Convention 169, Free Prior and Informed Consent, the General Recommendation 34 by the Committee on the Elimination of Discrimination against Women, the UN Declaration on the Rights of Indigenous Peoples, the Tenure Guidelines, and the Small-Scale Fisheries Guidelines. Similarly,

⁶⁸ IPC. (2018). *The IPC Statement from Paarl (Cape Town)*. www.foodsovereignty.org/ipc-statement-cape-town

⁶⁹ We would like to highlight that in accordance with international law and international human rights law, if human rights are in conflict with economic interests, then human rights must prevail.

quick adoption and implementation of the UN Declaration on the Rights of Peasants and Other People Working in Rural Areas is essential. Because the climate crisis is intrinsically interconnected to the crisis of global inequality, hunger, poverty, migration, dispossession, territorial conflicts, political repression, occupations and wars, broad systemic changes are urgently needed. La Via Campesina and our allies are working in the fields, on the streets and at institutional level to make these changes a reality.

ECOLOGY VOLUME 44.6

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