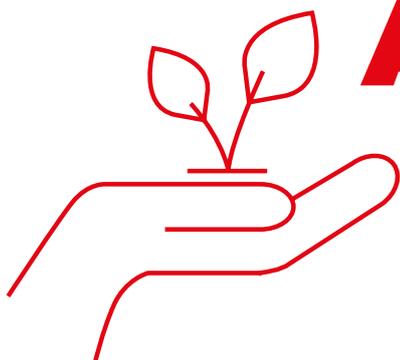


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**Agroecology:  
Scaling-up,  
scaling-out**

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# EXECUTIVE SUMMARY

ActionAid joins growing global calls to ‘scale-up’ and ‘scale-out’ agroecology. As governments and donors meet at the UN Food and Agriculture Organization (FAO) 2<sup>nd</sup> *International Symposium on Agroecology* we urge them to join forces to support agroecology on a large scale. At least 500 million family farms produce about 80 percent of the world’s food. Comprised of smallholders, pastoralists, landless, fisher folk, forest dwellers and tribal and indigenous peoples, about half of them are women. Peasant agriculture plays a multifunctional role, providing food, fiber and other goods, as well as employment, culture, and a way of life. There is now extensive evidence that peasant-based agroecological systems are superior to high external input industrial agriculture and are highly productive, highly sustainable, empower women, create jobs, engage youth, provide greater autonomy, climate resilience, and multiple social, cultural and environmental benefits for women and men in rural and urban communities. Key benefits of agroecology include:

- » Year-round access to healthy, fresh, diverse and culturally-appropriate food for local populations;
- » Reduced poverty and a key contribution to the realization of the right to adequate food and nutrition;
- » Increased climate resilience and reduced greenhouse gas (GHG) emissions;
- » Empowerment of women and reduced workload burdens;
- » Diversified livelihoods and valued local, tribal and indigenous cultures;
- » Improved health through reduced exposure to harmful agrochemicals;
- » More resilient ecosystems, healthier soils and improved water management;
- » Lower costs, less debt and greater autonomy;
- » Enhanced stewardship of seeds, crops, biodiversity, forests and natural resources.

A science, a set of farming practices and a social

movement, agroecology promotes food sovereignty and can also significantly contribute to achieving multiple Sustainable Development Goals (SDGs) and the 2030 Agenda. Based on our positive experiences of agroecology in 25 countries<sup>1</sup> and the wider body of evidence, we urge decision makers to cast aside any ideological bias or skepticism and embrace agroecology as a key policy priority. Seeking a major transformation in agricultural and food systems, we call for increased public investment and adoption of public policies, strategies, programs and incentives to scale-out agroecology. We highlight six key barriers that need to be challenged and seven key steps required to achieve agroecology at scale. We also highlight ActionAid case studies from Brazil, Ghana, India, Kenya, Rwanda and Senegal. The six key barriers we identify are: ideological barriers, international trade and export orientation, marginalization of women, monopoly seed laws, lack of agricultural Research and Development (R&D) on agroecology and concentration of power amongst agribusiness TNCs. The seven key steps required to achieve agroecology at scale are:

## Support peasant social movements to ‘scale-out’ agroecology

Decision makers should support broad-based peasant social movements and rural women’s movements to help ‘scale-out’ agroecology at the grassroots level.

## Prioritize implementation of CEDAW commitments on the rights of women living in rural areas

Governments should prioritize implementation of the *UN Committee on the Elimination of Discrimination Against Women (CEDAW) General Recommendation 34 (2016)* on the rights of women living in rural areas. It includes rights to participate and benefit from rural development, rights to health, education, employment, economic, social and public life, protection from violence, and rights to land and natural resources.

## Adopt public policies that support agroecology

Decision makers should adopt public policies that encourage the transition to agroecology at scale, such

<sup>1</sup> Bangladesh, Brazil, Burundi, Cambodia, Ethiopia, the Gambia, Ghana, Guatemala, Haiti, Kenya, India, Liberia, Malawi, Mozambique, Myanmar, Nepal, Nigeria, Pakistan, Rwanda, Senegal, Tanzania, Uganda, Vietnam, Zambia and Zimbabwe

as framework right to food and nutrition laws, national plans that encourage agroecological production and consumption, and public procurement schemes.

### **Include agroecology as a key tool for climate adaption**

Decision makers should ensure agroecology plays a central role in national climate adaption plans and strategies.

### **Prioritize local food systems and territorial markets**

Decision makers should prioritize and support broad-based peasant social movements, women's groups and smallholder food producers to re-localize food systems and foster short food supply chains.

### **Increase public finance and prioritize agroecology in agricultural R&D and extension services**

Donors, governments, multilaterals and philanthropists should significantly increase finance for agroecology and prioritize agroecology in their Overseas Development Aid (ODA), agricultural R&D and rural extension portfolios.

### **Repeal IPRs on seeds, protect resource rights and break up monopoly power of agribusiness TNCs**

Governments and decision makers should repeal intellectual property right rules (IPRs) on seeds, secure women and peasants' access and control over natural resources and other productive resources, and act to break up the monopoly power of agribusiness TNCs.



# INTRODUCTION

ActionAid joins growing global calls to ‘scale-up’ and ‘scale-out’ agroecology – made by social movements, peasants, civil society organizations (CSOs), academics, scientists and key multilateral bodies. Families run about nine out of ten farms globally and the FAO estimates there are at least 500 million family farms that produce about 80 percent of the world’s food.<sup>2</sup> This includes smallholders, pastoralists, landless, fisher folk, forest dwellers and tribal and indigenous peoples,<sup>3</sup> and about half of them are women. Globally, smallholder agriculture plays a multifunctional role, providing food, feed, fiber and other goods. It has a major influence on ecosystem services – such as water supply and carbon sequestration – and plays an important social, economic, cultural and spiritual role, providing employment, a way of life, and a medium of cultural transmission and cultural practices worldwide.<sup>4</sup>

There is now ample evidence that peasant and family farmer-based agroecological systems (see Box 1) are superior to high external input industrial and commercial agriculture, and are highly productive, highly sustainable, empower women, create jobs, engage youth, provide greater autonomy, climate resilience, and multiple social, cultural and environmental benefits for women and men in rural and urban communities.

Extensive research highlights the key benefits of agroecology:<sup>5</sup>

- » Year-round access to healthy, fresh, diverse and culturally-appropriate food for local populations
- » Reduced poverty and a key contribution to the

<sup>2</sup> FAO (2014) *The State of Food and Agriculture, Innovation in family farming*, FAO: Rome

<sup>3</sup> FAO (2014) *The State of Food and Agriculture, Innovation in family farming*, FAO: Rome

<sup>4</sup> Ikerd J (2016) *Multifunctional small farms: essential for agricultural sustainability and global food sovereignty*, *Livestock Research for Rural Development*, Vol 28, 192, 2016

<sup>5</sup> See: AFSA (2016) *Agroecology, The Bold Future of Farming in Africa, Alliance for Food Sovereignty in Africa (AFSA)/Tanzania Organic Agriculture Movement (Toam)*, Dar es Salaam, Tanzania; FAO (2015) *Agroecology for Food Security and Nutrition, Proceedings of the FAO International Symposium 18-19 September 2014, Rome, Italy*, FAO: Rome; Altieri M A et al (2015) *Agroecology and the design of climate change-resilient farming systems*, in *Agronomy for Sustainable Development* 35(3): 869-890; PAN AP (2015) *Replacing Chemicals with Biology: Phasing out highly hazardous pesticides with agroecology*, Pesticide Action Network (PAN) Asia and the Pacific: Panang, Malaysia; Pretty, J (2011) *Foresight project on global food and farming futures, Synthesis report C9: Sustainable intensification in African agriculture – analysis of cases and common lessons*, London: UK Government, Office for Science; De Schutter, O (2010) *Report submitted by the Special Rapporteur on the right to food, Olivier De Schutter*, United Nations General Assembly, Human Rights Council Sixteenth Session, 17 December 2010, A/HRC/16/49

## BOX 1 WHAT IS AGROECOLOGY?

Agroecology is the science of sustainable agroecosystems, it is a set of farming practices, and a social movement.<sup>i</sup> Agroecology draws on social, biological and agricultural sciences and integrates these with traditional, indigenous and farmers’ knowledge and cultures. It focuses on the interactions between microorganisms, plants, animals, humans and the environment. Highly knowledge-intensive, context specific and locally adaptive, its technologies are developed based on farmers’ knowledge and participatory on-farm experimentation. Adopted by millions worldwide, agroecology knowledge and skills are ‘scaled-out’ or transmitted horizontally most powerfully through ‘peasant protagonism’ and social movement-driven ‘farmer-to-farmer’ methods<sup>ii</sup> Agroecology’s key principles include recycling nutrients and energy on farm, rather than introducing external chemical inputs; integrating crops and livestock; diversifying species and genetic resources; and focusing on interactions and productivity across the agroecosystem, rather than focusing on individual species.<sup>iii</sup> Highly people-centered, the main agroecology approaches include integrated pest and nutrient management, conservation tillage, agroforestry, aquaculture, water harvesting and livestock integration.<sup>iv</sup>

<sup>i</sup> See: Altieri, M (1995) *Agroecology: The science of sustainable agriculture*, 2<sup>nd</sup> edition, Westview Press, Boulder, CO; Gliessman, S (1998) *Agroecology: Ecological processes in sustainable agriculture*, Ann Arbor Press, Chelsea, MI

<sup>ii</sup> Mier y Terán, M et al (forthcoming) *Bringing agroecology to scale: Key drivers and emblematic cases*, *Agroecology and Sustainable Food Systems*

<sup>iii</sup> De Schutter, O (2010) *Report submitted by the Special Rapporteur on the right to food*, Olivier De Schutter, Human Rights Council sixteenth session, agenda item 3, A/HRC/16/49

<sup>iv</sup> Petty, J (2008) *Agroecological approaches to agricultural development*, Background paper for the *World Development Report 2008*, World Bank: Washington, DC

realization of the right to adequate food and nutrition

- » Increased climate resilience and reduced greenhouse gas (GHG) emissions
- » Empowerment of women and reduced workload burdens
- » Diversified livelihoods and valued local, tribal and indigenous cultures
- » Improved health through reduced exposure to harmful agrochemicals
- » More resilient ecosystems, healthier soils and improved water management
- » Lower costs, less debt and greater autonomy
- » Enhanced stewardship of seeds, crops, biodiversity, forests and natural resources.

A science, a set of farming practices and a dynamic grassroots social movement, agroecology promotes food sovereignty and can also significantly contribute to achieving multiple SDGs and the 2030 Agenda – on poverty and hunger, education, gender equality, water, sustainable production and consumption, climate resilience and halting biodiversity loss.<sup>6</sup> Working with social movements, smallholder women and men farmers, women’s groups, indigenous, tribal and landless people, community-based organizations, universities, research centers and rural extension agents, ActionAid has extensive experience of promoting and supporting agroecology in diverse environments and terrains worldwide – including with women and poor communities in Bangladesh, Brazil, Burundi, Cambodia, Ethiopia, the Gambia, Ghana, Guatemala, Haiti, India, Kenya, Liberia, Malawi, Mozambique, Myanmar, Nepal, Nigeria, Pakistan, Rwanda, Senegal, Tanzania, Uganda, Vietnam, Zambia and Zimbabwe.<sup>7</sup> Based on our highly positive experiences and the wider body of evidence, we urge delegates and donors at the FAO 2<sup>nd</sup> *International Symposium on Agroecology* to urgently ‘scale-up’ and ‘scale-out’ agroecology on a large scale.

<sup>6</sup> Ching, Lim Li (2016) *Towards the transformation of our agricultural and food systems*, in *Spotlight on Sustainable Development 2016, Report of the Reflection Group on the 2030 Agenda for Sustainable Development*, Social Watch: Montevideo, Uruguay

<sup>7</sup> ActionAid (2014) *Climate Resilient Sustainable Agriculture, Experiences*, ActionAid International: Johannesburg

<sup>8</sup> See: IPES-Food (2016) *From Uniformity to Diversity, A paradigm*

ActionAid calls for a major transformation of agricultural and food systems away from existing high-input resource-intensive monoculture industrial food systems which are highly polluting, degrading of land, forests, water, air and biological diversity, and also harmful, wasteful and socially and ecologically unsustainable<sup>8</sup> –

## BOX2 AGROECOLOGY AND WOMEN’S EMPOWERMENT IN BRAZIL<sup>1</sup>

ActionAid-supported Network of Women producers in Pajeú’ in the semi-arid Pernambuco region of northeast Brazil has successfully adopted agroecological practices to deal with chronic water scarcity as well as empower socially isolated women under the threat of domestic violence. The network – made up of 10 women’s groups – following a process of collective construction of knowledge through farmer-to-farmer exchanges and participatory planning, shifted from dependence on external inputs and to increased climate resilience. They did this by adopting sustainable alternatives, such as the use of water harvesting cisterns, flower beds, local seed varieties, improved poultry husbandry and better-quality animal fodder, soil preparation and fertilization. Knowledge and experience gained through agroecology and access to local agroecology fairs and markets improved the women’s’ standing within family relationships and the wider community. *“Working with agroecology changed our daily lives,”* says Maria Aparecida de Lima Silva, a member of the Network of Women Producers in Pajeú. *“Now we get out of our houses, out of our community. We participate in events, seminars, workshops, trainings. I have more knowledge that allows me to increase my income. Today in my community, almost nobody else uses chemicals now.”*

<sup>1</sup> ActionAid (2014) *Climate Resilient Sustainable Agriculture, Experiences*, ActionAid International: Johannesburg

systems which fail in their promise to end hunger and which currently leave an estimated 815 million people chronically hungry,<sup>9</sup> two billion suffering from micro-nutrient deficiencies,<sup>10</sup> and 1.9 billion overweight and obese.<sup>11</sup> ActionAid calls for a major transition to locally based, diverse, environmentally sustainable, climate resilient and ecologically sound approaches. Our global experience shows that agroecology can empower women living in rural areas, ensure year-round access to healthy food and more diverse diets, cut poverty, increase incomes, create alternative employment, engage young people, foster climate resilience, mitigate the risk

of disasters, reduce dependence on chemical inputs, value tribal and indigenous knowledge, and regenerate soils, agro-biodiversity and the environment. We believe decision makers and donors – at the FAO 2<sup>nd</sup> *International Symposium on Agroecology* and beyond – should cast aside any ideological bias or residual skepticism and embrace agroecology as a key policy priority. We are calling for increased public investment and adoption of public policies, strategies, programs and incentives to scale-out agroecology. Below we highlight six key barriers that we believe need to be challenged and seven key steps required to achieve agroecology at scale.

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*shift from industrial agriculture to diversified agroecological systems*, International Panel of Experts on Sustainable Food Systems (IPES-Food), June 2016; UNCCD (2017) *Global Land Outlook, First Edition*, United Nations Convention to Combat Desertification (UNCCD): Bonn, Germany; IAASTD (2009) *Agriculture at a Crossroads, Global Report*, International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD): Washington, DC

<sup>9</sup> FAO/IFAD/UNICEF/WFP/WHO (2017) *The State of Food Security and Nutrition in the World 2017, Building Resilience for peace and food security*, FAO: Rome

<sup>10</sup> Glopan (2016) *Food systems and diets: Facing the challenges of the 21st century*, Global Panel on Agriculture and Food Systems for Nutrition (Glopan): London, United Kingdom

<sup>11</sup> HLPE (2017) *Nutrition and food systems, A report by The High-Level Panel of Experts on Food Security and Nutrition, September 2017*, HLPE: Rome



# 1 - SIX BARRIERS TO AGROECOLOGY

## 1. Ideological barriers

Unlocking ideological barriers, challenging industrial agriculture-focused mind-sets and gaining political recognition among key decision makers of agroecology and its benefits in achieving sustainable food systems is crucial for scale-up.<sup>12</sup> Global experts say the evidence for agroecology is overwhelming, and conclude the issue seems to be political or ideological rather than evidence or science-based.<sup>13</sup>

Entrenched skepticism against peasant or smallholder agriculture and ideological bias among governments and donors – shaped by powerful corporate lobbies and misconceptions about agroecology, professional inertia and a self-reinforcing ‘path dependency’ in favor of large-scale industrial agriculture<sup>14</sup> – strongly privilege a development model based on monoculture commercial agriculture over others. Donor-driven initiatives, such as the G8’s New Alliance for Food Security and Nutrition, promote corporate investment in smallholder agriculture in ten African countries to 2022 based on contract farming and the promotion of large-scale commercial production. Supported by TNCs such as the agrochemical giant Syngenta and Norwegian fertilizer giant Yara International, investment is based on access to huge tracts of land and production relies heavily on synthetic pesticides and fertilizers.<sup>15</sup> Other donor initiatives – such as the Alliance for a Green Revolution in Africa (AGRA) in 16 African countries<sup>16</sup> – focus on hybrid seeds and synthetic agrochemicals, in some cases supplied by the agrochemical giant Monsanto.<sup>17</sup> Ideological bias is further played out through public and private support for false solutions such as ‘Climate Smart Agriculture’,<sup>18</sup>

genetically modified organisms (GMOs), and industrial agriculture-focused Public-Private Partnerships (PPPs) – which can cause land grabs and disempower local communities.<sup>19</sup> Domestically, many governments also support agrochemical input distribution schemes to boost smallholder production, which are, however, highly expensive and often tools of political patronage.<sup>20</sup>

## 2. International trade and export orientation

International trade and investment agreements and export-led policies focused on global commodity supply chains ‘lock in’ specialized high-input monoculture agriculture – undermining rural livelihoods, food security and diversity of local food systems, as well as rights to access and control land, water, seeds and other productive resources. Such liberalization disempowers women, entrenches wider rural poverty, degrades land, water, forests, soils, biodiversity and the environment, leads to land grabbing and dispossession, depletes water resources, harms public health and emits high levels of GHGs. It also reinforces the concentration of corporate power and policy privilege.<sup>21</sup>

## 3. Marginalization of women

Despite their main role, women are largely invisible in agriculture and often not recognized as ‘farmers’ – by their families, male farmers, local communities or the state. Women and girls face widespread gender discrimination, violence, sexual exploitation and social, cultural and legal constraints, and are routinely marginalized in terms of

<sup>12</sup> Oxfam-Solidarity (2014) *Scaling-Up Agroecological Approaches: What, Why and How? Discussion Paper*, January 2014, Oxfam Solidarity: Belgium

<sup>13</sup> Altieri, M A (2012) *The scaling up of agroecology: spreading the hope for food sovereignty and resiliency, A contribution to discussions at Rio+20 on issues at the interface of hunger, agriculture, environment and social justice*, SOCLA (Sociedad Científica Latinoamericana de Agroecología)

<sup>14</sup> IPES-Food (2016) *From Uniformity to Diversity, A paradigm shift from industrial agriculture to diversified agroecological systems*, International Panel of Experts on Sustainable Food Systems (IPES-Food), June 2016

<sup>15</sup> De Schutter, O (2015) *The New Alliance for Food Security and Nutrition in Africa, Directorate-General for External Policies, Policy Department*, for European Parliament’s Committee on Development, 16 November 2015, Brussels

<sup>16</sup> See AGRA main funder Bill & Melinda Gates Foundation, at: <http://gates.ly/2IBAddc>

<sup>17</sup> See: GRAIN (2014) *How Does the Gates Foundation Spend its Money to Feed the World?*, GRAIN: Girona, Spain; African Centre for Biosafety (2012) *Alliance for a Green Revolution in Africa (AGRA), Laying the groundwork for the commercialization of African Agriculture*, African Centre for Biosafety: Melville, South Africa

<sup>18</sup> ActionAid (2014) *Clever Name, Losing Game? How Climate Smart Agriculture is sowing confusion in the food movement*, ActionAid International: Johannesburg

<sup>19</sup> ActionAid (2014) *The Great Land Heist, How the world is paving the way for corporate land grabs*, ActionAid International: Johannesburg

<sup>20</sup> See: IFPRI (2013) *Recent evidence on input subsidy programs in Africa, Highlights from a special issue of Agricultural Economics, Vol 40, No. 6*, November 2013, International Food Policy Research Institute (IFPRI): Washington, DC

<sup>21</sup> See: IPES-Food (2016) *From Uniformity to Diversity, A paradigm shift from industrial agriculture to diversified agroecological systems*, International Panel of Experts on Sustainable Food Systems (IPES-Food), June 2016; IAASTD (2009) *Agriculture at a Crossroads, Global Report*, International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD): Washington, DC

control over land, credit, tools, markets, rural extension, training, agricultural R&D and climate adaptation efforts.<sup>22</sup> Women and girls have less access to education, health, and employment opportunities, while rural extension services ignore the needs and time constraints that women face. They are at a higher risk of being trafficked and forced into labor, as well as into child or forced marriage and other harmful practices.<sup>23</sup> Women are especially burdened by the amount of unpaid care work they complete. Women living in rural areas work up to 10 hours a day caring for family and community members, cooking and cleaning, and fetching water, fodder and fuel – constraining their ability to adopt knowledge-intensive agroecology or access waged employment. Although women make up on average 43 percent of the agricultural labor force in developing countries,<sup>24</sup> they are also marginalized from decision-making spheres at all levels – including the household, local communities and national parliaments.<sup>25</sup> Women tend to be further marginalized by industrial and commercial agriculture. Women are excluded from decision-making and commercial activities, their traditional and indigenous knowledge is overlooked and disregarded, and they are more vulnerable to land grabs – they often lose out on access to food, water, fodder, wild species, firewood and medicinal plants as land and other natural resources under customary or informal tenure are fenced off by investors.<sup>26</sup> Even when formally employed under large-scale industrial agricultural models, they are more often engaged in work that is insecure, hazardous, poorly paid, vulnerable to sexual exploitation and not covered by social protection. This exacerbates gender inequalities and can undermine any benefits in terms of the potential empowerment of women created by such labor opportunities.<sup>27</sup>

## 4. Monopoly seed laws

The rapid expansion of IPRs and seed laws – promoted by a handful of powerful global seed and agribusiness TNCs, endorsed by multilateral institutions, and enforced by governments keen to ‘modernize’ agriculture – has privatized seeds and germplasm for new technologies and practices in many poor countries.<sup>28</sup> Based on generations of peasant plant breeding and stewardship, the majority of peasants and smallholders, particularly women, rely on peasant seed systems to access diverse local seed varieties, land races and native germplasm that is adapted to their local environment and cultures. IPRs, however, marginalize traditional and indigenous seed systems and transfer monopoly ownership to commercial interests – in the process criminalizing peasants (in Colombia and Tanzania, for example), undermining women’s key role as seed savers and overriding farmers’ rights to save, use, exchange and sell farm-saved seed<sup>29</sup> – a core foundation of agroecology.

## 5. Lack of R&D on agroecology

The vast majority of public and private R&D is not currently focused on agroecology or peasant-directed research. Analysts say there is little data on agroecology or peasant-directed research, and estimate it represents less than 1 percent of the \$50 billion currently spent globally each year in public and private R&D on agriculture.<sup>30</sup> Recent analysis of US Department of Agriculture (USDA) support found just 0.6 to 1.5 percent of funding went on projects with an emphasis on agroecology out of the USDA’s entire Research, Extension and Economics budget in 2014,<sup>31</sup> and researchers recently found that less than 0.5 percent of the United Kingdom’s total overseas aid budget since 2010 went to projects that promote agroecology.<sup>32</sup> Most gradually privatized current agricultural R&D is focused on a narrow range of commercial crops and high external

<sup>22</sup> See: Elver, H (2015) *Report of the Special Rapporteur on the right to food*, United Nations General Assembly, Human Rights Council, Thirty-first session, 14 December 2015, A/HRC31/51; ADB/FAO (2013) *Gender Equality and Food Security, Women’s Empowerment as a Tool against Hunger*, Asian Development Bank/FAO: Manila, Philippines; De Schutter (2012) *Report submitted by the Special Rapporteur on the right to food, Olivier De Schutter, Women’s rights and the right to food*, United Nations General Assembly, Human Rights Council, Twenty-second session, 24 December 2012, A/HCR/22/50

<sup>23</sup> CEDAW (2016) *Committee on the Elimination of Discrimination against Women, General recommendation No.34 on the rights of rural women*, 4 March 2016, CEDAW/C/GC/34

<sup>24</sup> FAO (2011) *The State of Food and Agriculture, Women in Agriculture, Closing the gender gap for development*, FAO: Rome

<sup>25</sup> De Schutter (2012) *Report submitted by the Special Rapporteur on the right to food, Olivier De Schutter, Women’s rights and the right to food*, United Nations General Assembly, Human Rights Council, Twenty-second session, 24 December 2012, A/HCR/22/50

<sup>26</sup> See: Oxfam (2013) *Promises, Power and Poverty, Corporate land deals and rural women in Africa*, Oxfam Briefing Paper 170, Oxfam: Oxford, UK; ActionAid (2012) *From Under Their Feet, A think piece on the gender dimensions of land grabs in Africa*, ActionAid International: Johannesburg; IFPRI (2011) *The Gender Implications of Large-Scale Land Deals*, IFPRI Discussion Paper 01056, IFPRI: Washington, DC

<sup>27</sup> CFS (2017) *CFS Forum on Women’s Empowerment in the Context of Food Security and Nutrition*, Committee on World Food Security (CFS), Forty-Fourth Session, “Making a difference in food security and nutrition”, Rome, Italy, 9-13 October 2017, CFS/201/Inf21, July 2017

<sup>28</sup> Monsalve Suarez S et al (2016) *Seeds and Agricultural Biodiversity: The Neglected Backbone of the Right to Food and Nutrition*, in *Right to Food and Nutrition Watch, Keeping Seeds in Peoples’ Hands, 2016/Issue 08*, FIAN: Heidelberg, Germany

<sup>29</sup> Monsalve Suarez S et al (2016) *Seeds and Agricultural Biodiversity: The Neglected Backbone of the Right to Food and Nutrition*, in *Right to Food and Nutrition Watch, Keeping Seeds in Peoples’ Hands, 2016/Issue 08*, FIAN: Heidelberg, Germany

<sup>30</sup> ETC Group (2017) *Who Will Feed Us? The Peasant Food Web vs The Industrial Food Chain, 3rd Edition*, ETC Group: Ottawa, Canada

<sup>31</sup> DeLonge M.S et al (2016) *Investing in the transition to sustainable agriculture*, *Environmental Science & Policy*, 55(1): 266–273, January 2016

<sup>32</sup> Pimbert M P & Moeller N I (2018) *Absent Agroecology Aid: On UK Agricultural Development Assistance since 2010*, *Sustainability*, 10, 505, 13 February 2018

input agriculture – overlooking many orphan crops, land races and native varieties that peasants use – and is ill-equipped to tackle multiple cross cutting issues, such as climate adaption, disaster risk reduction, gender equality or social inclusion.<sup>33</sup>

## 6. Concentration of power

A major barrier to agroecology scale-up is pervasive corporate lobbying and unprecedented power concentration in the global seed, agrochemical, fertilizer and grain trade markets. A recent round of global mega-mergers of giant seed and agrochemical TNCs – including Bayer’s \$66 billion buyout of Monsanto, Dow’s merger with DuPont and ChemChina’s acquisition of Syngenta – sees concentration of power reaching unprecedented levels. As much as 70 percent of the global agrochemical industry will soon be in the hands of just three TNCs.<sup>34</sup> This concentration reinforces corporate dominance and TNC’s ability to influence global and domestic policies, and incentives and imperatives guiding food systems.<sup>35</sup> Many poorer countries do not have the power to resist the undue influence of such market dominance.

<sup>33</sup> HLPE (2013) *Investing in smallholder agriculture for food security, A report by The High-Level Panel of Experts on Food Security and Nutrition, June 2013*, HLPE: Rome

<sup>34</sup> IPES- Food (2017) *Too Big to Feed, Exploring the impacts of mega-mergers, consolidation and concentration of power in the agri-food sector*, IPES-Food, October 2017

<sup>35</sup> Hilal Elver (2016) *The Challenges and Developments of the Right to Food in the 21st Century: Reflections of the United Nations Special Rapporteur on the Right to Food*, UCLA Journal of International Law & Foreign Affairs, Spring 2016, Vol.20 Issue 1, p1-43. 43p

## BOX3

### AGROECOLOGY AND CLIMATE RESILIENCE IN SENEGAL<sup>1</sup>

Working with vulnerable communities to adapt to climate change through agroecology is a focus of ActionAid’s work in Senegal and The Gambia. A women’s group on the island of Baouth in Senegal developed a system of raised table gardens to deal with rising sea levels, saline soils and more frequent floods. Previously cut off from accessing or even cooking with vegetables, the table gardens stand high above the ground on plastic-lined raised beds surrounded by cinderblocks and contain highly fertile organic soil mixed with peanut shells, rice straw and fresh water. These village gardens now provide communities year-round supplies of nutritious local and indigenous plants and vegetables – from eggplant and yams to okra and bissap – while diets have improved and much time and money has been saved from travelling to previously nearest local markets at Foundiougne on the mainland. “We have noticed that our families and our children are healthier as a result because now when we cook our meals, we have enough vegetables for our dishes,” says Seynabou Thior, a member of the women’s group from Baouth.

<sup>1</sup> ActionAid Senegal (undated) *Agroecology and Resilience Project: Stories of Change*, ActionAid Senegal: Dakar, Senegal



## 2 - SEVEN STEPS TO AGROECOLOGY

If decision makers, donors, the FAO, multilaterals, investors, social entrepreneurs and powerful philanthropic organizations are really committed to transforming agriculture and ensuring sustainable production and consumption to end hunger and malnutrition by 2030, they should put agroecology at the center of their priorities and pursue the following seven key steps to help scale-out agroecology on a massive basis.

### 1. Support peasant social movements to 'scale-out' agroecology

Decision makers should support broad-based peasant social movements and rural women's movements to help 'scale-out' agroecology at the grassroots level. The incredible commitment, dynamism and enthusiasm of broad-based peasant social movements and rural women's networks has been a key factor in rapidly spreading or 'scaling-out' agroecology knowledge and skills at scale among poor rural and urban communities.<sup>36</sup> Using inclusive social processes, 'peasant protagonism' and horizontal farmer-to-farmer pedagogical methods – which emphasize participatory farmer-to-farmer exchange of knowledge, farmer field schools, cross-visits, field days, reflection, and collective sharing of knowledge and experiences – millions of indigenous people, peasants and smallholder men and women farmers have successfully adopted agroecological practices.<sup>37</sup>

The *Campesino a Campesino* (CaC) movement in Mesoamerica has spread from Kaqchikel Maya farmers in Guatemala to Mexico, Honduras, and Nicaragua, where it now reaches 30,000 peasant families. Linked via the world's largest peasant social movement, La Vía Campesina (LVC), and learning from experiences in Mesoamerica, about a half of Cuba's peasantry – or some 200,000 peasant families – have now participated in the 'Farmer-to-Farmer Agroecology Movement', developed and self-catalyzed by Cuba's National Association of Small

Farmers (ANAP). Key practices that have transformed Cuban agriculture include soil conservation, crop rotation, green manure and compost, polycultures and agroforestry, biological control of pests, integration of livestock with crops, and diversification.<sup>38</sup> Broad-based peasant social movements – including the one million families-strong Landless Workers' Movement (MST) in Brazil – have been crucial in promoting agroecology through peasant-led farmer-to-farmer methods in Brazil.<sup>39</sup> Roughly 100,000 smallholders also practice a social movement-driven form of agroecology in the state of Karnataka in India known as Zero Budget Natural Farming (ZBNF). It has achieved scale in Tamil Nadu, Andhra Pradesh and Kerala<sup>40</sup>, and nationally ZBNF leaders say the number may run into the millions.<sup>41</sup> Designed to reduce indebtedness and boost incomes and family health by reduced dependence on expensive agrochemicals, and driven entirely by volunteers, ZBNF knowledge and skills are spread through farmer-to-farmer methods, mass training camps and the establishment of agroecology schools.<sup>42</sup>

### 2. Prioritize implementation of CEDAW commitments on the rights of women living in rural areas

Governments should prioritize implementation of *CEDAW General Recommendation 34 (2016)* on the rights of women living in rural areas. *CEDAW Recommendation 34* sets out the rights of women living in rural areas – such as rights to participate and benefit from rural development, rights to health care services, education, employment, economic, social and public life, protection from violence, and rights to land and natural resources – which signatory states are legally obliged to respect, protect and fulfill.<sup>43</sup>

Governments should review and ensure their legal frameworks are non-discriminatory for women living in rural areas and set up participatory systems to oversee,

<sup>36</sup> Mier y Teran M et al (forthcoming) Bringing agroecology to scale: Key drivers and emblematic cases, *Agroecology and Sustainable Food Systems*

<sup>37</sup> Mier y Teran M et al (forthcoming) Bringing agroecology to scale: Key drivers and emblematic cases, *Agroecology and Sustainable Food Systems*

<sup>38</sup> Mier y Teran M et al (forthcoming) Bringing agroecology to scale: Key drivers and emblematic cases, *Agroecology and Sustainable Food Systems*

<sup>39</sup> Oxfam-Solidarity (2014) *Scaling-Up Agroecological Approaches: What, Why and How? Discussion Paper*, January 2014, Oxfam Solidarity: Belgium

<sup>40</sup> Khadse A et al (2018) *Taking agroecology to scale: the Zero Budget Natural Farming peasant movement in Karnataka, India*, *The Journal of Peasant Studies*, 45:1, 192-219, 14 February 2017

<sup>41</sup> Mier y Teran M et al (forthcoming) Bringing agroecology to scale: Key drivers and emblematic cases, *Agroecology and Sustainable Food Systems*

<sup>42</sup> Mier y Teran M et al (forthcoming) Bringing agroecology to scale: Key drivers and emblematic cases, *Agroecology and Sustainable Food Systems*

<sup>43</sup> CEDAW (2016) *Committee on the Elimination of Discrimination against Women, General recommendation No.34 on the rights of rural women*, 4 March 2016, CEDAW/C/GC/34

track and monitor their commitments to ensure the rights of women living in rural areas. They should collect disaggregated data on women living in rural areas and pursue targeted actions specifically designed to tackle the gender inequalities and abuses faced by women throughout their support to scale-up agroecology.

The transition to agroecology has great potential to empower women and achieve gender equality – although the goal of gender equality must be *actively* pursued. Socially isolated and vulnerable to violence rural and peri-urban women, for example, became empowered after joining together in ten women-only groups and setting up the agroecology-based Network of Women Producers in Pajeú in northeast Brazil. Supported by ActionAid via grassroots partner Casa da Mulher do Nordeste, the women systematically shared experiences, took charge of managing agricultural processes normally carried out by men, and successfully fought to gain equal access and control over natural resources (see Box 2).

Scaling-out agroecology can and should put women at the center of on-going efforts, reinforcing gender equality and women's rights, livelihoods, incomes and social status. Effective, affordable, diverse, locally rooted and accessible to women living in rural areas, agroecology generates social 'spaces' and offers new opportunities to women as promoters, facilitators and coordinators. Setting out specific gender equity objectives can help. Cuba's ANAP farmer-to-farmer social movement for agroecology states that agroecology must include equal participation of men and women, according to their capacities and conditions, in both work and decisions on farms.<sup>44</sup> Women's groups have been at the center of the successful Community Managed Sustainable Agriculture (CMSA) social movement and agroecology initiative in Andhra Pradesh in India. Now practiced by about 10 million smallholder farmers in that state and designed to reduce dependence on agrochemicals through multi-cropping, 'Non-Pesticide Management' and ecologically friendly farming techniques, the involvement of women groups, younger women and development of women leaders as Community Resource Persons have been key to the growth of CMSA.<sup>45</sup>

Agroecology is based on the improvement of functional biodiversity on the farm. It encourages the use and preservation of local seeds and crop varieties suited to local climate and associated with traditional peasant knowledge. This gives agroecology enormous potential to empower women, who are traditionally keepers of seeds and traditional knowledge.<sup>46</sup> Community-based

women-only groups – such as the land, Dalit rights and agroecology-focused Deccan Development Society in India – have collectively reclaimed fallow land and revived the use of 80 traditional varieties of millet, cereals, pulses, legumes and oilseeds through a low caste Dalit women-run network of Community Gene Banks in 60 villages.<sup>47</sup>

Highlighted as a key issue to be addressed under CEDAW, agroecology can also help address the unpaid care burden currently imposed on women living in rural areas. Recent ActionAid research from Bangladesh, India, Nepal and Pakistan found women living in rural areas spend between nearly 8 to 10 hours every day on unpaid care work, and concluded that agroecology offers important time-saving options to relieve this burden (see Box 4). This includes: <sup>48</sup>

- » Creation of day care facilities for children and senior citizens;
- » Smallholder home gardens that require minimal labor, costs or inputs;
- » Livestock practices and fodder innovations that reduce labor inputs and time spent collecting fodder;
- » Harvest and post-harvest processing and crop storage which reduce food losses and conserve labor;
- » Improved women's products, processing and packaging, and links with markets that can increase incomes and reduce labor burdens;
- » Improved and lighter farm tools can reduce women's labor;
- » Water technologies such as piped clean water, rain water catchment systems and micro-irrigation reduce time spent collecting water;
- » Renewable energy technologies reduce time gathering fuel and firewood;
- » Homestead aquaponics fish and crop production, which is time-saving and highly efficient.

Furthermore, governments should fulfil CEDAW obligations by ensuring women and women's groups are involved in setting agricultural research priorities, promoting gender responsive rural extension services, and setting targets for female extension agents and agricultural scientists. They should ensure women have equal access to

<sup>44</sup> APNAP (2013) *Agroecological Revolution: The Farmer-to-Farmer Movement of the ANAP in Cuba*, Asociacion Nacional de Agricultores Pequenos (ANAP)/La Via Campesina: Ciudad de la Habana, Cuba/Jakarta, Indonesia

<sup>45</sup> PAN AP (2015) *Replacing Chemicals with Biology: Phasing out highly hazardous pesticides with agroecology*, Pesticide Action Network (PAN) Asia and the Pacific: Panang, Malaysia

<sup>46</sup> Khadse A (2017) *Women, Agroecology & Gender Equality*, Focus on the Global South, India: New Delhi, India

<sup>47</sup> See: Khadse A and Rosset M (2017) *Scaling-up agroecological approaches, Agroecology, Ecosystems, and Sustainability in the Tropics*, ed G Poyyamoli, 2017; PAN AP (2015) *Replacing Chemicals with Biology: Phasing out highly hazardous pesticides with agroecology*, Pesticide Action Network (PAN) Asia and the Pacific: Panang, Malaysia

<sup>48</sup> ActionAid (undated) *Addressing Women's Unpaid Care Work: Integrating Agroecology and Women's Economic Empowerment for Climate Resilient Livelihoods, Experiences from Bangladesh, India, Nepal and Pakistan*, ActionAid International (available on request)

credit and gender sensitive local markets,<sup>49</sup> as well as quality education and affordable childcare and day-care facilities.<sup>50</sup> Women's insecure rights to access and control land and other productive resources must be properly recognized and protected, and extra support given to women's groups, smallholder organizations and peasant social movements.

### 3. Adopt public policies that support agroecology

Decision makers should adopt public policies that encourage the transition to agroecology at scale. Experts say no single public policy is essential for scale-out; rather, combinations of complimentary policies are required for success.<sup>51</sup>

Following pressure from broad-based peasant social movements, Brazil adopted a framework right to food law and drew up supportive policies and plans that prioritize family farming and agroecology, including the Brazilian National Plan for Agroecology and Organic Production (PNPAO) in 2012. This was supported by two successful initiatives – the National Food Procurement Program (PAA) and National School Feeding Program (PNAE) – which privilege local family farmers and offer up to 30 percent higher prices for agroecological farmers to supply healthy school meals. The National Policy of Technical Assistance and Rural Extension (PNATER) also offers free support to agroecological practices for family farmers. In many cases, social movements and local CSOs played a central role in generating this process of construction of public policies and are the ones responsible for providing public extension services.<sup>52</sup>

Similarly, Nicaragua agreed an Agroecology Law in 2011 to promote agroecology and organic agriculture,<sup>53</sup> while Ecuador's revised 2008 constitution encourages a new low-input agricultural model based on food sovereignty and agroecology, and agreed a General Law of Food Sovereignty (LORSA) in 2010 that promotes the production and consumption of agroecological food.<sup>54</sup> Cuban government support through the National Program for Nutrition (PNAN) to the peasant social movement ANAP

<sup>49</sup> ActionAid (2018) *Gender Sensitive Market Access A Training Handbook*, ActionAid International: Johannesburg

<sup>50</sup> CEDAW (2016) *Committee on the Elimination of Discrimination against Women, General recommendation No.34 on the rights of rural women*, 4 March 2016, CEDAW/C/GC/34

<sup>51</sup> Mier y Teran M et al (forthcoming) *Bringing agroecology to scale: Key drivers and emblematic cases, Agroecology and Sustainable Food Systems*

<sup>52</sup> Khadse A and Rosset M (2017) *Scaling-up agroecological approaches, Agroecology, Ecosystems, and Sustainability in the Tropics*, ed G Poyyamoli, 2017

<sup>53</sup> Red PP-AL/FAO (2017) *Políticas públicas a favor de la agroecología en América Latina y El Caribe*, Red PP-AL/FAO: Porto Alegre Brazil

<sup>54</sup> PAN AP (2015) *Replacing Chemicals with Biology: Phasing out highly hazardous pesticides with agroecology*, Pesticide Action Network (PAN) Asia and the Pacific: Panang, Malaysia

## BOX4 AGROECOLOGY AND WOMEN'S UNPAID CARE WORK IN RWANDA<sup>1</sup>

Recent ActionAid research on women's unpaid care work in Bangladesh, Ghana, India, Nepal, Pakistan and Rwanda finds that agroecological systems can greatly lift the workload burdens that many women living in rural areas face. Time use diaries with over 2,389 women living in rural areas and men found women complete between nearly 8 to 10 hours of unpaid care work each day in Bangladesh, India, Nepal and Pakistan, while in Rwanda these women typically spend at least 5 hours on unpaid care work, while men spend only 1.5 hours. Such time poverty is a major barrier for women engaging in productive agriculture.

In Rwanda, Leoncie Niyonsenga, a mother of six from Mbeho village in Gisagara, used to struggle to access firewood and water supplies, while coping with an increase in crop diseases and pests, a lack of irrigation and an absence of food and grain storage. Working with the local 'Abishyizehamwe' women's smallholder farmers' cooperative, they set up a new Early Childhood Development Centre, freeing up 5 hours a day for women to engage in agricultural production and community life. The cooperative established community seed banks to store locally adapted indigenous seeds, integrated farm animals to provide milk and manure for organic compost, and planted multi-purpose leguminous trees to feed domestic animals as well as soils. Rainwater was also harvested for household, livestock and kitchen garden use. This saved women's time, protected soil from erosion and boosted women's productivity, climate resilience and economic empowerment overall.

<sup>1</sup> See: ActionAid (2017) *Incorporation of Women's Economic Empowerment and Unpaid Care Work into regional policies: Africa*, ActionAid International: Johannesburg; ActionAid (2017) *Incorporation of Women's Economic Empowerment and Unpaid Care Work into regional policies: South Asia*, ActionAid International: Johannesburg; ActionAid (undated) *Addressing Women's Unpaid Care Work: Integrating Agroecology and Women's Economic Empowerment for Climate Resilient Livelihoods, Experiences from Bangladesh, India, Nepal, and Pakistan*, ActionAid International: Johannesburg

was crucial in taking agroecology to scale in that country.<sup>55</sup> Supportive Cuban policy initiatives include programs to promote biological pest control, organic matter recycling, urban agriculture, participatory plant breeding, backyard livestock, changes in the school curricula, acquisition of agricultural products by the government, and new land reform policies that provide peasants access to unproductive land.<sup>56</sup>

Supportive policies are best conceived and monitored under a right to food framework and inclusive social processes, to ensure strategies are co-created, multi-sectorial, territorially focused, link rural and urban areas and include wider success measures, such as climate and disaster resilience, nutrition security, gender equity, biodiversity and soil, water and environmental sustainability. Brazil's effort to support family farming and scale-out agroecology, for example, was driven through inclusive governance spaces such as the National Council of Sustainability and Family Farming (CONDRAF) and the National Food and Nutrition Security Council (CONSEA),<sup>57</sup> while Ecuador's statutory eight-person National Conference on Food Sovereignty includes representatives from women, indigenous groups and peasant movements.<sup>58</sup>

Governments can further popularize agroecology among young people by adopting policies that put agroecology on school curricula and increasing support for agricultural training collectives, colleges and universities. The global peasant social movement LVC is leading the way and now operates some 65 peasant agroecology schools worldwide, although there could be scope for governments to co-support such peasant agroecology schools in the future.<sup>59</sup> Conversely, decision makers should urgently phase out harmful public policies such as costly state subsidies for chemical input and hybrid seeds distribution schemes, and instead reallocate public support to organic fertilizer initiatives and decentralized networks of community seed and grain banks, in order to promote local seed diversity and greater peasant autonomy and resilience.

#### **4. Include agroecology as a key tool for climate adaption**

Decision makers should ensure agroecology plays a central role in national climate adaption plans and strategies. Studies show that farms adopting agroecological approaches suffer less and recover more quickly from climatic stress and disasters. Greater resiliency is achieved through diverse farming methods

### **BOX5 COMMUNITY SEED BANKS IN INDIA<sup>1</sup>**

ActionAid supports the women's grassroots Gene Campaign social movement in India that set up a network of women-run indigenous community seed banks and homestead 'nutrition gardens' to improve nutrition and revive tribal and indigenous varieties in Uttarakhand in the Himalayas in northern India. In an area known for high levels of malnutrition – due to poor diets often lacking in vegetables – the Gene Campaign worked with poor women and tribal communities to establish village-level traditional varieties seed banks, stock planting nurseries and homestead 'nutrition gardens' in over 100 villages in the Kumaon division to ensure a diversity of nutrient-rich and culturally-appropriate vegetables and fruit throughout the year. Farmer-to-farmer training on nutrition and healthy diets was provided to women and adolescent girls, and homestead production of wild and semi-domesticated indigenous plants like nettles, ferns and *bathua* was revived. Farmer-led demonstration gardens were established alongside training in water harvesting, organic soil enhancement, and other agroecology techniques such as the System of Rice Intensification (SRI) for local millet varieties. With training in food processing and preservation, year-round access to indigenous green leafy vegetables like buckwheat greens, *methi*, *bichu*, *chua* or *bathua* increased, as well as to spinach, peas, eggplant, fava beans, pumpkin and sweet potato. Research found tribal women's empowerment improved through establishment of local women's groups and that incomes rose through the sale of food surpluses in local markets.

<sup>1</sup> ActionAid India (2016) *Change in Stills, Home Garden & Food Security in Kumaon, A 'Gene Campaign' Initiative*, ActionAid Association: New Delhi, India

such as mulching, composting, green manures, conservation tillage, intercropping, mixed cropping,

<sup>55</sup> Khadse A and Rosset M (2017) *Scaling-up agroecological approaches, Agroecology, Ecosystems, and Sustainability in the Tropics*, ed G Poyyamoli, 2017

<sup>56</sup> Mier y Teran M et al (forthcoming) Bringing agroecology to scale: Key drivers and emblematic cases, *Agroecology and Sustainable Food Systems*

<sup>57</sup> Red PP-AL/FAO (2017) *Políticas públicas a favor de la agroecología en América Latina y El Caribe*, Red PP-AL/FAO: Porto Alegre, Brazil

<sup>58</sup> PAN AP (2015) *Replacing Chemicals with Biology: Phasing out highly hazardous pesticides with agroecology*, Pesticide Action Network (PAN) Asia and the Pacific: Panang, Malaysia

<sup>59</sup> LVC (2017) *Toolkit, Peasant Agroecology Schools and the Peasant-to-Peasant Method of Horizontal Learning*, La Vía Campesina

agroforestry, permaculture, vermiculture, livestock integration and water harvesting.<sup>60</sup> By building healthier soils, increasing biodiversity, improving water conservation and optimizing yield increases, poor and marginal communities – ranging from Kenya and Ethiopia, to India, Cuba, Colombia and Nicaragua – have been able to limit losses and recover far better from environmental shocks and stresses such as droughts, floods and hurricanes, low precipitation, temperature fluctuations and reduced soil water availability or the invasion of new pests, weeds and diseases.<sup>61</sup> Agroecology also contributes to mitigation efforts; farming without synthetic agrochemicals is an important factor in reducing GHG emissions. Furthermore, agroecological systems that seek to improve soil conditions and fertility (such as the use of mulch and manure) and maintain vegetative cover have huge potential for carbon sequestration, while researchers say scaling-up agroecology and resultant productivity gains could cause less land clearance and deforestation – leading to huge GHG emission reduction gains.<sup>62</sup>

## 5. Prioritize local food systems and territorial markets

Decision makers should prioritize and support broad-based peasant social movements, women's groups and smallholder food producers to re-localize food systems and foster short food supply chains. Agroecological scale-out in all continents is more successful when it is based on re-localizing food systems and short food supply chains. Such systems help valorize farm-level agroecological methods and their wider environmental benefits.<sup>63</sup>

Markets are fundamental to scaling up agroecology and alternative local markets and networks of consumers and producers have played a key role in providing support to agroecological producers.<sup>64</sup> Peasant social movement-driven or government-supported alternative agri-food networks such as producer-consumer networks, farmers' markets, community supported agriculture, box schemes, collective producer shops and school provisioning schemes re-connect producers and consumers and provide important local and territorial-based markets and support for legitimizing agroecological farming (see Box 6). In southern Brazil, the *REDE ECOVIDA* agroecology social movement has brought together 180 municipalities and about 2,400 producers in 270 smallholder producer

## BOX 6 AGROECOLOGY AND TERRITORIAL MARKETS IN KENYA<sup>1</sup>

Women farmers have taken a landscape or 'territorial' markets approach in their adoption of agroecological practices in Khwisero in western Kenya. Women smallholders from the Khwisero District Farmers group were linked by ActionAid to the Kakamega Smallholder Farmers Network (KASFAN) and went on to co-design a diversified low-input agroecological system based on their existing knowledge of local landscapes and opened up more circular local markets for their agricultural products. The women created artificial swamps and diversified into growing beans, maize, bananas, arrowroot and sweet potatoes and planted Napier grass in rows for their cattle and which also acted as a biological control against harmful *Striga* maize pathogens. The Kakamega country government supported the farmers to set up their own factory, which added value to their bananas, arrowroot and sweet potatoes – through enriched bread and pastries, which were sold to local farmers. The country public procurement system also mainstreamed the women farmers to supply banana suckers to other local farmers.

<sup>1</sup> From unpublished research supplied by ActionAid Kenya research in March 2018

groups in a network, including 30 NGOs and 10 ecological consumers' cooperatives.<sup>65</sup> Producing all kinds of local, fresh, diverse and healthy agricultural products – from fruit and vegetables to milk and honey – and guaranteed under a Participatory Guarantee System, ECOVIDA's decentralized and horizontal structure tightens the circle between local farmers and consumers, linking up

<sup>60</sup> Altieri, M A (2012) *The scaling up of agroecology: spreading the hope for food sovereignty and resiliency, A contribution to discussions at Rio+20 on issues at the interface of hunger, agriculture, environment and social justice*, SOCLA (Sociedad Científica Latinoamericana de Agroecología)

<sup>61</sup> See: PAN AP (2015) *Replacing Chemicals with Biology: Phasing out highly hazardous pesticides with agroecology*, Pesticide Action Network (PAN) Asia and the Pacific: Panang, Malaysia; Oxfam-Solidarity (2014) *Scaling-Up Agroecological Approaches: What, Why and How? Discussion Paper*, January 2014, Oxfam Solidarity: Belgium; Altieri, M A (2012) *The scaling up of agroecology: spreading the hope for food sovereignty and resiliency, A contribution to discussions at Rio+20 on issues at the interface of hunger, agriculture, environment and social justice*, SOCLA (Sociedad Científica Latinoamericana de Agroecología)

<sup>62</sup> Oxfam-Solidarity (2014) *Scaling-Up Agroecological Approaches: What, Why and How? Discussion Paper*, January 2014, Oxfam Solidarity: Belgium

<sup>63</sup> Pimbert M (2018) *Reclaiming Food System: Local Food Systems and Access to Markets Linked to Territories*, in *Feeding The People, Agroecology for Nourishing the World and Transforming the Agri-Food System*, IFOAM EU Group: Brussels, Belgium

<sup>64</sup> Khadse A and Rosset M (2017) *Scaling-up agroecological approaches, Agroecology, Ecosystems, and Sustainability in the Tropics*, ed G Poyyamoli, 2017

<sup>65</sup> Khadse A and Rosset M (2017) *Scaling-up agroecological approaches, Agroecology, Ecosystems, and Sustainability in the Tropics*, ed G Poyyamoli, 2017

diverse actors in a solidary-economy.<sup>66</sup> Territorial market approaches link rural and urban areas in short, circular food webs, and it is crucial that support to foster local markets and re-localize food systems is gender sensitive and includes the leadership and participation of women producers, who face particular challenges of inequality, time poverty, violence, harassment and discrimination.<sup>67</sup>

## **6. Increase public finance for agroecology and prioritize agroecology in agricultural R&D and extension services**

Donors, governments, multilaterals, philanthropists and the global CGIAR public agricultural research system should significantly increase finance for agroecology and prioritize agroecology in their overseas aid, rural extension and agricultural R&D portfolios.

Despite global reinvestment in agriculture since 2008, financial support for agroecology is still strikingly low. A recent review of 7,531 EU-funded overseas aid to agriculture projects found less than a quarter explicitly targets smallholder producers, only 2-3 percent promotes gender equality in agriculture, while ecological sustainability is largely missed out in planning documents altogether.<sup>68</sup> Donors should urgently review their aid to agriculture and climate adaptation programs to get a clear picture of how much of their ODA currently goes towards agroecology. Bilateral donors should emulate and learn from progressive sister donor agencies – such as the Canadian, French, German, Japanese and Swiss overseas development agencies – which have all supported agroecology initiatives at scale and, crucially, sustained over the longer term.<sup>69</sup> German ODA for the agroecology-based System of Rice Intensification (SRI) in Cambodia since 2003 has seen more than 130,000 smallholder farmers successfully adopt low-input, water preserving and higher yielding SRI practices.<sup>70</sup> Early and sustained support by the German Agency for International Technical Cooperation (GTZ/GIZ) was instrumental in encouraging the Cambodian Ministry of Agriculture, Forestry and Fisheries to endorse SRI and to promote its scale-out.<sup>71</sup> In addition:<sup>72</sup>

The Swiss Development Cooperation (SDC) program has supported the co-generation of knowledge and improved farming practices based on agro-ecological principles and

the culture of local Andean farmers through its long-term support to the Agroecology Program at the University of Cochabamba (AGRUCO) since 1990. In one municipality production under AGRUCO of a native variety of potato called *Huachya* cultivated through the use of organic methods increased by 300 percent.

The French development arm Agence Française de Développement (AFD) has funded a network of 29 smallholder cooperatives made up of 1,700 village-associations (known as Koloharena) in eastern Madagascar since 2009, which has adopted the agroecology-based System of Rice Intensification (SRI) via a farmer-to-farmer extension system. Average rice yields increased from 3-5 tons to 5-8 tons per hectares under SRI and organic certification was obtained for a particular pink strain of high-yielding long-grain rice which has good disease resistance and drought and flood tolerance.

The Canadian International Development Agency (CIDA) has supported the participatory research-based Soils, Food and Healthy Communities (SFHC) project in northern Malawi since 2000 and followed up with the Malawi Farmer-to-Farmer Agroecology project (MAFFA), which targets farmer-to-farmer teaching about agroecology, nutrition and developing local food markets. Youths are particularly included and the formation of farmers exchanges, community seed banks and discussion groups at the community and household levels has highlighted the key role that women play in agriculture and household food security.

The Japanese Social Development Fund (JSDF) has supported the COCOA-RAAN project with indigenous communities in Nicaragua since 2010, which applies the farmer participatory field school approach to encourage communities to adopt land-use planning and practices that incorporate agroforestry, natural resource management and biodiversity conservation.

Besides far greater reinvestment in smallholder agriculture, donors, governments and the CGIAR global agricultural research system should democratize public agricultural research, putting farmers in the driver's seat of research agendas and work with peasant social movements, women's group, smallholders and consumers to co-design and prioritize agroecology in all agricultural research, extension services and education. Involving women in all decision-making processes for scaling-up agroecology is crucial (see Box 7), and emphasis should be put on trans-disciplinary approaches and the integration of traditional,

<sup>66</sup> Mier y Terán, M et al (forthcoming) Bringing agroecology to scale: Key drivers and emblematic cases, *Agroecology and Sustainable Food Systems*

<sup>67</sup> ActionAid (2015) *Gender Sensitive Market Access A Training Handbook*, ActionAid International: Johannesburg

<sup>68</sup> Oxfam (2017) *Missing Out On Small is Beautiful, The EU's failure to deliver on policy commitments to support smallholder agriculture in developing countries*, Oxfam Briefing Paper, Oxfam International: Oxford, United Kingdom

<sup>69</sup> Greenpeace Africa (2015) *Financing Ecological Farming in Africa, A guide for international donors*, Greenpeace Africa: Johannesburg

<sup>70</sup> See: Greenpeace Africa (2015) *Financing Ecological Farming in Africa, A guide for international donors*, Greenpeace Africa: Johannesburg, South Africa; PAN AP (2015) *Replacing Chemicals with Biology: Phasing out highly hazardous pesticides with agroecology*, Pesticide Action Network (PAN) Asia and the Pacific: Panang, Malaysia;

<sup>71</sup> Greenpeace Africa (2015) *Financing Ecological Farming in Africa, A guide for international donors*, Greenpeace Africa: Johannesburg

<sup>72</sup> Greenpeace Africa (2015) *Financing Ecological Farming in Africa, A guide for international donors*, Greenpeace Africa: Johannesburg

tribal, indigenous and peasant knowledge. Decision makers should also ensure that GAFSP finance and global climate adaptation funds – such as the GCF – reinforce and support the Malabo Declaration commitment by African countries to spend at least 10 percent of their public finance on agriculture<sup>73</sup> and are increasingly focused on supporting scale-out of agroecological practices.

## 7. Repeal IPRs on seeds, protect resource rights and break up monopoly power of agribusiness TNCs

Governments and decision makers should secure women and peasants' access and control over natural resources and other productive resources, repeal IPRs on seeds, and act to break up the monopoly power of agribusiness TNCs. Governments should repeal IPR regimes that prevent women and peasants' rights to save, use, exchange and sell farm-saved seed. Instead, they should strengthen farmer-led and government programs that enhance *in-situ* local seed diversity through community seed banks and seed networks and enhance community rights over innovations in seeds, plants and biodiversity (see Box 5). Governments should encourage agroecology by implementing redistributive land reforms in areas of highly unequal access to land – especially for women, youths, indigenous and landless communities – and recognize and protect the insecure rights to land, water, forests, the commons, and other natural resources that women, indigenous and other marginalized communities depend on by fully implementing the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests.<sup>74</sup> Governments should also support the proposed UN International Declaration on the Rights of Peasants and Other Working People in Rural Areas to further recognize and protect the rights of peasants to land, seeds, biological diversity, natural resources, traditional knowledge, a decent income, the means of production and food sovereignty.<sup>75</sup> Globally, decision makers should use anti-trust and competition law to break up the monopoly market power of global agribusiness TNCs and establish a new UN Treaty on Competition to provide oversight of agribusiness TNC mega-mergers.<sup>76</sup>

### BOX 7

## AGROECOLOGY AND FEMALE EXTENSION VOLUNTEER PROGRAM IN GHANA<sup>1</sup>

A cadre of women farmer extension volunteers trained in agroecological practices and climate adaptation skills was successfully established in Ghana with ActionAid and government support. Working with its local partner Action for Sustainable Development (ASUDEV), the Ministry of Food and Agriculture and decentralized departments at the local government level, some 200 lead women farmers in 167 local communities were trained in agroecological skills under the Female Extension Volunteer Program. The women extension volunteers established field trials, demonstration farms and Farmer Field Schools, and tested and promoted site-specific innovations among local women farmers, such as composting to restore marginal soils, mixed cropping, improved soil fertility, biological insect control, and preserving, multiplying and supplying indigenous seed varieties threatened with extinction.

<sup>1</sup> Unpublished research supplied by ActionAid Ghana in March 2018

<sup>73</sup> For the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods, at the African Union Summit in June 2014, see: <http://bit.ly/2psJaNG>

<sup>74</sup> FAO (2012) *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security*, FAO: Rome

<sup>75</sup> LVC/FIAN (2017) *Towards a United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas*, Policy Brief, September 2017, La Via Campesina (LVC)/FIAN

<sup>76</sup> IPES- Food (2017) *Too Big to Feed, Exploring the impacts of mega-mergers, consolidation and concentration of power in the agri-food sector*, IPES-Food, October 2017

# RECOMMENDATIONS

An extensive body of evidence shows scaling-out agroecology could significantly contribute to achieving multiple SDGs and the 2030 Agenda. Massive support for agroecology could significantly contribute to achieving sustainable agriculture and transformation of food systems. It would ensure food sovereignty, help realize the right to food and nutrition, strengthen women rights, eradicate extreme poverty, address the climate crisis and enhance natural resources. As governments and donors gather at the FAO 2<sup>nd</sup> *International Symposium on Agroecology*, we believe:

## Governments

### Ideological barriers

- » Should cast aside any ideological barriers or bias against peasant agriculture and fully embrace the wide-ranging benefits of agroecology;
- » Promote agroecology as a central pillar for sustainable livelihoods in global policy processes, programs and projects, particularly in the CFS, FAO, IFAD, WFP, GAFSP and GCF domains.

### Support peasant and rural women's movements to scale-out agroecology

- » Support broad-based peasant social movements and rural women's movements to 'scale-out' agroecology at the grassroots through participatory approaches;
- » Provide institutional and political recognition at all levels for farmer-to-farmer knowledge networks that are led by peasant and rural women's movements.

### Implement CEDAW commitments on the rights of women living in rural areas

- » Prioritize implementation of *CEDAW General Recommendation 34* on the rights of women living in rural areas;
- » Collect, analyze, use and disseminate disaggregated data on the situation of women living in rural areas in order to monitor and enforce women's rights under CEDAW.

- » Ensure women and women's groups participate in decision making at all levels;
- » Support the role of women as knowledge bearers and agents of transformation towards more sustainable production systems, especially agroecology.

### Adopt public policies that support agroecology

Adopt public policies that encourage the transition to agroecology at scale, such as:

- » Constitutional commitments or framework right to food and nutrition laws;
- » National plans that prioritize agroecological production and consumption;
- » Public procurement policies that incentivize agroecology i.e. public or school provisioning schemes;
- » Incentivize and support local and territorial markets for smallholders' agroecological produce;
- » Withdraw state subsidies and phase out chemical inputs and hybrid seed schemes and promote organic fertilizer initiatives.

### Prioritize local food systems and territorial markets

Prioritize support to domestic food systems by re-localizing food systems and fostering short food supply chains.

### Include agroecology in national climate adaption plans

Ensure agroecology is included prominently in national climate adaption plans, such as National Adaption Programs of Action (NAPAs).

### Prioritize agroecology in agricultural R&D, extension services and education

- » Reorient public agricultural R&D agendas on agroecological innovations and ensure peasants and women's movements participate in setting research agendas;

- » Restructure and reorient national public extension systems to fully support agroecology and women smallholder farmers groups;
- » Provide greater financial support and regular capacity building to extension workers on agroecology, set targets for female extensions workers, and increase technical assistance to women smallholder farmers;
- » Include agroecology on school curricula and support peasant-led agroecology schools, collectives, colleges and universities.
- » Strengthen the FAO's work on agroecology by ensuring political support and adequate financing to FAO specific programs and initiatives oriented towards promoting agroecology at global, regional and national levels
- » Work closely with FAO Country Offices to develop and implement comprehensive national programs on agroecology

### **Repeal IPRs on seeds and protect rights to natural resources**

- » Repeal national IPR regimes on seeds and instead strengthen farmers' rights to save, use, exchange and sell farm-saved seed;
- » Promote a national networks of community-managed seed banks and seed exchanges;
- » Protect women and local communities' rights to land and natural resources by implementing the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests;
- » Support the UN International Declaration on the Rights of Peasants and Other Working People in Rural Areas to further protect the rights of peasants to land, seeds, biodiversity, traditional knowledge and natural resources.

### **In particular, we call on donor governments to:**

- » Significantly increased finance for agroecological scale-out in ODA portfolios and in national climate adaption plans via The Green Climate Fund and Global Agriculture & Food Security Program

### **Prioritize agroecology in agricultural R&D, extension services and education**

- » Urgently review all ODA to agroecology focused initiatives and work with peasant and rural women's movements to reorient and prioritize agroecology within agricultural R&D agendas and the global CGIAR agricultural research system
- » Support a global network of peasant-led agroecology collectives, colleges and universities

### **Break up the monopoly power of global agribusiness TNCs**

Use competition law to break up the monopoly market power of global agribusiness TNCs and establish a new UN Treaty on Competition to provide oversight of agribusiness TNC mega-mergers







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