SUPPORTING
SMALL-SCALE FARMING SYSTEMS

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SCIENCE FOR ACTION

Global LAND Programme

INTERNATIONAL LAND COALITION

SUPPORTING SMALL-SCALE FARMING SYSTEMS

The Science for Action Series is jointly coordinated by the International Land Coalition (ILC) and the Global Land Programme (GLP). It brings together key findings from research networks relevant to ILC's ten commitments to People-Centred Land Governance. The Series facilitates exchange of knowledge between scientists, civil society and grassroots organisations to strengthen efforts of land users, practitioners and policy-makers to bring about positive change in land governance.

This brief refers to Commitment Two: 'Ensure equitable land distribution and public investment that supports small-scale farming systems, including through redistributive agrarian reforms that counter land concentration, provide for secure and equitable use and control of land, and allocate appropriate land to landless rural producers and urban residents, whilst supporting smallholders as investors and producers, such as through cooperative and partnership business models'.

It is based on the research at the Centre for Sustainable Food Systems and the Institute for Resources, Environment and Sustainability at the University of British Columbia (UBC) and the University Observatory of Territorial Planning (OUOT) of the National Autonomous University of Honduras.

In many contexts, small-scale farming systems demonstrate higher yields and harbour greater biodiversity on their lands than larger-scale farming systems, making them highly relevant for mediating environmental and social outcomes related to sustainable development.[1]

THE IMPORTANCE OF SMALL-SCALE FARMING SYSTEMS

To sustainably produce enough food for a growing world population, a radical shift in global food systems is necessary.[2] Small-scale farmers are at the heart of this transition - small scale farmers can produce higher yields and harbour greater crop and non-crop biodiversity at the farm and landscape levels compared to larger farms.[1] Moreover, they produce a disproportionate share of global food despite having less access to land.[3]

Between the 1950s and 1970s, backed by cheap fossil energy and the belief that small-scale farming is a source of poverty and not compatible with global markets, a rapid expansion of large-scale, industrial and export-oriented agriculture was supported with policies such as the Green Revolution.[4,5] To date, as a result, agriculture is a main emitter of greenhouse gases and contributes to the decline of biodiversity.[6]

Policies supporting large farms favour land consolidation and urbanisation, and contribute to rising social and economic inequalities from the local to the global level.[7]

More recently, there has been a shift in policy debates about how small and family farmers are viewed as valuable stewards of social and environmental sustainability.[5,8] Participation of small and family farmers as well as other people working in rural areas in all decision-making processes – either as individuals or as groups – that may affect their lives, lands and livelihoods is crucial to maintain and enhance food security, support on and off-farm biodiversity and address land inequalities.[9,10]

UNDERSTANDING LAND INEQUALITIES

Historically, land inequality is tied to the legacies of colonialism, conquest and division, as well

as more recently to policies favouring export-markets, large corporations and financial investments in food and agriculture. In many parts of the world land inequality is a politically charged issue.[10] Alongside concentration in land, small-scale farmers have disproportionately less access to necessary infrastructure[11] for resilient farming systems, such as irrigation[12], roads to market access, processing facilities, and storage.[13]

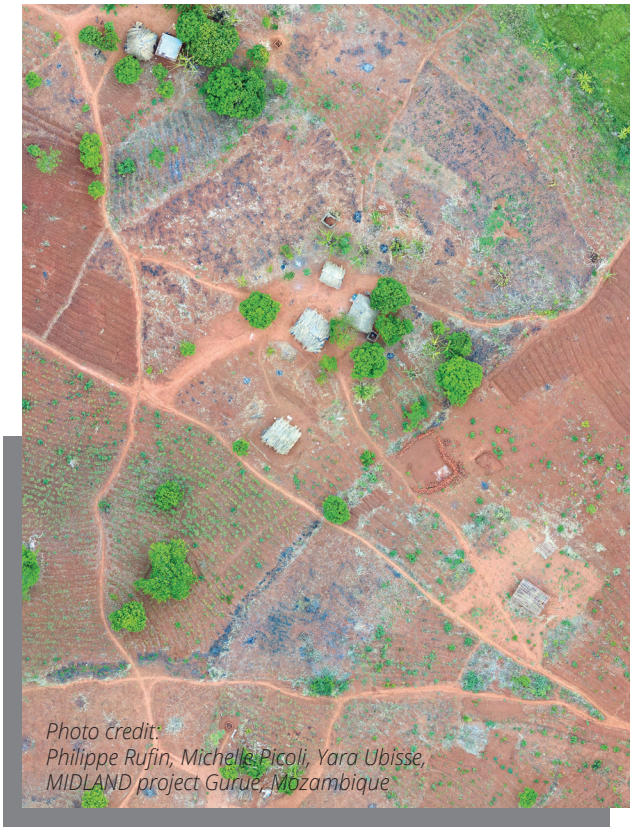
In 2018, following almost 20 years of mobilisation led by the social movement La Via Campesina and its allies, the United Nations General Assembly adopted the UN Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP) in 2018. UNDROP aims to rebalance power relations in rural areas, and to respond to the multiple forms of discrimination faced by small-scale farmers, rural women, landless people, and rural workers. In the implementation of the UNDROP particular attention shall be paid to the rights and needs of individuals and groups, such as girls, who represent 70% of the world's hungry people, and who have been historically discriminated, and who play a key role in local and global food security.[14]

FACING CHALLENGES

GETTING DATA AND INFORMATION ON SMALL-SCALE FARMING SYSTEMS

In December 2017, the United Nations proclaimed the Decade on Family Farming 2019-2028 as an opportunity to achieve the Agenda 2030 and its Sustainable Development Goals. Yet, the importance of family farming for global food security and of the contexts requires renewed attention.

The FAO World Programme for the Census of Agriculture, for example, operates on a ten-year cycle, meaning that global comparisons based on census data can be outdated. Census data is also often unable to account for shorter-term cyclical disruptions including drought, economic crisis and demographic shifts in agriculture. The census also can fail to account for the multi-functionality of small-scale, diversified farming operations. For example, recording only the yield of crops that are sold misses production oriented to family consumption, dietary diversity, community sharing, ecosystem services, and other important characteristics of sustainable farming systems.[13]



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Philippe Rufin, Michelle Picoli, Yara Ubisse, MIDLAND project Gurue, Mozambique

Farm size has been a key variable in debates surrounding food security, development and the environment. A common variable used is the <2ha in size definition for small-scale farmers. According to this definition, 84% of the 570 million farms globally are small but yet own only 12% of farmlands.[15] However, family farms and the smallholder sector cannot be defined based on farm size only. The size of an economically viable farm varies by region, commodities, intensification and production strategies, market access, family structure, access to markets, infrastructure and technology, and the natural resource base, among others.[7]

UNDERSTANDING FAMILY FARMS IN THEIR CONTEXTS

A better awareness of family farms and small-scale farming is vital to understand its role for food security, biodiversity and land equality. While small-scale farming generally refers to the 2ha variable, there exist several definitions of family farming.[16] FAO's World Agriculture Watch highlights the interlinkages between domestic and agricultural activities, that family farms do not often utilise permanent hired labour and that productive assets and family heritage are deeply rooted in the identity of family farmers. ▶

Besides this basic characterisation, family farming can be divided into at least three groups:[7]

1. Those that are well-endowed and well-integrated into markets;
2. Those with significant assets and favourable conditions but lacking critical elements (like sufficient credit or effective collective action) and who may not qualify for social safety nets; and
3. Land-poor farmers, who are primarily characterised by family subsistence/non-market activities and who require significant investment in social safety nets.

Using this definition, family farms constitute 98% of all farms and work on 53% of all farmlands. They are by far the most predominant form of agriculture. Understanding their diversity in different national and local contexts is crucial for designing effective policies and measures.[7]

DESIGNING EFFECTIVE POLICIES FOR FAMILY FARMS

Many current applications of agricultural producer support are problematic and need to be shifted. Price incentives and fiscal production tied to production are also still prevalent and widely used in high-and middle-income countries, with the implication that diversified family farmers cannot access such support.[2]

Global land grabbing[17,18] and what is known as "financialisation"[19,20,21] have contributed to farmland concentration, dispossessing small-scale farmers across the globe.

Photo credit: Ariane de Bremond, GLP

The UN Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security[22] brought the need to ensure secure land access for smallholders to the global policy arena. However, the non-legal binding nature of the guidelines and the failure to address key concerns of small-scale farmers and indigenous peoples about land restitution and protection of water rights are cause for concern.[13]

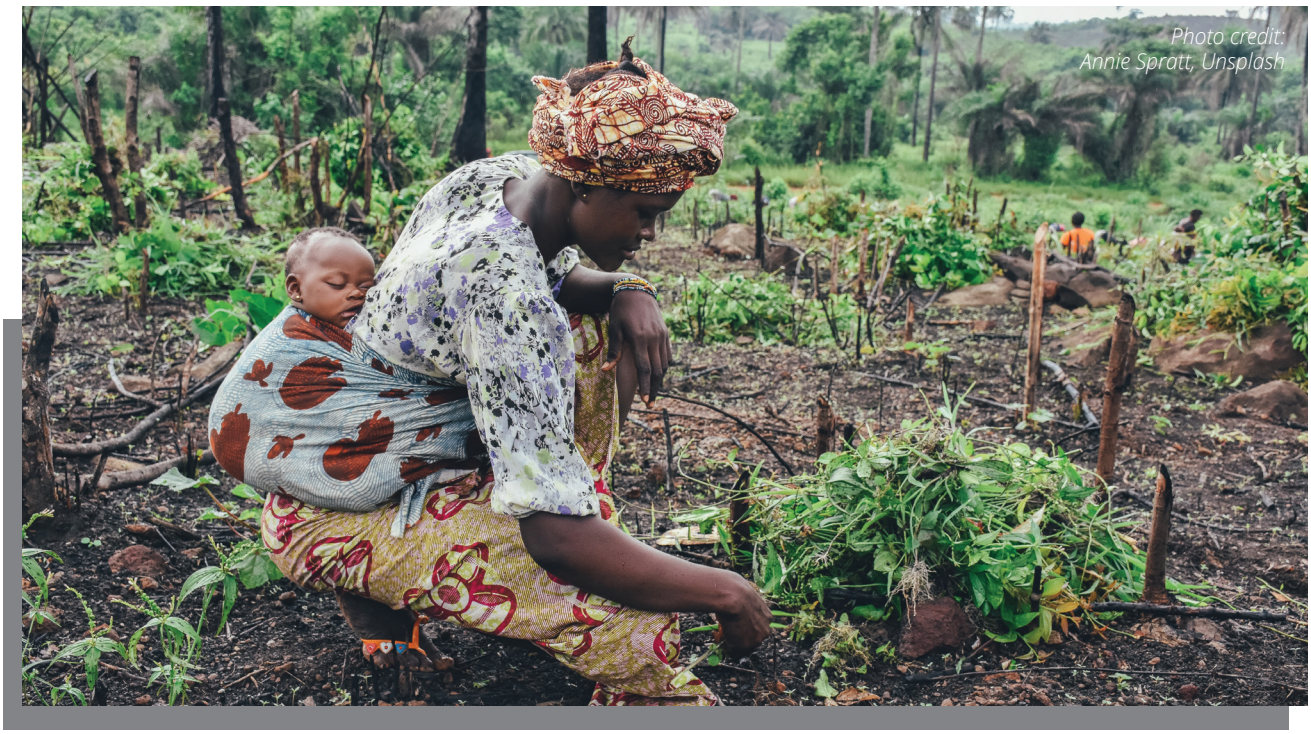
FINDING SOLUTIONS

Looking at agriculture through the perspective of 'family' moves the focus on conventional productivist agricultural intensification and considers a broader range of activities undertaken by rural families and communities. Acknowledging the pluriactivity, multilocality and interconnectedness of farming activities provides us with a vision of a diversified rural economy, possible agricultural futures, and public policies associated with them. Research can help open new pathways.[16]

SUPPORTIVE POLICIES FOR DIVERSE SYSTEMS

Strong small-scale farming systems depend on several important factors: secure and equitable land tenure, access to stable markets, public infrastructure and agricultural support services, strong social networks for knowledge and resource sharing, and a supportive policy environment for sustainable agriculture that respects food sovereignty and the right to food.[13] Any action directed towards supporting small-scale and family-farming systems first has to define the characteristics of a family farm in a given context, including the tenure system at local level, to be able to define specific, targeted and effective policies. This requires improvements in agricultural census design and data collection.[7,9]

This doesn't necessarily have to happen as a formal governmental agricultural census. The FAO and a large number of partners have developed the Tool for Agroecology Performance Evaluation (TAPE) to measure the multi-dimensional performance of agroecological systems across the different dimensions of sustainability.[23] The Centre for Sustainable Food Systems of the University of British Columbia, for example, is working with researchers, farmers and sustainable farming organisations to develop a farmer-driven method for characterising diverse farm systems.[24]



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The free, open-source web app helps farmers to improve their financial and environmental management. This open-source model enables farmers to share data about their practices in real time, while respecting their data sovereignty.[25] Additionally, it can improve our understanding of the dynamics facing small-scale farmers, and serve as an input to more targeted research and policy work to support the sector as a whole.[24]

to food, differ from approaches that focus on measures, such as food availability, affordability or consumption. In Malawi, for example, a national agricultural input subsidy programme provided coupons to smallholder farming households to purchase fertiliser and hybrid maize seed at reduced prices. While the programme increased national maize production and overall food security, the majority of agricultural producers remain net buyers of maize.

> *A range of measures is needed, including redistributive programmes, regulatory reforms, taxation, and accountability measures, not only in relation to land but across the agri-food sector, from inputs to retailing.*[10]

RIGHTS-BASED APPROACHES ADDRESSING FARMERS' NEEDS

Current environmentally and socially harmful support mechanisms that focus on production should be redirected towards investments in public goods and services for agriculture that improve small farmers' access to infrastructure, subsidies that are independent of the output level such as direct payments to family farms, as well as research and development.

A focus on approaches that emphasise farmers' rights, such as food sovereignty and the right

Research suggests that better-off farming households who received more coupons could increase their food security, but 42% of farming households still face food insecurity.[7] Even with these challenges, Malawi has made great progress toward addressing food insecurity and the needs of family farms. Alternative approaches that include crop diversification, agroecological practices, more agricultural research and extension as well as targeted attention to equity issues help ensure the resilience of small-scale and family farming systems as they additionally focus on farmers' rights by improving food sovereignty.[7] ▶


Photo credit: Ricky Martin, CIFOR

FINDING SOLUTIONS (continued)

Consequently, public support mechanisms focusing on food security should include all six dimensions of food security including recognising the centrality of agency by empowering individuals and groups and ensuring sustainability along with the four other dimensions of availability, access, utilisation and stability.[26] Agency refers to the capacity of individuals or groups to make their own decisions about *what* foods they eat and produce and *how* that food is produced, processed and distributed within food systems, as well as their ability to engage in processes that shape food system policies and governance. Sustainability refers to the long-term regenerative ability of food systems to provide food security and nutrition in a way that does not compromise the economic, social and environmental bases that generate food security and nutrition for future generations.

PRACTICAL SOLUTIONS FOR UPHOLDING SMALL-SCALE FARMING

- Invest in more agroecological research-action projects and programmes for nutrition-sensitive and biodiverse agriculture that is not reliable on external inputs.
- Implement mechanisms to protect small-agricultural producers from uncertainties and income losses, such as improved access to markets, transfers, the specific insurances, and more affordable access to inputs. Policies must also be flexible to fully take into account the specificity of each context.
- Campaign for investment for better infrastructure such as markets, roads or irrigation at the regional, national and local levels.
- Address inequalities in land access and confront the process of land concentration.[10,27]
- At the community level, promote home and community gardens for biodiverse, nutrition-oriented individual and community responses.

BRAZIL'S NATIONAL COUNCIL ON FOOD SECURITY AND NUTRITION

Since the late 1990s, Brazil has developed two divergent sets of agricultural policies: one favouring large-scale, export oriented industrial agriculture, and one supporting the family farm sector oriented to domestic markets and regional food security. In a context of extreme land concentration (family farms are currently at about 84% of all farms, but control under 24% of agricultural land), family farmers produce approximately 70% of total domestic food consumption.[13,28]

Civil society organisations in Brazil have been global examples in the power of collective action for integrated food policy supporting the family farm sector. The National Council on Food Security and Nutrition (CONSEA) was an early advocate of Brazil's landmark "Zero Hunger" policy framework for linking support for small-scale agricultural producers directly to support regional food networks and food security. A 2010 Law on Food Security supported increased agricultural research and extension for family agriculture, access to credit for women and youth, and support to grow the agroecological and organic farming sector to meet consumer demand.

Unfortunately, the Bolsonaro government elected in 2019 has begun to undermine many of these advances, abolishing CONSEA and repealing land reform measures undertaken by previous governments. This reaffirms the need for civil society organisations to remain vigilant in social mobilisation and regional cooperative networks.[29]

- Support farmers' education and training to promote a better understanding of practices to decrease farmers' reliance on external inputs and to increase their autonomy over the production process.[27]
- Recognise, value and support the dissemination of local and traditional knowledge.[27]
- Support stronger regulation, including competition policy, to empower small and medium agrifood enterprises to participate in national, regional and global supply chains.
- Promote gender justice, ensure food system workers' rights are recognised and integrated in national legislation. Promote and enforce compliance with established norms.
- Empower vulnerable and marginalised groups and promote sustainability across all aspects of food supply chains, from production to consumption. Increased food production alone is not sufficient.[26]

LOOKING TO THE FUTURE

Investment in better infrastructure for small farmers such as access to water, better roads and storage for produce, as well as training in or provision of cooperative marketing and hubs for food processing can not only benefit farmers in opening up new markets for their produce but can also benefit national food security by building stronger food supply chains. This requires recognising that food systems, ecological systems and economic systems create positive synergies, rather than working at cross-purposes.

In order to achieve land titling and reduce land inequality, every individual of a farmers group has to get the necessary information and become involved in the process. Individuals have to be able to transmit what they have learned, to socialise the actions and work as a team and thereby to empower and defend their rights. To keep governments accountable and cooperative, and partnership models working, monitoring should be done by:[14]

- Supporting the establishment of an enabling environment, which includes assisting governments to develop appropriate regulatory and legal frameworks, a conducive investment climate and consultation frameworks for policy-related dialogues;
- Enhancing the effective participation of cooperatives and producer organisations in policy dialogue processes to advocate for their members' needs, making their voice heard at the national, regional and global level;
- Facilitating the development of producers' capacities, including their technical, managerial, organisational, and marketing skills, as well as their ability to integrate into value chains and networks, and to influence policy- and decision-making processes; and
- Sharing knowledge in the form of publications, learning training modules, briefing notes and good practices.

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- Graeub, B.E., Chappell, M.J., Wittman, H., Ledermann, S., Kerr, R.B., Gemmill-Herren, B., (2016). The state of family farms in the world. World Dev. 87, 1–15. https://doi.org/10.1016/j.worlddev.2015.05.012.
- Ricciardi, V., Mehrabi, Z., Wittman, H., James, D., Ramankutty, N., (2021). Smaller farms are higher yielding and more biodiverse than larger farms. Nature Sustainability. https://doi.org/10.1038/s41893-021-00699-2.
- Villatoro Escobar, J.G., (2018). Análisis de la gestión del proceso de titulación en tierras en el Municipio de Comayagua, Honduras. International Land Coalition and the University Observatory of Territorial Planning of the National Autonomous University of Honduras, Tegucigalpa, Honduras.

REFERENCES

For a full list of references please refer to the Annex - End notes

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