

Small Scale Agroecological Approaches for the COVID-19 Response and Beyond

Community-Sourced Impacts, Recommendations and Resources

Background

On 6 May 2020, [SCALE](#) and a team of practitioners from African Women Rising, Danish Refugee Council, Helen Keller International and the International Rescue Committee convened over 200 participants for a virtual discussion and interactive brainstorming session on the role of small scale agroecological approaches during the COVID-19 response and beyond ([recording here](#)).

The registration form for this event asked participants to share a pressing challenge they are facing related to small-scale production in the COVID-19 context. Their responses provide some indication of the needs and priorities facing implementing partners currently working in this space.

Registrant Snapshot

- 420 registrants from 64 countries across Africa, Asia, Middle East, and Latin America
- 257 registrants are currently supporting small scale production interventions
- 137 registrants are based in the United States or UK supporting global programs

Responses on Challenges (n=139)

- 40% face challenges around **access to markets and agricultural inputs** (primarily seeds)
- 25% have challenges related to strategies for **remote technical assistance and monitoring**
- 20% sought **technical practices** for addressing challenges related to water scarcity, pests, soil fertility, and social and behavior change for adoption of new practices
- 15% have challenges linking small scale production to enhanced **nutrition and food security**

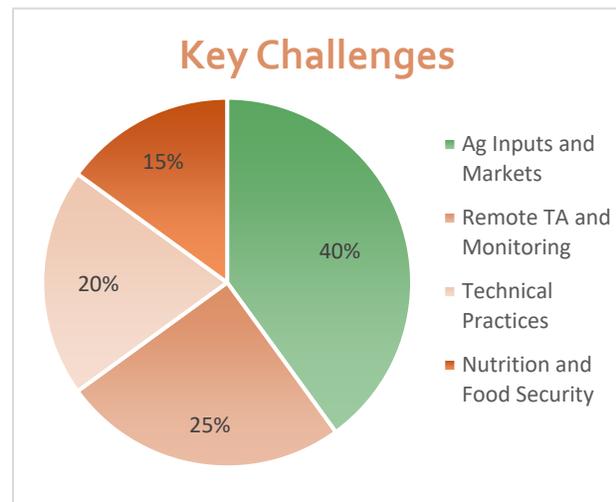


Figure 1: What pressing challenges are you facing related to small-scale production in the COVID-19 context? (n=139)

Community-sourced Resource Document

During the event, participants joined small breakout groups to dive deeper into these challenges. In collaborative documents, they shared the key issues they are facing, ways they are adapting, and useful resources. SCALE synthesized participants' ideas, strategies, and guidance to form the community-sourced resource below to support other implementing partners working on small-scale agroecological interventions. Note: the resources and recommendations shared here do not necessarily represent the views of USAID, the United States government or the SCALE award.

1. Access to Agricultural Inputs and Markets

Challenge

Disruptions in supply chains and restrictions on travel have limited farmers' access to agricultural inputs they rely upon for production, including seeds, tools, and fertilizers. The closure of markets and borders has constrained farmers' ability to connect with consumers and sell their produce.

Strategies Employed by Implementers

Implementers have been supporting community-based seed production, seed banks, and seed sharing to address challenges related to seeds access. Activities include:

- Conducting [seed assessments](#) to understand access problems before deciding on interventions.
- Establishing and supporting community-based seed production, seed banks, and local seed sharing schemes. Building capacity of farmers for seed management and seed savings.
- Organizing seed fairs with vouchers, inviting communities with seed banks, private sector, and government representatives while maintaining COVID-19 social distancing requirements.
- Contacting researchers for guidance on seed stock, such as CGIAR, CIMMYT, ICRISAT, IRRI, and AfricaRice, as well as the private sector.
- Employing [seed crowd sourcing](#) - with agricultural research partners - to encourage farmer selection and adoption of adaptable varieties.

Implementers are promoting the use of local organic materials in place of fertilizers. Activities include:

- Promoting compost and other locally-made fertilizers, such as effective microorganisms, biochar (including urine-infused biochar), and vermiculture.
- Integrating nitrogen-fixing legume cover crops and leguminous trees to enhance soil fertility.
- Creating a "tea" by soaking local fertility plants (e.g. Tithonia in parts of Africa, nettle and comfrey in UK) and applying to soil as a highly nutritious natural fertilizer.
- Using locally available materials like manure, wood ash, charcoal dust, blood meal, neem leaves, and decomposed organic material from rubbish pits to improve the soil.

With markets closed, programs are exploring ways to link producers directly with local consumers, shops, and partners often with the aid of technology. Activities include:

- Connecting school feeding programs and food banks with farmers that have lost markets.
- Exploring food delivery services that gather produce from farmers directly to urban consumers (ex. Twiga Foods in Kenya, Cookshop in Liberia).
- Promoting home delivery strategies and using mobile vans to provide door-to-door service.
- Linking farmers to small shops and companies nearby their location.
- Partnering with government social assistance programs/humanitarian programs with market linkage to reach the most vulnerable.
- Using village business agents to distribute/sell inputs on bicycles in exchange for commission.
- Working with communities and the private sector to select and train village agents that can provide input and output market services to extremely poor producers (farmers and non-farm) on a sustainable basis.
- Facilitating COVID-19 linked transport licenses for smaller transporters who are struggling to gain permits that allow them to move goods from more remote farmers and rural markets.
- Advocating to local authorities to safely ease restrictions to market for smallholder farmers.

2. Meeting the Food Security & Nutrition Needs of the Most Vulnerable

Challenge

Participants shared concerns about meeting the nutrition and food security needs of vulnerable populations, including those in IDP and refugee camps, those with disabilities, and those in fragile contexts who face a range of shocks and stresses in addition to COVID-19.

Strategies Employed by Implementers

To meet food security needs, implementers are encouraging small-scale production, promoting nutrition education, and building partnerships with health services. Activities include:

- Building capacities of families on organic farming and permaculture to produce nutritious food in small areas, and integrating trees where feasible to enhance production and soil health.
- Promoting supplementary nutrition programs, basic nutrition education, and the consumption of nutrient-dense vegetables.
- Focusing on indigenous and local varieties while protecting indigenous crops and livestock.
- Partnering with food banks, Rotary Clubs, churches, and social groups to teach these practices.
- Reinforcing knowledge of nutrient-dense, drought and flood resistant plants, and edible trees.
- Supporting resilient, informal seed systems and exchange amongst farmers.
- Strengthening links with health systems and emphasizing preventative health care.

In camp contexts, implementers are supporting local production and seed systems where possible and directly distributing resources where needed. Activities include:

- Establishing small-scale production with permagardens, sack gardens, and rooftop gardens, which can be adapted for small, cramped conditions found in camps.
- Connecting with food hubs, food banks, seed, and cereal banks.
- Providing seeds and tools (using cash or vouchers or in-kind) for families that are otherwise unable to access markets.
- Training households on improved storage for seeds and produce.
- Promoting respect, preservation, and sharing of local seeds with communal networks.

To build food security resilience for vulnerable populations, partners are integrating agroecological programs with multi-sectoral responses that address multiple shocks. Activities include:

- Promoting sustainable agricultural methods that address challenges posed by COVID-19, climate change, land degradation, and locusts.
- Enhancing production and improving water use/soil health for the long-term (permaculture approaches).
- Encouraging social connections through family-to-family sharing of food, especially nutritional produce locally available.
- Promoting fast growing crops while giving training on drying and storing of food for hard times.
- Supporting food systems that rely on short value chains within and between communities (e.g. production systems not geared toward producing cash crops or products for export).
- Strengthening links between cash transfers and local community market systems.
- Encouraging families to join in nutrition garden program.
- Advocating for governments to support local procurement.

3. Remote Technical Assistance & Monitoring

Challenge

Travel restrictions and social distancing requirements have required programs to find new ways of delivering technical assistance and monitoring program quality. Identifying strategies for remote agriculture training, technical support, and effective monitoring interventions has proven challenging for implementing partners. While technology provides some solutions, it can also exclude those who do not have access to a phone or internet.

Strategies Employed by Implementers

Implementing partners have been relying on community leaders and community-based staff, as well as a mix of social media platforms, phone calls, text messages, radio, and TV, to continue providing technical support to farmers. Activities include:

- Developing simple, agroecological production materials in local languages with graphics.
- Using short videos and radio spots to broadcast through community radios and TVs.
- Encouraging farmer-to-farmer radio programming where farmers learn from one another and “experts” help respond to questions.
- Shifting to individual farmers visits (instead of group visits) and on-site training with social distancing.
- Using SMS, Facebook, WhatsApp, and other social media to mentor farmers one-on-one, address key challenges, share pictures on disease identification, and send video demos.
- Partnering with mosque speakers or other religious leaders to help publicize key messages.
- Providing cell phones as part of programs’ cash transfer component so that the most vulnerable to have access to extension services.
- Identifying community leaders who can be given phones to collect information on behalf of others as it might not be possible to carry out phone distribution. These leaders are often also the heads of existing groups (savings groups, women’s groups, lead farmers, etc.).
- Adapting approaches to ensure women are receiving info through appropriate channels
- Purchasing seeds in bulk, repackaging them and safely distributing to farmers. Local facilitators are establishing vegetable nurseries in their homes and distributing seedlings to farmers ([DIG](#)).

Phone and email surveys, and the support of lead farmers, have allowed some programs to continue monitoring garden programs through safe data collection. For example:

- Using phone, WhatsApp, and email to respond to survey questions and to send photos.
- In areas with some mobility, lead farmers are collecting information from farmers in their communities on a one-to-one basis or visiting sites themselves to monitor progress (while following social distancing requirements, wearing appropriate PPE, etc.).

Partnerships with health services can help to ensure agricultural trainings follow COVID-19 guidelines and provide an opportunity to reinforce health messaging. Activities include:

- Working with health services staff to integrate hygiene promotion and raise awareness of COVID-19 in agricultural trainings.
- Training field based frontline staff on health related messaging on COVID-19 and prepare them to share those messages in their village in order to provide guidance on maintaining social distancing and other precautions as well as deliver agricultural advice.

4. Longer-term Resilience Linkages

Challenge

Integrating agroecological approaches from the COVID-19 response to longer-term resilience strategies can pose challenges related to capacity strengthening, partner coordination, and awareness raising.

Strategies Employed by Implementers

To support sustainability, implementers are ensuring agroecological approaches are community-driven and rely upon local resources by:

- Building capacity of local level institutions, community structures, and leaders.
- Promoting local seeds that are resistant to climate change and can be exchanged locally.
- Using participatory training methods to roll out agroecological approaches in ways that honor community knowledge and ownership.
- Shortening supply chains (production based on local inputs is more resilient to market shocks).
- Including seeds and input subsidies for farmers in private sector partnerships.
- Facilitating contracts or agreements with new local buyers.

Implementers are leveraging opportunities within emergency programming, such as Cash for Assets, to promote agroecological approaches and solutions. Activities include:

- Using tools, such as market mapping in crisis ([EMMA](#)) to inform how development and humanitarian interventions can be integrated around food systems at the earliest stages.
- Leveraging Cash for Assets to construct water/erosion control structure such as swales or berms, or to set up Payments for Ecosystem Services schemes.
- Engaging agroecologists in emergency planning teams to influence government-led responses.
- Developing simple guidance for those working in response/recovery to help them identify ways to contribute to longer-term food security resilience.

To address water scarcity challenges, implementers are emphasizing capacity building for water management and efficient water use in their agroecological programs. Activities include:

- Focusing on water storage in the ground (aquifers/wetlands/soil) and in biomass (agroforestry).
- Providing training on how adding soil organic matter increases water holding capacity.
- Drawing lessons/guidance from the integrated water resource management approach.
- Encouraging use of drought-tolerant, locally adapted species and integrating drip irrigation.
- Exchanging lessons and best practices around the safe use of grey water in irrigating gardens.
- Integrating native tree crops, wild tree, and root foods in household gardens in drought-prone areas.

Implementers are integrating agroecological interventions with financial activities to bolster the resilience of farmers against multiple shocks and stresses. Activities include:

- Establishing savings groups and other solidarity-based systems, which enhance social cohesion and resilience against shocks.
- Integrating agroecological interventions with graduation services like savings groups, business plan training, and productive asset transfers to create pathways out of poverty
- Adapting VSL approaches to prevent overstretching of cash reserves at one time.
- Working with finance institutions to develop a savings to lending approach for young agripreneurs which can be linked to farmer kit packages and training from local input providers.

Next Steps

SCALE is currently working on a range of guidance materials, learning events, and collaboration opportunities for USAID’s Office of Food for Peace implementers and partners working on agroecological approaches. If your agency is interested in learning more about agroecological solutions for the COVID-19 response or has resources/impact assessments to share, please contact SCALE at scale@mercycorps.org. To stay on top of upcoming events and new resources, [sign up for the FSN newsletter](#).

Community Resources List

The following list of resources was shared by implementing partners during the virtual event and registration. Please note that these resources and recommendations do not necessarily reflect the views of USAID or the United States Government and should not be viewed as an endorsement by Food for Peace or the SCALE award.

Title	Description	Source
Permagarden Toolkit	Permagarden Technical Manual, 3-day Training Guidelines and Adult Education materials	https://www.fsnnetwork.org/to-ps-permagarden-toolkit
Resilience Design in Smallholder Farming Systems	Technical Manual, Measurement Toolkit and Tip Sheets for designing resilient farming systems	https://www.fsnnetwork.org/resilience-design-smallholder-farming-systems-approach
Helen Keller International	HKI resources page Video showing how frontline staff have adapted their communications with project participants (SILC focus) during COVID-19	https://www.hki.org/what-we-do/knowledge-resources/ https://www.facebook.com/saplingbd/videos/256542015457938
African Women Rising	Impact assessment on Permagardens in a refugee setting:	www.fsnnetwork.org/impact-assessment-permagardens-palabek-refugee-settlement-northern-uganda www.africanwomenrising.org
Seed System Security Assessment and related tools	Assessment Tools, Guidance and e-Learning Course	www.seedssystem.org
Seed-Related Assistance in Fragile Contexts: Lessons for the COVID-19 Response	Webinar and brief on key guidance and lessons for seed system interventions in the COVID-19 response	https://www.fsnnetwork.org/seed-related-assistance-fragile-contexts-lessons-covid-19-response

Development in Gardening (DIG)	DIG is adapting its garden interventions with the help of Telerivet SMS texts, at-home nurseries and seed repacking for safe distribution. See video	https://reaplifedig.org/ https://vimeo.com/414054410 https://telerivet.com/
Farm Radio International	Multiple examples of how farm radio is providing essential pandemic-related information to remote and rural communities in sub-Saharan Africa	https://farmradio.org/
Farmer's Handbook	A permaculture ebook, specifically tailored for Himalayan conditions	https://permies.com/wiki/50195/Farmers-Handbook-Volumes-Chris-Evans
Tropical Permaculture Guidebook	Comprehensive resource of permaculture, food sovereignty and environmental regeneration practices	https://permatilglobal.org/
Bioversity International	Home garden resources and recent global survey on school gardens impacts	https://www.bioversityinternational.org/ https://www.bioversityinternational.org/news/detail/growing-for-the-future-a-new-book-on-school-gardens/
The World Vegetable Center's Approach to Household Gardening for Nutrition	Guidance document for household gardening	https://avrdc.org/wpfb-file/ebo270-pdf/
Re-Alliance resources	Guidebooks, tools, case studies for implementing regenerative practices in humanitarian and development settings	https://www.re-alliance.org/toolkits www.re-alliance.org
FAO Tool for Agroecology Performance Evaluation (TAPE)	Tool to help gather data, show impacts and assist farmers to prepare for AE design planning.	http://www.fao.org/3/ca7407en/ca7407en.pdf
Educational Concerns Hunger Organization (ECHO)	Multiple resources, case studies and global community of practice around agroecology	https://www.echonet.org/

Connexus	Multiple case studies related to agribusiness, value chains, agroecological production	https://connexuscorporation.com/our-work/projects/
Agrisud International Guides	Agroecology guides in multiple languages (Eng, French, Wolof)	http://www.agrisud.org/en/type-publications/guides/
Trocaire water technologies (Rwanda)	Water Management technical manual	https://www.trocaire.org/resources/policyandadvocacy/rwanda-water-management-project-technical-manual
Agroecological and agroforestry practices in tropical wet zones	Agroecology guidance document drawing from DRC, Myanmar, Cambodia and India	https://www.gret.org/publication/agroecological-and-agroforestry-practices-in-tropical-wet-zones/?lang=en
AccessAgriculture Resources	Resource platform with guidance materials, apps, tools for agriculture and agroecology	https://www.accessagriculture.org
Crop Museums in Schools: Conserving Agrobiodiversity of Nutritional Importance	A primer for school teachers in public elementary and secondary schools	https://schoolnutritionphils.files.wordpress.com/2020/04/crop-museum-primer.pdf

About SCALE

SCALE (Strengthening Capacity in Agriculture, Livelihoods, and Environment) is an initiative funded by USAID's Office of Food for Peace (FFP) and implemented by Mercy Corps in collaboration with Save the Children. SCALE aims to enhance the impact, sustainability and scalability of FFP-funded agriculture, natural resource management and off-farm livelihood activities in emergency and development contexts.

Recommended Citation:

Lambert, Kristin. 2020. *Small Scale Agroecological Approaches for the COVID-19 Response and Beyond: Community-Sourced Impacts, Recommendations and Resources*. Produced by Mercy Corps as part of the Strengthening Capacity in Agriculture, Livelihoods, and Environment (SCALE) Associate Award.

Contact information

c/o Save the Children
 899 North Capitol St NE, Suite 900
 Washington, DC 20002
www.fsnnetwork.org/SCALE
SCALE@mercycorps.org