

Agroecology in Action: Stories from the Ground November 2024







ACKNOWLEDGEMENTS

This document is the product of extensive discussion and presentations under the Agroecology Coalition's Working Group on Implementation, which allowed members to interact and reflect on lessons learnt from the implementation of agroecology projects and initiatives all over the world. These presentations and inputs can be found in the Agroecology Coalition website's <u>Repository of Case Studies</u>, from which the Agroecology Coalition selected the ten that appear in this publication. The selection was made to ensure geographical representation (projects based in all continents) and to cover different topics (markets and entrepreneurship, reduced dependency on external inputs, valuing tradition and local diets, co-creation of knowledge, and so on). We thank those who presented their projects during the various meetings and contributed to drafting the case studies, members who actively participated in the discussions after the presentations and, lastly, WG co-facilitators Joshua Aijuka (PELUM Uganda) and Pierre Ferrand (FAO), who supported the Secretariat.

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Amina Mohamed is a 40 years old farmer and small scale businesswoman in Kiromo (ward), Bagamoyo (District), Pwani (Region), Tanzania. In 2019 she began engaging in organic farming activities and joined a seminar on organic farming organized by SWISSAID.

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Foreword



We have long been waiting for the moment when agroecology is taken up across the board, by a range of stakeholders from all walks of life.

Interest has grown tremendously since the first FAO International Agroecology Symposium in 2014. Other milestones have included the 2019 adoption of the 10 elements of agroecology by FAO member States, the 2019 Committee on World Food Security's (CFS) High-Level Panel of Experts (HLPE) Report on Agroecology, which laid out the 13 principles of agroecology, and the 2021 UN Food Systems Summit. This global momentum is built on a collective realisation that our current food systems are not sustainable, and that the multiple crises we face threaten the sustainability of our natural resource base and the wellbeing of our society.

However, it is also inspired by ongoing local and grassroots efforts, which have been both preaching and practising agroecology not only to survive but to thrive. This publication is precisely about these efforts from the ground which are initiated, supported and implemented by Agroecology Coalition members around the globe.

The cases featured in this publication were shared by members during the monthly meetings of the Coalition's Working Group on Implementation, which provided a space for co-learning the ways in which agroecology can be implemented on the ground and in different contexts, and to discuss the ideal conditions for ensuring positive results and impacts. These gatherings also enabled members to reflect collectively on the factors that help or hinder their efforts, and the lessons learned for wider implementation.

The continued co-creation and exchange of knowledge and practice in agroecology is crucial to sustaining this momentum. So, read the stories in this document and get inspired by the countless ways that agroecology can transform food systems, making them prioritise resilience, equity and health.

Oliver Oliveros - Agroecology Coalition Coordinator



Ms. Rebeca AHAA Associate, demonstrating her free-range vegetable production in Colombia.

© Viviana Sánchez Prada, SWISSAID

Key Learnings

- Agroecology can bring multiple benefits, including increased livelihood, biodiversity, resilience, and soil health.
- Agroecology lighthouses and promoters are key to promoting agroecology practices among local farmers and communities.
- Agroecological practices such as crop diversification, intercropping, on-farm biodiversity and locally available natural inputs enable cost reduction and reduced dependency on external inputs.
- Agroecological fairs, farmers markets and communication campaigns are key to raising consumers' awareness of agroecological products and linking them directly to farmers.
- The management of agroecological systems is usually more knowledge and labour intensive than that of systems based on industrial agriculture. This offers ample possibilities to create decent jobs in the agricultural sector, involving diverse areas of competence ranging from ecology to marketing and rural development.
- Economic diversification (e.g. growing diverse crops or raising diverse breeds, having mixed farms, creating businesses, processing food, etc.) and reduced production costs can increase farmers' incomes and livelihoods.
- **Revitalising knowledge** about production, processing, cooking methods and nutritional benefits of ancestral and indigenous crops and breeds fosters interest among farmers and consumers.
- Mobilising local actors through a network brings the community closer in a short time, and ensures a boost in the local economy.
- Using participatory approaches and co-creating solutions and innovations ensures ownership and sustainability.
- Financial support mechanisms to manage transitions from one system to another and their associated risks are needed to encourage farmers to start their agroecological business.
- Strong national agriculture policies that support the transition towards agroecology are needed.



Introduction

In the fight against food insecurity, the agricultural and food systems of today face major environmental, climate, biodiversity, and health challenges. Food systems are also increasingly impacted by climate change, while simultaneously contributing a third of global greenhouse gas (GHG) emissions, and certain agricultural practices contribute significantly to the erosion of biodiversity, environmental pollution, soil and land degradation and water scarcity. The precarious livelihoods and social inequities faced by many farmers and food system workers exacerbate the difficulties of ensuring adequate nutrition for all.

The multiple intersecting crises in food, climate, and biodiversity present both an urgent problem and an opportunity to bring together diverse actors in support of a bold proposition: transforming food systems through agroecology.

Agroecology is a science, a set of practices and a social movement¹ recognised by scientists, farmers, policymakers and civil society.

Agroecology is "an integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of food and agricultural systems" that "aims to optimise the interactions" between plants, animals, humans and the environment while taking into account the social aspects that must be addressed for a sustainable and equitable food system", Food and Agriculture Organization of the United Nations (FAO).

Agroecological diversified systems aim at working with nature, not against it.

In 2019, the High-Level Panel of Experts for Food Security and Nutrition (HLPE-FSN) of the Committee on World Food Security (CFS) developed 13 Principles of Agroecology, highlighting how agroecology can simultaneously achieve economic, social and environmental objectives.

These 13 principles are aligned with the **10 Elements** of Agroecology approved by the FAO Council in 2019, after the first International Symposium on Agroecology for Food Security and Nutrition (2014) and an international consultation process carried out between 2015 and 2017, which culminated in the Second International Symposium of Agroecology in 2018.

Ten years after the first International Symposium on Agroecology for Food Security and Nutrition in 2014, the Agroecology Coalition is publishing this report that compiles ten projects making the case for agroecology, highlighting how the Agroecology Principles and Elements can be implemented on the ground in various countries.

From Asia (India, Nepal, Himalayas), Africa (Mozambique, Malawi, Tanzania, Tchad, Ivory Coast, Niger), and the Middle East (Lebanon), to Europe and Latin America (Colombia, Nicaragua, Ecuador), many organisations are working together to implement projects and initiatives to transform their food systems through agroecology.







Demonstration plot showcasing agroecological practices to farmers in the urban area of Maputo.

© AICS Maputo

STORY BY AICS Mozambique **Boosting Agroecology in Urban areas:** the AGRI.URB project





- The Italian Agency for Development Cooperation (AICS)
- WeWorld-GVC
- -<u>AVSI</u>
- Associação para Desenvolvimento Sustentável (ABIODES)
- Associação para a Defesa e Desenvolvimento da Sociedade (ADDESSO)

Location: Maputo, capital city of Mozambique

Context: Maputo is home to **1.1 million people** and is spread over **300 square** kilometres. Maputo's main urban agriculture characteristics are the extensive green areas known as "zonas verdes" (established by colonists two centuries ago) where 14,500+ farmers undertake their activity. Larger production systems are based on home gardens, small-scale and commercial farms, which mainly produce cabbage and lettuce through monoculture which leads to pest issues, high use of pesticides, and health risks. Around 40,000 inhabitants are involved in urban agriculture related activities, and 5% of the population directly earns revenues from agriculture. The population faces income challenges – 70% struggle to cover monthly food costs. There are many farmers associations in Maputo's urban agriculture, whose role is to regulate land use rights and facilitate knowledge exchange (e.g. on-farm training, personal and farmer-to-farmer advising). The city's main challenges and risks are linked to the impacts of climate change and water contamination.

Project duration: July 2022 - September 2023

Budget and Donors: USD 294 992 (EUR 270,000) funded by AICS



Objectives

Sustainably strengthen urban agroecological farming and livestock activities in the Green Zones of Maputo (Zonas Verdes de Maputo – ZVM) in the Municipal Districts of KaMavota and KaMubukwana.

Contribute to the improvement of food and nutritional security of households in the City of Maputo.

Reduce the overall use of inputs (both organic and synthetic) and use functional biodiversity.

Activities

- **Recruit 15-30 farmers** and form a group.
- Organise training sessions, meetings and workshops regularly as part of a year-long program. The topics include agroecology principles, soil fertility management, biopesticides, composting, seed production, and water management, based on the Formação Agrícola Participativa (Participatory Agricultural Training, FAP) approach.
- Use participatory learning and knowledge exchange, which combines theory with practical demonstrations and encourages active participation on demonstration plots.
- Organise field visits and mentoring on the right use of agroecological practices by the project's technical staff.
- Use Nitrogen-Fixing plants and mulching to increase the recirculation of nutrients.
- Use manure produced on farm thanks to the introduction of small animals like chickens and rabbits to reduce dependency on external inputs.

- Use intercropping (of 5 crops) and natural fences to increase crop and landscape diversity
- Use fruit trees to regenerate soil and provide shadow and windbreak.
- Use bio-pesticides and functional biodiversity produced on farm like garlic, chilli, soap and ash as natural repellents to manage pest and increase plant health.
- Organise agroecological fairs monthly.
- Organise discussions on the implementation of an agroecological label. This was already created, but the Participatory Guarantee Scheme (PGS) is not yet in place.

Featured principles and elements







Input reduction



Monitoring and Evaluation Methods

The performance of the project was assessed by the AICS team through the <u>Agroecology Finance Assessment Tool</u>, a collective online tool which provides a methodological framework based on the 13 principles of agroecology to assess how much projects are contributing to agroecology. It also provides a guide for developing projects that implement agroecology. Results showed a good performance for co-creation and exchange of knowledge, synergy, soil health, and recycling.

Outcomes and Lessons Learned

OUTCOMES

Agroecology in urban and peri-urban contexts brought **multiple benefits**, such as increased livelihood, biodiversity, resilience, and soil health.

The Formação Agrícola Participativa (FAP) approach was effective in spreading agroecology practices to the 104 direct beneficiaries (40 women and 64 men) from four associations working in urban areas.

The agroecology "lighthouses" (farmers experienced in agroecological practices) were well recognised among the association for their key role in promoting agroecology practices.

Qualitative observations indicate that farmers who have transitioned to agroecological practices have experienced a significant decrease in input costs. For instance, an agroecological lighthouse farmer reported that he no longer incurs input costs as he produces everything himself, from biopesticides to biofertilisers, and even some seeds. The only inputs he still purchases are seeds that are particularly difficult to produce on his own. While these insights suggest substantial cost savings, a comprehensive quantitative analysis is needed to accurately measure the extent of these reductions.

Agroecological fairs raised consumers' awareness of agroecological products and linked them directly to farmers.

It was noticed that agroecology practices seem to be **more labour-intensive** than conventional practices. The project addressed this perception by establishing both demonstration fields and identifying experienced farmers to act as agroecological "lighthouses". These lighthouses exemplify how, although the initial transition to agroecology requires more labour, the system becomes increasingly resilient and less labour-intensive as it matures. Farmers in the early stages of adoption are invited to visit these experienced practitioners to witness firsthand the long-term benefits and sustainability of agroecological systems.

The project provided incentives, such as organic manure and seeds suited to agroecological systems, along with technical support, to facilitate this transition. These inputs were crucial in enabling farmers to adopt agroecological practices more effectively and in encouraging broader uptake across the community.

ENABLING CONDITIONS

- Subsidies are necessary to mitigate the risk of the agroecological transition for farmers.
- The promotion of market access for agroecological products and direct selling are needed, given that agroecology is still a niche market and unknown to consumers. In this regard, labels can help consumers to differentiate agroecological products from conventional ones.
- Farmers produced very high-quality products (in terms of taste) compared to conventional products, so consumers were ready to pay more.

LIMITING FACTORS

- The lack of subsidies to support the agroecological transition and the socioeconomic pressure. Farmers were highly averse to the risk entailed by the transition.
- The high levels of urbanisation pressure and land speculation trigger conflicts of interest and difficulties in accessing land.
- The lack of favourable policies and regulations to scale up agroecology.
- The lack of specific channels or markets to distribute agroecological products.



NDEX



A high elevation food forest research plot focused on developing the most appropriate and effective growing systems, plant guilds and biofertilizer applications for fruit and nut trees over 2000 metres elevation.

© Himalaya Agroecology Research and Development / Almost Heaven Farms

STORY BY THE HIMALAYA AGROECOLOGY **RESEARCH AND DEVELOPMENT** Nepal Food Resilience through Agroecology





Lead organisation and partners

- <u>Himalaya Agroecology Research and Development (HARD)</u>

- <u>Almost Heaven Farms</u>

Location: Koshi Province in Nepal

Context: Koshi Province is on the easternmost side of Nepal. It includes a diversity of geographical and climatic zones from the plains of the Indian subcontinent at 200 metres elevation, to the highest point on earth, Mount Everest at 8,800 metres. The project is being implemented in 7 out of 14 districts in the province, which includes some of the most remote communities in Nepal.

Project duration: September 2022 to August 2025 (3 years). This project is a continuation of their work over the last 20 years.

Budget and Donors: USD 1 million funded via the Kamala Foundation





Objectives

- Build ecologically resilient communities connected by resilient food systems across the Himalayan bioregion.
- Work across the whole food supply chain to address food resiliency for the communities living in the Himalayan bioregion.
- Develop the highest quality biological resources, appropriate growing systems, educational materials and women-led micro-enterprise models appropriate for farming communities in the Himalayan bioregion.

Activities

- Design a 6-year research project on agroecological systems focusing on soil health, nutrient cycles, crop rotation and crop diversification.
- Implement on-farm research trials on a diversity of cash crops. On-farm research trials at seven locations across the province to test both biofertilisers and agroecological growing systems on a diversity of cash crops at a diversity of altitudes. The research will measure effects on soil health, crop production, pest and disease pressure, and nutrient density, as well as cost analysis to ascertain what is most appropriate and effective in the local context.
- Demonstrate agroecological growing systems. Research plots will also double as demonstration sites for farmers and other stakeholders to visit. Disseminate the results among stakeholders, business communities and government bodies who are developing policies and budgets for agriculture.
- **Develop a network of strategic partners** to address the resilience of other parts of food systems/supply chains such as transportation logistics, market development, etc.
- Set up off-grid biofertiliser factories that do not require petrol, gas or electricity inputs. These factories use local organic materials, plants and microbiology to produce foliar sprays, biochar and other high quality soil amendments. These will produce enough biofertiliser to support/supply **18,000 farmers**. Demand for biofertilisers is expected to increase, as governments and farmers alike have

reported issues with synthetic fertilisers and declining soil quality in recent years.

- Encourage municipal governments to allocate budgets to support the development of biofertiliser factories and other agroecology-related projects in their respective areas. This has been extremely successful and has doubled the funds going into the food resilience project
- Develop women-led microenterprises for value-added food production. Train women in financial literacy (basic accounting and financial analysis), marketing/sales and food production techniques and support them with start-up grants (50% matching) in order to take ecologically grown crops and transform them into nutrient-dense food products for local markets. Value-added food products include packaged products like jam, chutney, dried and fermented food, flours and spices, as well as cooked food to be sold in local restaurants and hotels.
- Educate the general public and increase awareness of agroecology through the production and distribution of 2000 posters on 12 agroecology topics, 2000 agroecology farmer's handbooks in Nepali language, and 48 social media videos posted across a diversity of platforms.

Featured principles and elements







Monitoring and Evaluation Methods

A complex Monitoring, Evaluation and Learning (MEL) protocol is used to collect, process and share data/information within the organisation and with strategic partnerships. The MEL protocol includes:

- Soil health indicators
- Water usage
- Pest/disease pressure
- Production (quantity)
- Brix levels (quality)
- Cost/benefit analysis

Data on farmers, farmer groups, value-added food producers and other strategic partners is also collected, processed and communicated. This includes:

- Quantity of food grown using agroecological methods
- Quantity of food grown using agroecological methods sold on local markets
- Quantity of food grown using agroecological methods sold F2B (directly farmer) to business)
- Profit generated by farmers
- Amount of value-added food products
- Quantity of value-added food products sold on local markets
- Quantity of value-added food products sold F2B (directly farmer to business)
- Profit generated by micro-enterprises
- Amount of funding invested in agroecology by strategic partners

Outcomes and Lessons Learned

OUTCOMES

- 9 research plots established
- 9 research partners trained
- Information collected on 42 major cash crops
- Information collected on 15 biofertilisers
- Information collected on 10 cultural management practices
- 16,000 demonstrations given at research plots
- 22 agroecology policies developed
- USD 45,000 of budget allocated by government through policies
- USD 45,000 of budget allocated by other stakeholders
- 250 members of Agroecology Nepal Network
- 10 media highlights on research/findings
- 10% of farmers have heard of agroecology
- 14 functioning biofertiliser production units
- 15 biofertilisers produced
- 270,000 units of biofertiliser produced
- 18,000 farmers using biofertilisers
- 19,800,000kg of organic produce grown
- USD 6,630,041 in organic produce sales
- Incidence of pest and disease on crops decreases 50% compared to average
- 40% reduction of input costs for farmers
- Nutrient density of produce doubles
- 170 women-led micro enterprises established
- 340 jobs created
- 160 food products produced
- 375,000kg of value-added food produced
- Women produce 81,600kg of value-added food products per year
- Women generate income of USD 1,138,489.
- 1 million views, 5,000 comments, 50,000 likes and 50,000 shares on social media



LESSONS LEARNED

- Demand for biofertiliser products needs to come from farmers themselves. Many municipal governments have invested in producing biofertilisers and subsidising the cost for farmers but have not done enough to help educate farmers, raise awareness of biofertilisers as an alternative, or even halt subsidies or promotion of chemical fertilisers. Education and awareness are key to driving demand, and will ultimately lead to the overall transition to agroecological practices and biofertiliser use.
- It was challenging to create value-added food products and get them to market. The industry is already over-developed and extremely competitive in general. «Green washing» and «health washing» rhetoric from synthetic fertiliser companies makes it hard to convince consumers that our products are better for their health and for the environment.

LIMITING FACTORS

- Unstable, constantly changing governments, as well as more general political hindrances
- Cheap, processed foods flooding the market from abroad
- Lack of proper regulation with regard to the biofertiliser industry
- Unrealistic expectations in different rural communities created by decades of poor international development practices by NGOs and INGOs

from 80 to 3200 meters in elevation.



Aulching of shade tree nurseries by UIREC members in Côte d'Ivoire. UIREC

STORY BY UIREC Côte d'Ivoire

The VITAL Project: Farmers' organisations, businesses and research harness the sustainable effects of agroecology to scale up their operations



Lead organisation and partners

- Union Inter-Régionale des Sociétés Coopératives (UIREC)
- French Farmers and International Development (AFDI)
- Institut National Polytechnique Houphouët Boigny de Yamoussoukro (INPHB)
- Société coopérative de la zone des Savanes à Bouaflé (SCZSB)

Location: San Pedro region in Côte d'Ivoire

Context: Agroecology is underdeveloped in San Pedro, the world's largest cocoa port. The region faces extreme climatic conditions (droughts and violent winds). Soil fertility is declining due to the overuse of synthetic inputs, monoculture and intensive ploughing. The region is also facing increased deforestation due to mining, agricultural expansion (especially in the area of the St. Lawrence River), and the loss of forests. According to Mighty Earth, in 2020, 7,000 hectares of forest were cleared in the country for cocoa production, wood production for energy purposes, and the increase of bushfires.

Côte d'Ivoire is the world's leading producer of cocoa beans, covering 40% of the world's supply. This industry contributes 15-20% of its GDP, employs nearly 600,000 growers, and supports almost a quarter of the population. 98% of cocoa is produced by family farmers, grouped together in cooperatives which, despite some difficulties, manage to increase the resilience of producers. Given that 67% of Ivorian cocoa is consumed in Europe, communications and initiatives between the European Union and Côte d'Ivoire have been undertaken to combat deforestation.

Project duration: The project started in 2019 and was completed in 2022.

Budget and Donors: USD 364,769 (CFA francs 219 million) funded by the French <u>Agency for the Development (AFD)</u> and the <u>Economic Community of West African</u> States (ECOWAS).



Objectives

- Intensify agroecological practices to bring economic and environmental sustainability to family farms.
- Carry out collaborative experimentation with appropriate agroecological practices on cocoa and maize. Disseminate the results of these experiments and market the products resulting from these practices.
- Involve rural civil society, research and producers' organisations in the coconstruction of experimentation, awareness-raising and training schemes for agroecological practices.

Activities

- An agrarian diagnosis and a market survey, both carried out at the start of the project in 2019. These two documents highlighted a lack of maintenance of cocoa plantations (the average size of cocoa plots is 2.5 hectares), a lack of pruning of cocoa trees, a lack of adjustment of cocoa tree densities, poor application of chemical or biological fertilisers, and the presence of cocoa brown rot. These observations guided the choice of agroecological experiments to be carried out with producers, as well as the promotion of agroecological products on the market.
- Setting up 18 experimental plots with the aim of demonstrating the effectiveness of agroecological practices, and training producers in these practices. In the cocoa sector, experiments focused on good cocoa farm maintenance practices (organic fertilisation and density adjustment) and on agroforestry (choice of species based on their contribution to soil fertility, their ability to provide shade, and the additional income they can generate by producing fruit or wood). In the corn sector, conservation agriculture practices were tested (no-till and direct seeding, crop associations, biofertilisers).

- Create and train a network of 15 animators and 40 relay farmers to lead interventions on the experimental plots, promote the dissemination of practices (biochar, bio-inputs, pruning, etc.) to other growers, strengthen management and good governance capacities, and better include young people within the cooperatives.
- Organise open days and participate in radio broadcasts to raise the profile of the project and of agroecological practices among the general public.

Featured principles and elements



Economic diversification



Connectivity





Recycling



Soil health



Synergy



Co-creation of knowledge



Monitoring and Evaluation Methods

Together with INPHB researchers, the network measured the social, econor and environmental performance of these systems.

- To assess soil health, **samples** were taken at the beginning and end of project.
- For the impact of training on trainees, a survey was carried out in Augu 2022 to estimate how many trainees (sample of 25%) put into practice agroecological techniques acquired during training.

Outcomes and Lessons Learned

OUTCOMES

- Over 1,000 producers in the UIREC network have benefited from institution and technical support.
- Between 2020 and 2022, 3,147 hours of training were provided for UIRI members (790 men and 161 women).
- 100% of those surveyed have implemented agroecological practices, but survey was not precise enough to extrapolate the type of practices implement
- Monoculture plots have been transformed into agroforestry plots.
- Synthetic inputs have been eliminated and replaced where necessary biofertilisers.
- In San Pedro, improved levels of chemical elements (NPK, carbon, etc.) we recorded in the soil where biofertilisers were used.
- 87% of respondents noted a reduction in pest attacks on cocoa over the patients 2 years.
- Good practices on cocoa trees have resulted in an increase in productive from 300 kilos per hectare produced annually to over 750 kilos toda

	100% of respondents have increased their cocoa product 2019 and 2021 (average increase of 7.2% from 2019 to 2020; 8 to 2021, and 15.8% from 2019 to 2022).
	 Growers' incomes have risen thanks to economic diversification costs
mic	 99% of respondents believe that their expenditure on cocoa cu fallen thanks to the reduction in pests
the	
just	LESSONS LEARNED
the	 The process of transitioning to agroecology and agroforestry has be through communication with the general public and dialogue resource management companies, consumer organisations representatives.
	 Aquality approach is being considered with 200 producers from 5 with the aim of certifying their products as organic via the ECOCE the high cost of such certification is leading UIREC to look for a organic cocoa prior to certification.
	Economic diversification is crucial: 66% of respondents have other income than cocces, mainly rubber, oil nalm, rice and corp. 100% of the second corp.
onal	feel they have earned a better living over the past 2 years.
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Different varieties of Bambara beans and other Neglected and Underutilized Species (NUS).

© Nathalie Tailly, SWISSAID

STORY BY SWISSAID Niger, Chad, Tanzania and India **Consumption of Resilient Orphan Crops & Products for Healthier Diets** (CROPS4HD)





Tanzania

India



Lead organisation and partners

- SWISSAID
- Research Institute of Organic Agriculture (FiBL)
- Alliance for Food Sovereignty in Africa (AFSA)
- World Vegetable Center
- Alliance of Bioversity-CIAT
- GRAIN
- <u>APREBES</u>

Location: India (3 regions), Chad (4 regions), Niger (1 region) and Tanzania (1 region)

Context: The project operates in four very different socio-economic, cultural and agroecological contexts. In Niger and Chad, the interventions take place in a semi-arid area, which is also partially the case in the project region in the south of Tanzania. In all four countries the programme builds on pre-existing agroecological interventions by SWISSAID and works in the setting of smallholder mixed farming systems. In terms of socio-economic context, the situation is quite diverse. While in India, and also to some extent Tanzania, Neglected and Underutilized Species (NUS) products can be promoted as lifestyle products in urban centres, the rural population in Niger and Chad faces regular food insecurity – the promotion and diversification of drought resistant millet varieties or Bambara beans can help to address this pressing challenge. The different contexts require different project angles and the adaptation of agroecological approaches.

Project duration: From 2021 to 2031 (Phase 1: July 2021-June 2025, Phase 2: July 2025-June 2029, Phase 3: July 2029-June 2031)

BudgetandDonors: USD14,871,033 for the 2021-2025 period (CHF12,824,201), funded at 75% by the Swiss Agency for Development and Cooperation (SDC)

Objectives

- Improve food security and nutrition of smallholder farmers, especially women
- Sustainable use and conservation of farmers' varieties/landraces, focusing Neglected and Underutilized Species (NUS)
- Respect agroecological approaches (based on the 10 Elements and 13 princip) of Agroecology, with an added <u>14th principle on gender equity</u>)

Activities

Activities fall under three components: PUSH, PULL and POLICY.

- **1. Activities related to the project's PUSH component**
- Conduct a seed inventory and characterisation of the crop varieties a species, working with seed guardians from the farming community.
- Organise participatory cultivar selection and plant breeding.
- Strengthen Farmer-Managed Seed Systems (FMSS), support establishment of community seed banks, and ensure access to locally adapted high-quality seed for farmers.
- Implement participatory on-farm research to develop locally adapt solutions for food production and increase access to knowledge and innovation
- Strengthen peasants and their networks in promoting access to knowled and innovation through training on NUS and diverse agroecological farm practices, like intercropping, crop rotation, methods for improving soil fertil and so on.
- Link farm production to markets by supporting farm level processing a constant supply.

	2. Activities related to the project's PULL component
en I on	 Raise awareness of and access to information on agrophotopy produced NUS and their nutritional benefits, cultivar selection diets through organizing food and seed fairs, carrying out information in both traditional and social media, and creating communication (for instance, the <u>Cookbook based on Tanzanian NUS</u>, or the <u>introduction video</u>).
	Organise cooking classes to demonstrate the culinary benefits
oles	 Foster market development via the use of Participatory N Approach (PMCA), creating thematic groups with members alo value chain to develop marketable NUS-products.
	 Support the establishment of points of sale for NUS and ag products.
	 Build consumer-producer relations in order to promote heal agroecologically produced food, and to create demand.
	3. Activities related to the project's POLICY component
and	 Collect and disseminate evidence in favour of NUS, agro agroecology and FMSS (e.g. by producing case studies (see <u>h</u> in English, <u>here</u> and <u>here</u> in French).
tha	 Raise awareness on the above topics, as well as on the r and adequate diets among relevant stakeholders, such as policy government officials.
ed,	 Engage in policy spaces, such as the negotiations around the Treaty on Plant Genetic Resources for Food and Agriculture (strengthen farmer's rights within the Treaty and to facilitate the in
ted on	of seed policies on the national level that provide more space for
dge	 Advocate for the integration of NUS, agroecology and agrobi food policies.
lity,	 Facilitate the participation of peasant organisations in policy are through capacity building and reinforcing national networks of fare society organisations.
and	 Strengthen and collaborate with civil society organisations from local to international, through the organisation of and attenda as well as networking with like-minded organisations.



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Featured principles and elements



Biodiversity



Economic diversification



Social values and diets



Participation



Co-creation of knowledge



Land and resource governance





Monitoring and Evaluation Methods

- Four surveys were conducted as baseline (in 2021) and endline (in 2024) in selected representative food system contexts in all four countries.
 - The PULL survey (Consumer Household Survey) captures the status and influence factors of food choices/diet in the consumer household, with a special focus on the role and potential of orphan crops in dietary diversity.
 - The PUSH survey, based on the FAO TAPE tool, captures different agroecological dimensions of NUS production (including self-perception on income increase) as well as including the FIES food security ranking and Minimum Dietary Diversity for Women for measuring livelihood improvements.
 - A third survey targets producers and consumers of seeds (PUSH/PULL), which captures access and availability, amount, type, and characterisation of seeds (farmers' cultivars and NUS) as well as consumer demands related to seeds among the current practices of seed provision (own, exchanged, purchased).

- The baseline and the endline for outcome 3 (POLICY) are captured in a qualitative way based on the policy survey conducted during the planning phase in all four countries.
- Yearly monitoring at output level: Output and activity related data are collected constantly in real time at country-level; they are part of an embedded implementation routine. Implementing partners, SWISSAID, FiBL and AFSA teams are responsible for collecting this data and presenting it in annual reports. For quantitative data, the project refers mainly to the collection via digital tools. For qualitative indicators at output level, specific recording and documentation procedures are defined (e.g. characterization of NUS). Each year, the data is reviewed by the coordination team and sent to donors.
- Agroecology Criteria Tool (ACT Assessment) and levels of transition to assess agroecological transition (early 2023), showing that the agroecological transition interventions of the project are initiated at all 5 levels of the food system framework, from incremental to transitional level, from agroecosystem interventions to food systems interventions. CROPS4HD performs well to very well in all 10 agroecological elements. Thus, CROPS4HD, with its three-fold "PUSH, PULL, POLICY" approach, is a well-designed project that aims to transform food systems through agroecology.
- <u>TAPE</u> Study in Tanzania to assess agroecological transition & interim impacts (late 2023). Link to the final report.

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Outcomes and Lessons Learned

OUTCOMES

- The nutritional profiles of around 20 NUS were analysed.
- Awareness campaigns on NUS/healthy diets were launched in all 4 countri and reached more than 3 million consumers each year.
- 67 new products produced from NUS were developed.
- 31,657 peasants started to apply agroecological practices.
- 26 crops were tested and selected according to farmers' criteria (Participate **Crop Selection**)
- 45 seedbanks were created and/or strengthened to provide NUS seeds farmers.
- Influential government staff became involved in activities promoting FMS agroecology in each CROPS4HD country.
- 63 organisations signed AFSA's proposed legal framework for FMSS acro the African continent, including 17 in CROPS4HD countries.
- National networks of civil society organisations were established for FMSS Tanzania (TABIO), Chad (PEPAF), and Niger (Raya Karkara).
- Since 2023, Tanzania's National Ecological Organic Agriculture Strate (NEAOS) has recognised the importance of FMSS and community seed bar and calls for policy support. However, the 2003 Seed Act still prohibits the sa of farmer managed seeds.
- The project has contributed to strengthening farmers' rights in ITPGRFA. T team members have been nominated as experts to the Ad-Hoc Techni Committee on Sustainable use of PGRFA, which has been convened to prepa a set of voluntary guidelines for conservation and sustainable use of PGRF

	LESSONS LEARNED AND ENABLING CONDITIONS
	 Expanding and sharing knowledge on production, processing methods, as well as the nutritional benefits of NUS, has fostered in farmers and consumers.
	 Highly motivated and organised peasant groups are needed to s lesser-known crops/NUS and implementing agroecological meth
ies,	 Strong social cohesion (social infrastructure) is crucial to esta functioning community seed banks.
	ullet Astrong network of value chain actors is essential to encouraging NL
ory	 Supply and demand must grow hand in hand. A multi-acto complex, but necessary for a holistic agroecological transform systems. Working simultaneously on all three components (F POLICY) is crucial.
s to	 Researchers must be flexible enough to adapt their approard realities.
SS/	 Mobilising existing local actors in the value chain ensures loc NUS markets.
OSS	 Using participatory approaches (PMCA and PVS) and co-creations ensures ownership and sustainability.
S in	LIMITING FACTORS
egy	Adverse legal frameworks in many countries.
nks sale	 Political instability and lack of democratic institutions complicate with policy makers.
	Limited pre-existing private sector actors in very remote areas
「wo ical are ⁼A.	 Substantial time investment required for scientific trials on s capacities for other PUSH activities, and makes synchronisatio with other parts of the project (e.g. PULL) difficult.
	 The first project phase (2021-2025) focuses on NUS. The starting in 2025, will pay more attention to main crops to inc on food security and nutrition.



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AeD-LABs SWISSAID: Experience exchange Ecuador-Colombia. Guangaje, May 2023.

© Courtesy of Daniele Conversa, Farmbetter

STORY BY SWISSAID Ecuador, Colombia, and Nicaragua

The Agroecological Adaptation Laboratories (AeD-LABs) project: **Digitally supported peer to peer** knowledge exchange on climate change adaptation

Nicaragua

Ecuado

Colombia



Lead organisation and partners

- SWISSAID Colombia, Ecuador and Nicaragua
- <u>RENAF-Red Nacional de Agricultura campesina, familiar y comunitaria</u>
- Semillas de Identidad in Colombia
- Unión Nacional de Agricultores y Ganaderos (UNAG)
- Organización para el Desarrollo Económico y Social para el Área Urbana y Rural (ODESAR) in Nicaragua
- Redes de Mujeres in Ecuador
- Farmbetter
- World Overview of Conservation Approaches and Technologies (WOCAT)

Location: Nicaragua, Colombia and Ecuador.

Context: These countries share similar landscapes and face analogous difficulties due to climate change in their ecosystems: Ecuador and Colombia share the Páramo mountain range (moorland) and several forest ecosystems (rainforest) while the dry corridor in Nicaragua shares aspects of its ecosystem with the tropical dry forest in Colombia. The challenges faced in these critical ecosystems are drought, heat, strong winds, and heavy, unpredictable rains, as well as frost at high altitudes. These events affect the local agriculture, food systems and community livelihoods. Some of the aforementioned ecosystems are biodiversity hotspots. All of them provide additional critical ecosystem services such as regulating the hydrological cycle and providing water to the megacities in the plains, creating microclimates, and storing carbon in soil and vegetation. Nonetheless, these ecosystems are threatened by climate change and harmful practices, such as mining and conventional agriculture. Agroecology supports families living in these ecosystems and protects and supports these systems and their services.

Project duration: From September 2022 to 2026.

Budget and Donors: USD 500,000, funded by several family foundations such as the Swiss-based Stiftung Volkart and the Stiftung Dreiklang.

Objectives

- Make farmers' innovations in adapting to climate change visible and accessible to others, and create spaces where they can conduct trials, exchange knowledge and showcase their research results and innovations (Agroecological Adaptation LABs).
- Provide instruments for exchanging innovations among communities who face difficulties in similar ecosystems, including through the Farmbetter mobile extension app and WhatsApp.
- Strengthen farmer-led research to support early-stage innovations through research design, experimentation, relevant capacity-building, and collaboration with other researchers.
- Scale-up innovation by recognising innovations and inventors. Put innovations into practice by collaborating with farmers' organisations, researchers, extension services, policymakers and investors or donors.

Activities

• **Conducting a survey** among 110 participants in the 3 countries in 2023

• Assessing survey results:

- Main climatic issues for agriculture according to survey participants were water scarcity, drought, winds and degraded soils.
- Main solutions identified were planting (agroforestry, reforestation, crop diversification and native species), seed banks to protect native seeds, and water management practices (managing water infiltration, setting up reservoirs, supply, organic composts, etc.).

• Defining innovation as farmers:

- Innovation is the "process of creating a new product, production process," service or management model that solves a specific problem" IICA, 2023.

 Innovation is a newly introduced p
- Innovation is a process, product or

- Innovation is not always intentional – it can arise by chance or be discovered inadvertently. It is verified by research, it addresses climate-related issues, and it sparks processes of dialogue and exchange.

is rediscovered/preserved, or that helps to adapt.

• Outline the process for bringing innovations to maturity. An innovation starts off being implemented by a **niche group**, and SWISSAID then supports farmers through agroecological labs so that they can undertake farmer-led research, trialling the innovation and deciding whether it should be shared further or not. Farmers then **reach out to the community** to encourage them to implement the innovation. During this phase, it is important to get academics and researchers on board and do more joint research elsewhere with other farmers. Once the innovation shows positive, scientifically backed results in clearly described, different contexts, it can be scaled up in other ecosystems with similar problems.

Identifying the first sets of innovations:

- Greenhouses to control temperatures
- Newly discovered crops to enhance soil fertility
- Rescue native seeds via seed banks
- Temperature and rainfall monitoring to help people make better decisions about when and where to plant which crops
- Agroforestry systems to help soil recovery and other ecosystem services
- Nutritional supplements for animals, to strengthen them and have a better production
- **Collaborating** with partners from the outset, including farmer organisations, governmental and extension services, and research organisations.
- Organising in-person workshops to foster farmer-led research.
- Developing didactical material on climate change risks and options for action (leaflets, the application, videos, radio, and so on)
- Co-developing the Farmbetter extension application to suit farmers' needs and enable innovation and knowledge exchanges via Whatsapp. The app has four key functions:



process, product or service.

service from another place, or which

- Communication with the facilitator/extension agent (or a lead farmer) via WhatsApp for those who have a problem to solve
- Upload farmers' innovations into the application to share with others
- Control panel for quality assurance regarding the innovations
- Database and library for those who want to browse WOCAT good practices on sustainable land management and climate change adaptation
- Forum / webpage (coming soon) to facilitate communication with the wider community of researchers, policymakers, and donors or investors.

Featured principles and elements



Co-creation of knowledge



Connectivity

Monitoring and Evaluation Methods

- Quantitative: information on the direct and indirect beneficiaries of a project, as well as the total number of innovations uploaded and downloaded, are retained by the application.
- Qualitative objectives are monitored by extension agents/facilitators through different workshops (e.g. quality and satisfaction with the farmer-led research process).

Outcomes and Lessons Learned

OUTCOMES

- Progress so far: 40 innovations to be uploaded by the end of 2024. Additional innovations have been researched, and are expected to be ready by the end of 2026.
- Farmers are very interested in researching their innovations further and sharing them via app.
- The project invests in creating easily understandable content on the one hand, and improving the digital literacy of communities on the other.
- Partners such as farmers' organisations, NGOs and extension services generally welcome more efficient communication with smallholder families, including on climate change adaptation.
- Longer follow-up time is required to see the long-term effects of innovations on climate change mitigation and adaptation.

LESSONS LEARNED

- A financial mechanism which compensates farmers when an experiment goes wrong helps to maintain farmers' willingness to invest in innovation.
- Identifying innovations and researching them more systematically requires prior co-creation processes within the communities and with research organisations willing to engage in farmer-led research.
- Lead farmers and/or extension agents are key in the set up to making knowledge exchange work. By sharing didactical WOCAT solutions via app and WhatsApp, as well as technical inputs regarding farmers' innovations, they can help farmers work on both innovations and problems efficiently. However, this requires a careful selection of any new members of the lead farmer/extension agents' group and may make scaling slower.
- To ensure its long-term sustainability, the project and app should ultimately be jointly taken over by communities, extensionists and research partners.







LIMITING FACTORS

- Connectivity issues in remote locations complicate the project's outreach via app and WhatsApp. We are currently considering investing in offline technology.
- Financial means are key for the farmers to be able to respond to losses and damage due to climate change and to apply the developed solutions at a larger scale in order to prevent future losses and damages.
- Horizontal co-creation of knowledge processes between researchers/academia and farmer-researchers will help to change the paradigms of conventional research and implement effective participatory action research processes that recognise the local knowledge of communities.



Raising awareness – teaching school children how to identify millet seeds. © Bimla Devi, Champion Farmer and Millet-Fellow, Balh, Mandi (HP)

STORY BY HIMRRA NETWORK India Resilience through biodiverse cropping and millet recipes, driven by a network of Indian women

India



Lead organisation and partners

- HimRRA Network, which is the Himachal Pradesh branch of the national **Revitalising Rainfed Agriculture Network**
- Rural Technical Development Center (RTDC)
- Chinmaya Organization for Rural Development (CORD)
- Watershed Support Services and Activities Network (WASSAN)

Location: Himachal Pradesh state (districts of Kangra, Chamba, Mandi, Hamirpur, Bilaspur, and Kullu), India.

Context: The working region is located in low and medium foothills (500 to 2,200 metres above sea level), featuring a humid subtropical climate. Inhabited largely by marginalised people in a rainfed area, the terraced fields are small in size, each family owning around half a hectare of land. Farmers sow a variety of crops, including vegetables and cereals, largely to meet their domestic requirements. They sow cereals like rice and wheat and have lately added varieties of millet, such as finger millet and foxtail millet. Keen to grow vegetables, farmers also grow pulses and beans, and generally cultivate 10 or more crops, even on small plots of land (like a quarter of a hectare).

Project duration: March 2018 to the present

Budget and Donors: USD 53,000 funded by the <u>Global Fund for Community</u> Foundations (USD 40,000) and the Himachal Pradesh State Government (USD 13,000)

Objectives

- Build a network of organisations/farmers engaged in natural farming
- **Promote natural farming** and strengthen agrarian livelihoods
- **Develop framework for public investments** into rainfed agriculture
- Encourage people's innovations for location-specific solutions
- Provide forums for **capacity-building** and integration
- Effect policy change by working as an interface between civil society and state government (starting with Panchayati Raj Institutions)
- Integrate farmers into collectives, such as Farmer Producer Organizations (FPOs) and Farmer Producer Companies (FPCs)
- Promote ecological farming

Activities

- Organise exchanges and peer-to-peer knowledge through the network of organisations and farmers, fostering co-creation and knowledge-sharing
- Promote natural farming, including recycling and input reduction, enabling lower production costs and a better environment
- Encourage government contributions in rainfed regions where people are working to develop agricultural food systems that are more environmentally friendly, in line with local land and natural resources governance
- Promote ecological farming practices such as line sowing and multi-cropping with varieties of millet, carried out using dung and urine from indigenous cattle and promoting traditional seeds and landraces; encourage farmers to use their local seeds and exchange them amongst each other to result in more yields and better adaptation to the local climate

- Encourage a crop system that is context-specific and adapted to local conditions and knowledge, using synergy between different farming elements
- Help with social and human value systems to build capacity and promote social values and millet-based diets
- Raise awareness among farmers and villagers and advocate for district and state representatives to provide more funding in these areas, in alignment with local land and natural resource governance; meet with policymakers in Shimla (the state capital city) and showcase the participation of farmers/ villagers, training, and activities implemented
- Organise field trainings, e-Learning and school visits to reinforce farmers' production organisations and communities and boost circular economy.

Featured principles and elements





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Monitoring and Evaluation Methods

Local Self-Help Group leaders and Champion Farmers monitor the activities of the project, starting by sowing different kinds of millet and other crops, as well as recording the crops planted, all varieties (including traditional), and the area covered by each farmer in the village.

The Project Coordinator also visits different villages, records the details of their progress, and presents them in weekly meetings held every Saturday to discuss any actions or alternative approaches.

Summarised results are discussed in the weekly RRA_N Meeting every Monday after presenting the weekly updates in Google Sheets. Sharing experiences, observations and any new challenges facing HimRRA and other state groups and theme group experts (Seeds Group, Millet Group, Livestock Group, Water Group) helps pave the way for corrective actions and developing know-how, which can be applied immediately or in the following year.

Outcomes and Lessons Learned

OUTCOMES

FAO's 10 elements on agroecology helped participants understand that there are four key paths to ensure good implementation:

- Responsible governance
- Diversity
- Circular economy
- Co-creation and sharing of knowledge

Moreover, initiating the project by forming a network brought the community closer together in a short amount of time. This helped in co-creation and knowledge-sharing at physical meetings and through media such as WhatsApp.

Women farmers took to Natural Farming more vigorously, as they noticed positive changes in the behaviour of children who were offered naturally grown food. Noticing this, women farmers took more interest and created new recipes, including some based on traditional preparations. These recipe preparations were also sold at organised public events (e.g. at Dharamshala, Palampur, and Karsog in 2023). Participation and involvement of women farmers brought them recognition for developing innovative recipes, while sales at the events also provided financial gains. HimRRA Champion Farmers are now in demand by state government officials to provide training or raise awareness on different types of millet and the importance of local seeds.

ENABLING CONDITIONS

- Networking
- Community-level field work
- Opportunity for women farmers to act as managers
- Gender-balanced organisational team
- Promoting local experts, recognising and appreciating local innovations
- Engaging 'Master Trainers' in natural farming
- Narrative expressions of a comparative study on health parameters in conventionally farmed vs naturally farmed villages/wards
- Technical support from the Revitalising Rainfed Agriculture Network (e.g. Seed Group, Millet Group, Livestock Group, and other state chapters)

LIMITING FACTORS

- Shortage of local (indigenous) breeds of cattle (by number)
- Losses of standing crops due to damages by stray animals (male cattle/monkeys)
- Insufficient rainwater conservation
- Lack of staff needed to have wider coverage and more intense involvement for a multifarious approach to promoting agroecology
- Lack of funds, especially for human resources







STORY BY NEVERENDINGFOOD PERMACULTURE Malawi **NeverEndingFood Permaculture**



Lead organisation and partners

- NeverEndingFood Permaculture (NEF)

Location: Malawi

Context: Kristof and Stacia Nordin, founders of NeverEndingFood Permaculture, were invited to the country by the Government of Malawi to work on HIV-related issues in 1997. At that time about 15% of the adult population were living with virus. Despite the high rate of HIV, communities in Malawi often requested more food and agricultural support than HIV interventions due to widespread denial about the disease and high levels of food insecurity. In the late 90s, about 65% of the population was classified as poor and unable to meet their basic needs, with households affected by HIV facing the most dire conditions. Malawi has a rainy season that lasts 3 to 4 months, during which almost all agricultural production takes place. Most farming focuses on maize, a crop introduced through slave trade and colonialism around 1850, even though there are hundreds of indigenous species that can be harvested year-round. Malawi's agriculture faces challenges due to over-reliance on maize monoculture, poor water management, and degraded soils, all of which lead to <u>nutrient depletion in the soil, inconsistent yields, and</u> food and nutrition insecurity. As a result, the Nordins worked on raising awareness about HIV while taking a holistic approach to boosting immune systems through Permaculture, an approach that designs human systems for sustainable living.

Project duration: The Nordins began implementing Permaculture practices in 1997 through education, research, certification, and teaching based at one of Malawi's main agricultural research stations. In 2003, they established NeverEndingFood, which has been innovating sustainable solutions ever since.

Budget and Donors: USD 20,000 for infrastructure and USD 10,000 for annual running costs. The project is self-funded by the Nordins' salary and through private donations.



Objectives

NeverEndingFood follows the ethics and principles of Permaculture, which align closely with the principles of agroecology. The main difference between the two is that while agroecology focuses primarily on sustainable agricultural practices, Permaculture encompasses a broader approach, designing for all human needs, including sustainable buildings, energy, water, sanitation, medicines, financial systems, and more.

THE THREE ETHICS OF PERMACULTURE ARE:

1. Care for the Earth (Earth Care)

• Earth Care is a holistic approach to protecting the planet by recognising the interconnectedness of all elements in our environment. It focuses on conserving resources, preserving biodiversity, restoring damaged landscapes, and using sustainable practices.

2. Care for people (People Care)

• People Care aims to enhance individual and community wellbeing by recognising the connection between human and ecological health. It fosters strong communities by empowering individuals to attain better nutrition, overall health, and a more sustainable and equitable world.

3. Fair share of resources (Fair Share)

• Fair Share focuses on ensuring that everyone has equitable access to resources by balancing consumption and production. It encourages sharing surplus resources, thoughtful consumption to support sustainability, community cooperation, reduced waste, and social equity through practices like redistributing resources, adopting zero-waste strategies, and supporting fair trade.

Activities

- The activities at NeverEndingFood address all 13 principles and 10 elements of agroecology, though some are emphasised more than others. When the Nordins arrived at what would become NeverEndingFood, they found the soil to be poor and compacted, the plants unhealthy, and only a few trees. Most of the area consisted of empty maize plots and a dried-up, diseased tomato garden. Tree growth had been stunted due to the negative impact of human activities such as clearing, sweeping, and burning. In order to restore soil health through reintroduced organic matter and nutrients, they implemented several key changes and practices.
- In August, their first month, which falls in the middle of the dry season, the Nordins focused primarily on observation and design. Immediate activities included adding organic matter to the soil, harvesting grey water, building a composting toilet, encouraging the community to stop burning plant residues, and collecting seeds and organic matter from local sources, like roadsides and market scraps. Relying heavily on their existing knowledge and experience from implementing and teaching Permaculture at the research station for 6 years, the Nordins concentrated on areas that were relatively easier to heal, making progress within the first month. In more severely degraded areas, they either needed to do significant digging or wait for the rainy season so they covered those areas with organic matter to protect the surface and let nature start to heal itself. They created a map, design, and action plan, prioritising tasks to manage both the work and future harvests effectively.
- In months 2 and 3, they continued with essential earth restoration and seasonal tasks, including preparations to harvest rainwater, as rains would start in around the fourth month. They concentrated on native plants, fungi, and animals, engaged with the local community, watered and harvested from garden beds, and expanded the restored land by creating new pathways and beds while adding organic matter. The design and action plan were regularly updated to track progress and address evolving needs.
- By month four, the rainy season began, lasting about 3-4 months, and the area started to thrive due to the preparations made with organic matter, seeds, and water harvesting. This period involved learning about plant growth, harvesting, preserving excess produce, and returning organic matter to the soil through compost, the composting toilet, worm farms, or mulch.

NDEX

- In the second year, they doubled the amount of land under restoration and production and began implementing most of their plan, including establishing a seed bank, integrated gardens, ponds, forests, and fields with diverse plants, fungi, trees, and small livestock such as chickens, rabbits, and beehives. Students and interns joined to learn and apply new skills, and one intern stayed on to build their management capacity.
- Over the years, the land continued to heal and strengthen. The seed bank grew, allowing more indigenous species to be shared, and harvests increased, reducing the need for purchases and supporting the Fair Share ethic. By year 10, the farm expanded to over 1.2 hectares (3 acres), requiring additional restoration using resources from already restored land. In year 15, NeverEndingFood partnered with African Vision Malawi to build a rammed earth classroom with integrated glass bottles and with the Rainwater Harvesting Association of Malawi to install a new type of rainwater harvesting tank that requires less input. They also expanded the fishponds, and most of the land was fully healed and thriving.
- Over time, challenges have also arisen, including external pressures on natural resources, such as illicit tree cutting, unmanaged free ranging of animals, cultural barriers to sustainable practices and diversified diets, and increased pollution, especially from plastics. Business practices and government policies often exacerbate these issues through misguided approaches and the stigmatisation of indigenous resources. To address these challenges, NeverEndingFood puts significant effort towards policy advocacy, community outreach to promote active involvement in community improvements, and promoting the use of online resources.

Featured principles and elements



Co-creation of knowledge



Synergy



Recycling



Diversity



Input reduction



Social values and diets

Monitoring and Evaluation Methods

NeverEndingFood keeps detailed farm and visitor records but does not have a formal monitoring and evaluation framework. Instead, they rely on continuous observations, team discussions, and adaptable planning to make decisions and adjust their approaches as needed.





Land and resource governance



Economic diversification

Outcomes and Lessons Learned

OUTCOMES

The organisation has earned a credible reputation both locally and internationally, leading to a steady stream of visitors, interns, and students. They receive invitations to speak, advise, and contribute to documents, programmes, and policies. Many of the former interns, training participants, and visitors have remained connected through joining the Permaculture Network in Malawi. Some have secured Permaculture jobs, obtained diplomas and degrees, acquired land for their own projects, and one even became a high-level Minister.

LESSONS LEARNED

Through their practice and sharing of Permaculture, the Nordins learned the importance of:

- Strategic Coordination and Collaboration: Working with diverse people can address many societal problems.
- Persistent Problem-Solving: Facing challenges from different angles and not giving up is crucial for driving positive change.
- Community Engagement: Collaborating with both local and sector-specific communities to make improvements is essential.
- Continuous Innovation: Regularly rethinking, reflecting, and sharing solutions and problems.

Overall, they realised that a Permaculture mindset and lifestyle can address many global issues by applying thoughtful design based on Permaculture ethics and principles. They also noted that the restoration of indigenous species and reduction of fossil fuel plastics need more attention in Permaculture and Agroecology and hope more people will integrate these aspects into their work.





Three women, all members of a cooperative, preparing pomegranates to make molasses.

© Fair Trade Lebanon

STORY BY FAIR TRADE LEBANON Lebanon

Tarik Akhdar (Green Road) – Fair trade and Agroecology: A strong alliance for economic diversification and increased resilience of small producers





Lead organisation and partners

- Fair Trade Lebanon
- Association pour le Droit à l'Initiative Economique (ADIE)
- Solidarité Internationale pour le Développement et l'Investissement (SIDI)
- Al Majmoua
- Fair Trade and Tourism Lebanon

Location: Lebanon

Context:

Agricultural Context: Lebanon is a Mediterranean country with high mountains (up to 3,000 metres). The country does not have a high production of raw materials, but produces rather high-quality products that can be found in delicatessen shops in Lebanon and abroad. One of their key assets is that they produce a great diversity of products: Citrus fruits, tomatoes, cucumbers, olives and olive oil, almonds, grapes and wine, prunes, apricots, peaches, cherries, and apples. They also engage in small-scale breeding and fisheries. Most of the farms and processing units are artisanal, family-based and small-scale. Agriculture is not supported by policymakers, so there is an increasing quantity of abandoned agricultural land. The agricultural market is dominated by synthetic agrochemical importers who offer their products at the beginning of the season and are paid at the end of the season, creating a dependency. Awareness is increasing around organic and fairtrade products, thanks to the certification process and visibility at farmers markets.

Economic and Political Context: Lebanon is faced with multiple crises. Inflation rates have been high since 2019, which encourages some people to come back to rural areas and cultivate the land. There is a lack of government stability (e.g. the country has had no President, elections, or government for 14 months). The banking system is weak, there is a lack of access to lines of credit, and the purchasing power of the Lebanese people is in decline. The current conflict in Gaza also has direct repercussions in the southern part of the country; the use of phosphorus bombs has destructive effects on the environment, plants and soil, thereby affecting local agriculture.

Project duration: From September 2022 to August 2025

Budget and Donors: USD 1,093,153 (equivalent to EUR 1 million), funded by Agence Française pour le Développement (AFD), Foundation ACTES, Région Île-de-France, and Drosos Foundation.

Objectives

- **Overall Objective:** Contribute to the revival of the Lebanese rural and agricultural economy by promoting ecological and social transition and providing financial support to fair trade actors and micro-enterprises
- Specific Objective: Supporting and financing cooperatives and microenterprises that adopt socially and ecologically sustainable operating methods

Activities

- Organise agroecological trainings for informal groups wishing to create a cooperative (e.g. olives, legumes, vegetables, fruits, aromatic herbs, honey, preserves, as well as climate adaptation and mitigation practices), for future micro-entrepreneurs, and for groups of cooperatives and micro-entrepreneurs already established
- Set up pilot local markets, in partnership with small producers and local authorities and support the participation of producers themselves (without intermediary) at local events and farmers markets (which are new and still uncommon) by paying for transport costs
- Set up a partnership between Fair Trade Lebanon and Al Majmoua to offer innovative financing solutions such as micro-credits to increase beneficiaries' activities or launch new ones
- Develop support modules such as financial projections, creation of a cooperative, and business development
- Raise awareness and create an advocacy campaign targeting political decision makers
- Organise two forums on "fair trade as a lever towards ecological and social transition": one at the national level in 2024, and one at the regional level in 2025

Ensure traceability of food products

- Farmers participate in **farmers markets** themselves, ensuring direct links between consumers and producers.
- Getting the WFTO label ensures the traceability of food products.
- **A QR code** was developed to indicate the geographic origin of products.
- A local label specific to Lebanon (i.e. Transparency, Ethics, and Quality **TEQ)** was developed as well.

Featured principles and elements



Fairness



Economic diversification



Connectivity





Participation

Monitoring and Evaluation Methods

In addition to activities carried out directly with farmers and producers, the project includes several studies designed to strengthen the advocacy capacity of the various project stakeholders:

- A mapping of pioneering agro-ecology initiatives in Lebanon
- A study of the obstacles to accessing credit for farmers and agri-food producers
- A study of the resistance to adoption of the cooperative management model by Lebanese entrepreneurs and the alternatives that could lead to the creation of a legal framework for social enterprises

Moreover, an adaptation of the FAO's Tool for Agroecology Performance Evaluation (TAPE) and of the Biovision's Business Agroecology Criteria Tool (B-ACT) to the Lebanese context and processing units is currently being studied to monitor the agroecological performance of the project.

Finally, the project is planning two workshops in 2025, bringing together a wide audience: the first workshop will be an opportunity to announce the establishment of the Agroecology Coalition in Lebanon (ACL) and will have a national impact, while the second aims to bring together the main agroecology players from around the Mediterranean to strengthen mobilisation in favour of ecological transition on a regional scale.

Outcomes and Lessons Learned

OUTCOMES

- The project was able to reach people far from urban areas, vulnerable communities (suffering from the socio-economic crisis), specifically:
- 1,200 people (including 50% women and youth at the beginning of their business activities)
- Training for 600 members of production units
- access to innovative funding for 110 production units (80 micro-enterprises) and 30 informal groups and cooperatives)
- 5,000 people with a new awareness of fair trade and agroecology issues (via universities and the organisation of two forums)

LESSONS LEARNED

- Having qualified people graduating universities with high degrees in agronomy creates potential to develop small-scale enterprises and innovative projects (e.g. mushrooms, red fruits) as well as entrepreneurship.
- Creating a collective dynamic (e.g. AOP) and agreeing on common norms and standards can be difficult.
- The absence of strong national agriculture policies does not incentivise the development of sustainable agriculture, fair trade or agroecology. Large companies are also unable to buy land. Lebanese agriculture is largely based on family farming and the smallholder model, with most of the land owned by smallholders (except in the region of Bekaa).
- Both the increase of price of imported synthetic inputs and a higher demand for organic products triggered the creation of small start-ups to produce local and organic inputs in response to farmers' demand, paving the way to enhance the circular economy and prompting better waste management.



Social Work Institute (SWI) chingard web of agroecology.

© Prabina Shrestha

STORY BY RAISE CONSORTIUM South Asia Child and Youth-Oriented Agroecological Initiatives for Sustainability and Equity in Peasant Communities

Nepal

India



Lead organisation and partners

- Fastenaktion
- DKA Austria
- Commutiny Youth Collective and Farm 2 Food Foundation
- Youth For Action
- International Movement of Catholic Agricultural and Rural Youth (MIJARC) -Asia
- Social Work Institute (SWI)

Location: India and Nepal.

Context: Despite gains in basic food security indicators, **South Asia accounts** for 37.4% of undernourished people globally (FAO 2020), with a predominantly rural population (66% in India and 80% in Nepal, FAOSTAT) and a significant rural-urban poverty gap. While food systems in South Asia are diverse and complex, informal food systems based on local production and informal markets continue to play a key role in marginalised sectors. In India, the Public Distribution System (PDS) does buy key staples from farmers and in turn distributes to the country's poor through the states' distribution systems. Yet, 90% of smallholder farmers, accounting for 86% of all farmers and 47% of arable land (Bisht et al 2020) in India, produce primarily for their own consumption through mixed crop-livestock systems. Moreover, many of the remote areas of India – particularly Northeast and tribal hinterlands – do not have physical access to the PDS system and rely on local produce. While the Green Revolution has consolidated, commercialised and commoditised agriculture and produced a range of disruptive effects, marginalised areas such as the Indian Northwest and the Himalayan region remain untouched by it, holding potential for organic and agroecological farming and bottom-up market linkages based on farmers' own agency to reshape the agricultural narrative. Agroecological transformation is a key strategy to transform smallholder-based food systems towards greater resilience and sustainability while strengthening local economies and to "build back greener and more resilient" (FAO 2021).

Food system transformation in South Asia requires inclusive approaches to marginalised population groups. Half of the women of reproductive age in India are affected by anaemia. The growth of 36% of children under five years old is stunted (FAOSTAT), largely due to poor diets in early age, poor nutrition of women before and during pregnancy, as well as poor sanitation. However, women who are empowered enjoy much greater dietary diversity (Gupta et al 2019). Poor nutrition during childhood greatly affects future life opportunities. This



underscores both the key role of women's and youth empowerment as well as agro-ecological approaches based on the empowerment of smallholder agency in order to break the perpetual cycle of marginalisation in rural communities. Indigenous food systems have long been denigrated and overwritten by the mainstream food industry, although they are now being rediscovered in light of their potential to generate positive externalities and contribute to local resilience and development.

Furthermore, in both Nepal and India, the right to food has high legal status in the constitution. Both countries have also voted in favour of United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP)² and have various normative frameworks in support of smallholders. Nevertheless, smallholders face a range of challenges, first and foremost contradictions between supportive programmes and programmes and policies supporting primarily the Green Revolution and industrial approaches. There are also great regional differences and geographical differences, such as differing state-level policies in India.

Project duration: From 2022 to 2025 (Phase 1)

Budget and Donors: Budget for South Asia is USD 646 435 (CHF 550 000), co-funded by the Swiss Agency for Development and Cooperation (SDC) under their Programme on Human Rights in Food Systems and individual contributions by the different consortium partners

Objectives

General Objectives:

- Ensure that peasants know their rights and are empowered to claim them
- Ensure that duty bearers are aware of peasants' rights in order to bring forward their implementation
- Contribute to strengthening global frameworks on peasants' rights through influencing United Nations mechanisms
- Create global awareness among potential alliance partners to further advance the rights of pesants.

Strategic Objectives:

- Promote the rights of the people to produce, distribute and consume food, and reinforce food sovereignty
- Strengthen climate resilient communities and farms
- Build the capacities of staff, partners, and communities on conceptual clarity around ecology, agroecology, and related practices
- Build networks and alliances, understanding that these are a critical source of power

Overall Goal in South Asia:

• Children and youth from rural communities actively participate in agroecological transformation.

The promotion of agroecology as a key approach to sustaining food systems is the technical focus of the project. In this time of climate and food crises, agroecology offers viable solutions through nature-based options for food production – thereby minimising the risks in the production system, allowing for the combination of nutritious food with the use of natural processes (less carbon footprint) in production, while enhancing ecosystem services. The focus is put on raising awareness and strengthening the capacities of children and youth in forging a relationship between agroecology and the realisation of peasants' aspirations throughout the entire food system.

This project contributes to the following SDGs: 1, 2, 3, 4, 5, 8, 10, 12, 13, 15, 16, 17.

Activities

Focus on South-Asia (April 2022 – end 2023)

- Adapt, contextualise, and translate the <u>"Sambidhan Live, Be a Jagrik"</u> toolkit to raise constitutional awareness:
 - Role playing activities and small tasks performed by children
 - Fundamental rights (31 Fundamental rights, including land rights, food sovereignty and security, etc.)



- 4 fundamental duties
- United Nations Convention on the Rights of the Child (UNCRC)
- United Nations Declaration on the Rights of Peasants (UNDROP)
- Establishment of community-based child clubs: 17 clubs, 328 children
- Co-create an Agroecology Toolkit, using participatory tools (under development) that integrate the HLPE's 13 Principles of Agroecology:
 - Understanding local food systems
 - Understanding local agriculture practices
 - Existing/traditional technologies related to agriculture and food
 - Dietary intake
 - Supply chain
 - 15 youth groups/258 youths directly involved
- Discussions about agroecology among young people
- Organise Youth Conferences on Agroecology (Jamshedpur, India):
 - Youth Conference in India held from 1–4 November 2023 to allow youth from Nepal and India to share problems and issues related to farming, form common goals, exchange knowledge, and create a movement
 - National Youth Conference in Nepal held from 28–30 December 2023 to create a common understanding and vision on Agroecology among the youth, foster the exchange of knowledge among young people, and promote agroecology in Nepal.
- Create a **Youth Network on Agroecology** amongst South Asian partners
- Undertake Networking and Advocacy work for a Special Procedure on UNDROP (Consortium Level)
- Elaborate the Kailali Memorandum to the Kailali Municipality (Dialogue) with Local Authorities): Children discussed the agriculture practices in the village, and decided to have a meeting with municipality members to hand over the memorandum. Children request Municipality support to promote organic agriculture and local food production and to discourage the use of chemical fertilisers and pesticides.
- Undertake comparative research and discussions on UNDROP, including a comparative study on the implementation of UNDROP and a national legal framework in Nepal

• Organise trail farms run by young farmers on which local seeds, organic fertilisers, insect repellents, mixed cropping are used; implement a local seed **exchange programme** (Assam, Telangana, Karnataka, Nepal)

Featured principles and elements



of knowledge

Participation



Land and resource governance

Monitoring and Evaluation Methods

The M&E system is integrated into the overall RAISE Consortium.

- On the level of the Consortium, there is a **mix of 39 qualitative and quantitative** (cumulative and incremental) indicators across different outcomes and outputs, a selection of which the different partner organisations committed to at the beginning of the project phase. There are three qualitative global indicators, the other indicators are specific to the different outcomes and outputs of RAISE.
- Target values are monitored during semi-annual reporting periods and updated in a Yearly Plan of Operation.
- One challenge with the M&E system is the diversity of partners and perspectives, with sometimes slightly different practical interpretations of indicators.
- One advantage is having a homogenised and detailed system of indicators across the entire network.





Outcomes and Lessons Learned

OUTCOMES

- National policy frameworks on food systems and their implementation are reviewed with the participation of agricultural labourers.
- The plans of communities of agricultural labourers are developed and implemented by stakeholders in local communities.
- The awareness and capacities of agricultural labourers regarding agroecology policy are enhanced.
- Stakeholders are addressed via documents and events focusing on children's and youth perspectives on agroecology-based food systems.
- In the South Asia unit two joint products were produced for an international audience:
 - The facilitator's guidebook "We, the Changemakers"
 - Contributions to the scope of the CFS HLPE report on **Building Resilient Food** Systems. The consultation consisted of a questionnaire with five open-ended questions on resilience and provided good insight into how youth and young farmers look at the challenges around resilient food systems. It is quite clear from this that young people know the situation of their own communities well and have a keen eye for potential solutions and (policy) needs.

LESSONS LEARNED

• Awareness and capacity-building work with children and youth required more resources than expected. The process to make children and youth aware of and empowered to act on agroecological principles in a focused way takes time. The consortium planned the project during the years of the COVID-19 pandemic, with a reliance on **joint online processes** across different geographical, linguistic, and cultural zones. While they started with a joint online capacity-building and awareness process (i.e. the Jagrik), they soon realised that they needed to revert to a decentralised, locally driven, physical process to build trust on local perspectives before more intensively connecting the different groups across different languages, cultures and geographic locations.

While this added diversity to an already complex setup, participants are now starting to see the benefits of young people becoming active in their local communities as well as on a regional level. In September 2024 we will have a joint Youth Conference with young people from all South Asian partners, which will set the stage for the further development of a joint South Asian youth network on agroecology and the concerns of agricultural labourers.

- "Network of networks" approach: Effective (administrative) coordination, (physical) workshops and personal meetings build common perspectives and ownership.
 - Diversity (culture, organisation, language): Translation and inspiring moments are needed for cooperation, motivation, and solidarity.
 - Child and youth-led processes: Social preparation, empowerment, and capacity building are important. Young participants learned to explain the 13 principles of agroecology, and trainings on agriculture, agroecology and food systems enabled peer learning among them.
 - Various local languages: Decentralising the bottom-up approach.
 - Shrinking space: Being mindful of (advocacy) language, building on "positive advocacy", and respected concepts (e.g. natural farming and agroecology).
 - Need for relevant consortium-level impact data versus local diversity of approaches: It is best to keep things meaningful and simple. While it is useful to have detailed aggregated data on the consortium level, the consortium recognises that simplification will be needed in the next phase to give justice to the local diversity of approaches and perspectives within RAISE. For example, different international RAISE partners holistically connect capacity and awareness-building work on agroecology and agricultural labourer rights with advocacy campaigns in quite different ways. In turn, when indicators are then aggregated, a certain activity may touch upon three different sets of indicators for one partner and a different set of indicators for another. Partners also included certain holistic activities under different budget lines, depending on small differences in what they assume to be at the core of each activity (e.g. capacity building, awareness, action research, or advocacy). It is quite challenging to develop a coherent, universal but also adequately simple monitoring system within a diverse global consortium.



Agroecology training organized during the AE4EU project by ECVC. © ECVC, AE4EU

STORY BY ISARA AND PARTNERS Europe Agroecology For Europe (AE4EU)



Byelorussia

Russia

Ukraine



Lead organisation and partners

The <u>AE4EU Consortium</u> is composed of the following.

- ISARA
- University of Gastronomic Sciences UNISG
- <u>Agroecology Europe</u>
- Thünen-Institute
- <u>Coventry University</u>
- <u>Wageningen University and Research</u>
- <u>Hellenic Agricultural Organisation ELGO DIMITRA</u>
- <u>The European Coordination Via Campesina</u>
- The Consiglio per la Ricerca e l'Analisi dell'Economia Agraria
- The University of Santiago de Compostela
- Eco Ruralis
- <u>The Swedish University of Agricultural Sciences</u>

Location: European countries.

Project duration: From January 2021 to December 2023

Budget and Donors: USD 2,2 million (EUR 2 million) funded under the European Union's Horizon 2020 research and innovation programme





Objectives

- Improve connections between relevant actors: Understanding, mapping, and identifying the state of the art of agroecology in European countries, as well as the various actors involved, is an indispensable task. The final goal is to establish a European Agroecology Exchange Network.
- Develop skills and methods for creating research infrastructure and living labs: Living Labs are user-centred, open innovation ecosystems based on a participatory co-creation approach, including and integrating the user as well as actors from various backgrounds into real-life communities and settings. The establishment of living labs, research infrastructure, and agroecologyterritories is key for enabling a successful transition to agroecology.
- Analyse and prepare funders for increased and complementary funding of agroecology: AE4EU will identify potential adaptations for long-term funding schemes to support the enhanced cooperation and coordination of public and private, national or European funders and to develop recommendations for enlarged and complementary funding. Implemented elements of agroecology in public and private, national or European funding schemes and how well they function will be analysed.
- Improve human and social capital: A European Agroecology Exchange Network Hub that will include a diversity of stakeholders (such as farmers, up and down-stream businesses, researchers, consumers, and citizens) will be set up in order to facilitate knowledge exchange within the Europe-wide agroecology network. Pathways of co-development and co-learning must be identified for strengthened agroecological research and innovation.
- Improve capacity to tailor policy interventions to specific situations: AE4EU will identify and analyse policy frameworks that include elements of agroecology. Recommendations for future policies that support and promote the development of agroecology in Europe will be provided, in particular considering the context and aims of the Eco-schemes and the recently approved European Green Deal, Farm to Fork strategy, and the CAP.
- Support the development of a European partnership in agroecology: AE4EU will develop a roadmap and framework for a European network that includes living labs for agroecology, research infrastructure, and other relevant

actors to build a European partnership. The overall goal is to accelerate the transition towards sustainable farming and food systems practices by promoting networking, connectivity, and place-based innovation in a co-creative environment.

Activities

- Map current, existing agroecology initiatives, research cooperation, and **policies** to get an updated picture on national and local initiatives in agroecology, national and regional policies, and research development in Europe. See: Mapping the development of agroecology in Europe - Volume 1, 2023, and Volume 2, 2024, and this publication on Germany/Austria. The project team also worked on <u>a mapping</u> of projects, programmes and institutions involved in agroecological research in Europe at different levels.
- Set up and facilitate three living labs in three countries (NL, UK, IT) to develop context-based and site-specific solutions to the central question "Which mechanisms will strengthen the agroecological research and innovation ecosystems in Europe?". To create the living labs, three workshops were organised in each country. See: Information about Living Labs.
- Empirically analyse the Living Labs and other Research Infrastructures and assess how to enhance their human, social, agronomic, and ecological dimensions. This will form the basis for the provision of skills and methods necessary for the development of Living Labs and Research Infrastructure in Europe. See <u>Report</u> and <u>Toolbox</u>.
- Assess existing public and private funding schemes across Europe via **both a top-down** (assessment of funded research projects and calls as well as Common Agricultural Policy Payments) and a bottom-up approach (survey and interview farmers to understand how funding is currently delivered at the ground level, which mechanisms work and which could be improved, where the gaps and barriers are, and where there are good examples that might benefit farmers in other European countries. See: <u>Report</u> on public and private funding for agroecology.
- Compare the data on funding and use it as a basis to co-design future funding schemes. See the <u>publication</u> linked here.



- Analyse and assess national and European policy frameworks that include elements of agroecology. See <u>Roadmap and EU Agroecology Strategy</u>.
- **Provide recommendations** (via policy briefs) to enhance the integration and coordination of sustainable agriculture and food systems based on agroecology in the development of future policies. See 8 policy briefs.
- Develop training quidelines related to agroecology.
- Communicate about the project's activities and outcomes via videos, events, <u>newsletters</u>, <u>press releases</u>, and publications/deliverables on <u>zenodo</u>.

Featured principles and elements



Co-creation of knowledge



Participation



Land and resource governance

Monitoring and Evaluation Methods

No specific monitoring was established but start and end evaluations with living lab stakeholders were conducted via interviews. Many stakeholders underlined that they profited and learned from others in the living labs or workshops, as well as during the Agroecology Europe Forum in Hungary.

Instead of monitoring, a mapping of agroecology initiatives in European countries was conducted, documenting the development of agroecology with concrete examples in a large number of countries regarding movement, practices, science, education and training, and living labs.

Outcomes and Lessons Learned

OUTCOMES

- 8 policy briefs were drafted and published.
- 60 people (including food producers, citizens, researchers, policymakers, chefs, and NGO representatives) joined each Living Lab and online spaces were created to foster exchange.
- Workshops, growing trials, and on-farms visits were organised by the Living Labs.
- One local market was created in Italy.
- Assessment of private funding opportunities in Europe showed that an increasing number of foundations (both those who have been active in the field for a long time and those who entered the field more recently) **support** activities that benefit agroecology in their own way.
- Assessment of public funding in Europe showed that over the years 2014-2020, 95 out of 224 projects were classified under agroecology in CORDIS (a database of all the EU-supported Research and Development activities). One policy brief was published on the topic.
- Workshops bringing together funders were organised in 2022 and 2023 to identify how public and private funding might work together to bring about an agroecological transition.
- A better understanding was attained on how policies already promote the adoption of agroecological principles for the Post-2020 Common Agricultural Policy (CAP).
- 33 European countries were mapped for agroecology initiatives, cases, programmes, and development.
- Representatives from living labs and agroecology initiatives were brought together at the Agroecology Europe Forum in Hungary to exchange practices, experiences, and knowledge.



ENABLING CONDITIONS

- Engage with institutions such as the city councils and metropolitan regions
 - Bring together a diverse range of food actors and citizens
 - Collaborate with research institutes and universities
- Bring together new actors in living labs
- Engage and interact with policy makers in Brussels or national governments

LIMITING FACTORS

- Time constraints of busy people
- Uncertainty of funding and its longevity, especially after the end of the project, but the Agroecology Knowledge Hub was taken over by Agroecology Europe after the project end for continuation
- Atomised or small-scale organisation lacking collaboration and coordination
- Conflicting priorities
- Difficulty involving farmers in regular meetings



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Conclusion

- The ten stories featured in this publication illustrate how local food system actors are constantly innovating to determine what works best, given their environment and sociocultural contexts. Putting local context at the centre and working closely with all local stakeholders and communities is key to having successful projects that contribute to the development of local and circular economies that sustain livelihoods.
- We have also seen the importance of local agroecology champions, communications campaigns and fairs to increase the visibility of agroecology among policymakers and consumers, as well as to boost the demand for local agroecology-produced food.
- By working in tune with nature and constantly innovating, these ten case studies illustrate the many benefits of agroecology on the environment, soil health and fertility, on-farm biodiversity, and animal health, while effectively combining scientific knowledge with that of farmers, as well as local and indigenous knowledge, through participatory approaches. Likewise, revitalising knowledge of indigenous crops, farmers' seeds, ancestral diets, and culinary recipes makes it possible to bring the local community closer together and food provisioners closer to consumers.
- In light of this, the present publication aims to underscore the relevance of promoting agroecology as a holistic and transformative approach towards creating and maintaining resilient, equitable, and healthy food systems in the years to come.

Annex

- The Italian Agency for Development Cooperation (AICS) was established in 2014 and started to operate in January 2016, with the aim of aligning Italy with its principal European and global partners in the endeavour of development. Based in Rome, AICS runs another base in Florence and has 20 field offices worldwide for assessing local needs, implementing development initiatives, monitoring results, and building partnerships on the ground. The Agency's mission is to "perform technical and operational activities associated with the examination, development, financing, management and control of the cooperation initiatives. Its food security and rural development office is currently implementing around 120 initiatives, 60% of which are focused on rural development and 40% on food security. Transversal initiatives related to topics such as youth, gender, climate, agroecology, and community resilience to climate change are also key in their programmes. The project is operated by the **AICS field office in** Maputo (Mozambique).
- WeWorld-GVC is the implementing civil society organisation. This Italy-based CSO was created in 2018 after the merger of two organisations (WeWorld Onlus and Gruppo di Volontariato Civile (GVC)). Their work is focused on children, women and marginalised communities, with a mission of guaranteeing a decent livelihood in a fair and inclusive world. They run humanitarian and economic programmes in Italy, as well as in other countries in Africa, the Caribbean and Latin America, South-East Asia and the Middle East.
- AVSI is an Italy-based NGO created in 1972 that implements development and humanitarian programmes in 40 countries (Africa, Caribbean and Latin America, South-East Asia and Middle East) including Italy. It focuses on various areas including agriculture, energy, education, urban development and health.
- Associação para Desenvolvimento Sustentável (ABIODES) is a Mozambique-based NGO created in 1999 which aims to stimulate sustainable and inclusive development through agriculture and the rational use of natural resources. They have three workstreams: Agriculture and Food Security, Environment and Natural Resources, and Lobbying and Advocacy.
- Associação para a Defesa e Desenvolvimento da Sociedade (ADDESSO) is a Mozambiquebased NGO working in the areas of education, environment, economic empowerment, health and citizenship.
- Himalaya Agroecology Research and Development (HARD) is a company founded in 2022 by a dedicated team of ecological, social and agricultural educators, practitioners and entrepreneurs to bring the principles of ecology back to life in the area's communities and landscapes. Alisha Magar founded HARD as she wants to expand on her experience in rural community development. With a vision of empowered women leading development across eastern Nepal, she connects this region's rich food culture with agroecology and women's entrepreneurship. HARD has five main programs: research, biofertiliser development, womenled microenterprises, education, and raising awareness (see video).

- <u>Almost Heaven Farms</u> is a permaculture research and development social enterprise based in eastern Nepal. It is led by Zachary Barton, who researches, demonstrates and trains local farmers and international visitors in permaculture design, soil health and ecological restoration (see video).
- The Union Inter-Régionale des Sociétés Coopératives (UIREC) is a farmers' organisation comprising 25 cooperatives involved mainly in cocoa production. UIREC has been practising agroforestry and agroecology for several years. The organisation strengthens the economic and financial capacities of its members, and also offers training in good farming practices. UIREC is a member of the Alliance for Agroecology in West Africa.
- The French Farmers and International Development (AFDI) is an international solidarity association that supports family farmers in their efforts to make a decent living from their work and seeks to ensure a stable future for the next generation of farmers, both on their own farms and within farmers' organisations.
- The Institut National Polytechnique Houphouët Boigny de Yamoussoukro (INPHB) is a public institution for higher education, research and production, comprising 9 schools and located in Yamoussoukro, Côte d'Ivoire.
- The Société coopérative de la zone des Savanes à Bouaflé (SCZSB) is a cooperative of corn producers.
- SWISSAID is CROPS4HD's consortium leader. SWISSAID is an NGO headquartered in Switzerland that has been promoting a food system transition and fighting hunger through agroecology in nine project countries (India, Myanmar, Tanzania, Chad, Niger, Guinea-Bissau, Colombia, Nicaragua and Ecuador). SWISSAID is part of the Alliance for Sustainable Food Systems and Empowered Communities (Sufosec), reaching 43 countries overall.
- The **Research Institute of Organic Agriculture (FiBL)** is one of the world's leading institutes in the field of organic agriculture. FiBL's strengths lie in its interdisciplinary and participatory research, and in developing innovations jointly with farmers and other food system actors.
- The Alliance for Food Sovereignty in Africa (AFSA) is a broad alliance of different African civil society actors that are part of the struggle for food sovereignty and agroecology in Africa.
- CROPS4HD works with a number of partners including the World Vegetable Center, the Alliance of Bioversity-CIAT and national agricultural research institutes, as well as GRAIN and APREBES.
- The project led by SWISSAID Colombia, SWISSAID Ecuador and SWISSAID Nicaragua has several local partners, including **RENAF-Red Nacional de Agricultura campesina, familiar** y comunitaria, Semillas de Identidad in Colombia, the Unión Nacional de Agricultores y Ganaderos (UNAG), the Organización para el Desarrollo Económico y Social para el Área Urbana y Rural (ODESAR) in Nicaragua, and the Redes de Mujeres in Ecuador. Main international partners are **Farmbetter** - a private sector ICT solutions actor – and **the World Overview of Conservation Approaches and Technologies (WOCAT)**.
- HimRRA Network, which is the Himachal Pradesh branch of the national Revitalising Rainfed Agriculture Network, a collection of civil society organisations, researchers, and practitioners with the vision to establish productive and resilient rainfed agriculture in India.

- The **Rural Technical Development Center** (**RTDC**) is a voluntary action group established in 1988, operating in the Kangra District of Himachal Pradesh. RTDC has been promoting equitybased, mountain-specific and people-centred development with a focus on sustainability and inclusiveness. RTDC works with marginalised groups around three themes: 1) natural resource management, 2) economics and sustainable livelihoods, and 3) local self-governance.
- The Chinmaya Organization for Rural Development (CORD) is a movement that currently encompasses a wide range of spiritual, educational, and charitable activities, empowering thousands in India and beyond.
- The Watershed Support Services and Activities Network (WASSAN) works with communities, civil society, research and government institutions in rainfed areas to bring about prosperity and ecological security. They focus on smallholdings, farm workers, women and tribal communities.
- NeverEndingFood Permaculture (NEF) is a community-based initiative in Chitedze, Malawi, founded by Stacia, Kristof, and Khalidwe Nordin. The site, roughly the same size as an average smallholder farm in Malawi, makes NEF's demonstrations practical and relatable for local farmers. NEF has reached thousands of people through community outreach, regular visitors, an internship programme, and a «model village» where several local families demonstrate lowinput, high-impact ecological technologies for sustainable living. The NEF site includes three homes, a classroom, a seed bank, and integrated gardens, ponds, forests, and fields teeming with a diverse array of plants, fungi, trees, small livestock, and beehives. The organisation organically raises and shares hundreds of species, primarily indigenous, for various purposes, including food, fuel, fertility, fencing, fodder, and medicine.
- Fair Trade Lebanon is a local NGO created in 2006. The NGO started with cooperatives of women in charge of food processing scattered all over Lebanon, based on the observation that Lebanese women in rural communities have strong but underemployed skills and potential.
- Association pour le Droit à l'Initiative Economique (ADIE) is a French micro-credit agency created 30 years ago.
- Solidarité Internationale pour le Développement et l'Investissement (SIDI) is a French micro-credit agency created in 1983. As rural development and family farming is one of their priorities, the organisation also supports farmers' organisations (such as cooperatives) and agri-SMEs.
- Al Majmoua is a Lebanese micro-credit agency with a mission to promote sustainable development by improving the economic and social conditions of low-income individuals, especially micro-entrepreneurs and women, through the provision of financial and non-financial services, all over Lebanon.
- Fair Trade and Tourism Lebanon also known as Terroirs du Liban, is a socially engaged gourmet food brand offering authentic Lebanese specialties, developed by Fair Trade Lebanon. They belong to the global community of Fair Trade Enterprises (WFTO) that fully practise Fair Trade principles.
- Fastenaktion is an NGO based in Switzerland, established in 1961. It is committed to disadvantaged people in the global south, working towards a fairer world and overcoming hunger.

The group relies on local knowledge and the development of effective approaches to dialogue with our partner organisations. In the spirit of helping people help themselves, Fastenaktion supports communities in organising themselves and demanding basic rights. Working with partner organisations in 14 countries in Africa, Asia, Latin America and with organisations in Switzerland, the NGO leads the RAISE consortium (Rights-based and Agroecological Initiatives for Sustainability and Equity in Peasant Communities) under an SDC co-funded project on human rights in food systems.

- **DKA Austria** is the development agency of the Catholic Children's Movement in Austria and campaigs for a decent life for all, free from exploitation and poverty. DKA has been supporting people in Africa, Asia, Latin America and Oceania for almost 60 years. Since 1953, over 400 million euros have been collected and some 500 projects are supported annually.
- The **<u>Commutiny Youth Collective</u>** is building vibrant ecosystems and empowering spaces to nurture the leadership potential of young people in transforming themselves and their society. It cooperates with the **Farm 2 Food Foundation** based in Northeast India, which provides training and tools to enable local communities to take control of their own production and development processes to build a productive, change-oriented and self-reliant society.
- Youth For Action strives to promote many community-led opportunities, promoting gender equality, governance, social justice and socio-economic development for women, women farmers, and their families. YFA operates the KVK in Mahabubnagar.
- The International Movement of Catholic Agricultural and Rural Youth (MIJARC) Asia MIJARC is the international network for rural and Christian youth, represented within RAISE through its Asia chapter.
- The Social Work Institute (SWI) was established in 1987 to promote young leaders and social workers in Nepal. Their core areas include training, integrated community development and network, and advocacy. Their vision is a just and inclusive society in Nepal. In 2022, they discussed and formulated a Strategy on Agroecology with the aim to build on existing and emerging alternative agricultural practices to strengthen agroecology.

The <u>AE4EU Consortium</u> is composed of the following:

- **ISARA**, a French engineering school for agricultural, food, and environmental sciences, offers professional engineering programmes (MSc degree), master programmes, professional learning, and carries out research and extension. ISARA also coordinates the consortium.
- University of Gastronomic Sciences UNISG, based in Italy, is a university specialised in the study, research, transmission, and innovative processing of knowledge in the field of Gastronomic Sciences.
- Agroecology Europe is a Belgium-based international non-profit organisation that aims to analyse, design, develop, and promote the transition towards agroecology-based farming and food systems in Europe and throughout the world.
- Thünen-Institute is a German federal research agency that supports evidence-based agricultural policy. It is active on a broad range of topics that extend to the fields of agriculture, forestry, and fisheries.

- **Coventry University** is a University based in central England, United Kingdom. Its Centre for Agroecology, Water and Resilience is driving transdisciplinary research on the understanding and development of resilient food and water systems internationally.
- Wageningen University and Research is one of Europe's leading research institutions in the domains of Agri, Food and Life Sciences. It is based in the Netherlands.
- Hellenic Agricultural Organisation ELGO DIMITRA is the National Agricultural Research Organisation of Greece, whose mission is to design and implement research, demonstration, and pilot projects with regard to staple Mediterranean crops.
- The European Coordination Via Campesina, based in Belgium, is a European grassroots organisation that currently unites 31 national and regional farmers, farm workers, and rural organisations based in 20 European countries.
- The Consiglio per la Ricerca e l'Analisi dell'Economia Agraria is a national research body operating under the supervision of the Italian Ministry of Agriculture, in the field of research in agriculture, agro-industry, food, fisheries, and forestry.
- The University of Santiago de Compostela, based in Spain, boasts a Crop Production and Engineering Project Department with a staff of 27 and an Agroforestry Research Group, one of eight such research groups.
- Eco Ruralis is a national association of agricultural workers and small-scale agro-ecological food producers from Romania.
- The Swedish University of Agricultural Sciences develops the understanding and sustainable use and management of biological natural resources.

END NOTES

1. Wezel, A., Bellon, S., Doré, T., Francis, C., Vallod, D., David, C. (2009). Agroecology as a science, a movement or a practice. A review. Agronomy for Sustainable Development 29: 503-515.

2. UNDROP was adopted by the Human Rights Council on 28 September 2018. The adoption of the Declaration represented the culmination of a lengthy process that had started 20 years earlier. Although the Declaration may now be regarded as a "United Nations" declaration, after having been endorsed by the United Nations, it remains first and foremost a peasants' bill of rights: it was not States that launched the process, but peasants themselves, with the support of their representative organizations. Furthermore, it was not States that shaped its content, but peasants, on the basis of their knowledge and first-hand experience of the discrimination, oppression and social exclusion to which they have been subjected since agriculture started to develop

Agroecology Coalition

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