INCREASING HOUSEHOLD DIETARY DIVERSITY AND IMPROVING RESILIENCE TO SHOCKS AND STRESSES THROUGH AGROECOLOGY

SUMMARY
Stigma and misconceptions about wild and traditional foods (e.g. they are ‘poor man’s food’, unscientific, not scalable and incompatible with markets) contribute to unjust food systems and compound food insecurity across Trócaire programme countries. Trócaire promotes agroecology, including the restoration and protection of wild natural sources of foods and medicines, because it can avoid, reverse and challenge the damaging impacts of industrial agriculture without sacrificing productivity or profitability. Our programme results and research show that through agroecology, farmers have increased household dietary diversity and improved resilience to shocks and stresses, including during COVID-19 and food crises.

BACKGROUND
Petelina Abuo is a model farmer working with Trócaire partner Church of Uganda Teso Diocese Planning and Development Office (TEDDO) to recover wild and traditional species and foods in Kalaki, in Eastern Uganda. Due to environmental degradation, exacerbated by the impact of climate change on weather patterns, cyclical droughts and flooding have increased in frequency. Uganda is one of the 30 least developed countries in the world, with one-fifth of the population living in poverty and an estimated 29% of children malnourished.

Colonisation and globalisation have led to the perception that wild and traditional foods are less valuable compared to monoculture foods or processed and packaged consumer foods.

“Those days when a child got an eye disease, they would simply take you to the bush and give you a medicine called Ekarakiru. You would swallow 10 seeds and you would never get the same problem in 10 years.”

Petelina Abuo, Model Farmer, Kalaki District, Uganda
This has resulted in the loss of ancestral knowledge held by women like Petelina about the nutritional benefits of wild and traditional foods, the practices of harvesting and preparing wild foods for consumption and the use of certain plants for preventative and curative medicine.

**THE CHALLENGE**

Large-scale, intensive agriculture undermines biodiversity and the ecological conditions for agriculture and destroys the social fabric of farming communities and economies based on mutual support (solidarity economies). Through focusing on only a few market-oriented crops which require chemical inputs, industrial agriculture often leads to indebtedness, increased food insecurity and vulnerability to shocks and stresses, loss of ancestral knowledge, disregard for the many values of the wild and traditional species and the rejection of a holistic feminist approach to food systems. Unsustainable land management practices such as felling trees for firewood or making charcoal are also damaging the environment and preventing communities from unlocking the multiple benefits of wild plants and species.

**OVERCOMING THE CHALLENGE**

Petelina’s community is one of 39 communities in Kalaki District, Uganda supported by Trócaire partners to map and profile locally available wild and traditional food sources and their values and uses. This has included the Shea nut tree (Vitellaria paradoxa). The seed can be pressed for oil and shea butter production, a valuable input to the cosmetics industry. The bark extract has medicinal value while the branches can be used for timber. Trócaire partner Participatory Ecological Land Use Management (PELUM) network helped establish four community seed banks, creating depositories for 106 species. Many farmers have since established household level seed banks. The seed banks provide access to diverse, adapted and good quality seed, improving community and household resilience to external shocks provoked by climate change, the COVID-19 pandemic and market fluctuations. Trócaire has also registered improved dietary diversity, with 100% of participating female headed households (FHHs) and 74.9% of male headed households (MHHs) consuming at least one wild food every month in 2021. National, regional and district level wild/traditional food fairs have enabled over 600 farmers and farmer organisations to exhibit and exchange diverse varieties of traditional foods and seed across regions, sell their products and learn about the uses and values of different wild and traditional foods as well as agroecological practices. Trócaire and partners have successfully advocated for a supportive policy environment including the development of the National Agroecology Strategy to scale up agroecology in Uganda and the Plant Genetic Resource For Food and Agriculture Policy to ensure the protection of all genetic resources including plants, animals, fish, insects and microbials.

**GOOD PRACTICE**

- **Apply Agroecology Principles:** Trócaire’s programmes start with a participatory resource analysis process. In Uganda, communities mapped the resources and opportunities available to them and identified the most effective mix of activities for a better, more sustainable life. Farm and village landscapes are analysed under FAO’s ten elements of agroecology: Diversity, Efficiency, Synergies, Resilience, Recycling, Co-creation and Sharing of Knowledge, Human and Social Values (including gender equity), Culture and Food Traditions, Responsible Governance and Circular and Solidarity Economy.

- **Five Phases of Agroecological Transitions:** Transitions to agroecology are seen as a continuum rather than smooth linear processes. Experimentation and learning are facilitated and stresses and shocks commonly interrupt transition processes. Smallholders and communities are supported through
the five stages of agroecological transition (see above diagram) and may choose to begin at any phase. For example, in Uganda communities engaged in advocacy with government actors through seminars and exposure visits (Phase 5), showcasing the benefits of seed banks and their work to restore wild and traditional foods (Phase 1).

- **Restore and protect soil fertility:** Trócaire believes the replenishment of depleted soils is a priority investment for sustainably nourishing people. Our partners do this in affordable, sustainable ways and use natural, locally available resources for soil fertility and biological control. For example, tiered/storied planting systems are used in Uganda to mimic natural woodlands and forests. They use different plant heights and shapes to capture light for photosynthesis. Plants that reach different soil depths, and with various types of rooting, capture soil nutrients and feed them back by dropping their leaves.

- **Co-creation and sharing of knowledge:** Rural women, like Petelina, are supported to share their ancestral knowledge and test their innovations, protected against the risks of experimentation. This reverses the suppression of women’s ancestral knowledge and the notion that expertise is only found in academic research institutions and ‘extended’ outwards via extension officers. It also ensures we critically challenge assumptions regarding ‘silver bullet’ technologies that have not been adequately tested.

- **Solidarity economy:** Solidarity Economies support social, cultural, environmental and knowledge capital as well as economic imperatives. Trócaire supported seed banks in Uganda are an example of solidarity economy that produce multiple benefits for communities: economic (e.g. using seeds and the indigenous knowledge to trade for other goods and to grow crops for nutrition and for sale); social (e.g. communities retain diverse crops, increasing their food security and resilience when external stresses and shocks hit), cultural (e.g. traditional crops are available for traditional cultural rituals); and environmental (e.g. seeds are matched to the local land, soils, and weather and don’t require unsustainable, often harmful, inputs to thrive).
Women’s empowerment: Trócaire programmes strive to partner mainly with women and youth (especially young women). In Uganda, Trócaire and partners piloted Gender Action Learning systems (GALS) which consist of simple tools and diagrams that communities use to analyse the gender and broader socio-economic issues affecting their livelihoods, and then generate their own solutions. Farmers reflect on household roles and responsibilities related to access and ownership of resources, while simultaneously building technical skills on agroecological practices without creating an additional labour burden for women. The approach ensures women and men equally benefit from farming returns. GALS has led to positive changes within households, with men taking part in household chores and farm work and women participating in shared household decision making.

KEY FACTORS FOR SUCCESS FOR REPLICABILITY AND ADAPTABILITY

- Investing in long-term processes of transition: The recovery of wild and traditional foods is a process which is built over time, often requiring periods of transition from standard agricultural practices such as monocropping and dependencies on hybrid or GMO seeds. Families are supported throughout the transition period to dispel myths around the value of wild and traditional foods and to understand the

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long-term benefits of agroecology. Sustained engagement with government actors and agriculture extension service providers is also necessary to influence funding, resources and seed laws that support an alternative food system.

**Building-in scaling strategies:** A critical first step in developing scaling strategies is to understand indigenous communication within target communities—how communities create, obtain and share knowledge and information on agriculture and food production, who has access and who does not. Scaling strategies consider the traditional communication practices of communities and create new equitable approaches to disseminate learning. Wild and traditional food fairs and exchanges enabled local farmers, particularly women, to exchange their knowledge and practices and to promote the diverse medicinal and culinary uses and commercial potential of wild and traditional foods.

- Conventional approaches to agriculture remain prevalent within many of Trócaire’s operational contexts. To counteract their influence, programmes need to build-in significant investment of time and resources for on-going technical education and accompaniment of partners and peer sharing and learning initiatives on the principles and practice of agroecology. With evidence of agroecology resulting in enhanced food security and resilience to shocks and stresses in Uganda, this is a worthwhile investment.

**LESSONS LEARNT**

- Learning, training and advocacy with communities helps to positively shift attitudes about the palatability and health benefits of small grains, leafy greens and other wild and traditional crops in comparison to monocultures.
- Communal food initiatives contribute greatly to the recovery of community spirit around the exchange of seeds and the enjoyment of nutritious food. Food fairs and exchanges break down lingering prejudices, misconceptions and even stigma surrounding wild and traditional foods while promoting their diverse medicinal and culinary uses and commercial potential.

**MORE INFORMATION / REFERENCES**

- Breaking the Stigma of Wild and Traditional Foods in Uganda, Trócaire 2022
- Wild Edible Plants of Acholi and Teso sub-regions of Uganda, PELUM, Uganda 2020.
- When the wild shrinks, so do our foods – Trócaire Uganda 2021 12-minute Video
- “Growing equity through agroecology in Uganda”, Joshua Aijuka, Robert Guloba, Denis Okello and Mary Baganizi in Farming Matters magazine ‘Agroecology and Feminism. Transforming our economy and society’ (October 2020)
- Cooking Up Community Strength in Nicaragua, Trócaire 2022
- Fixing the Food System, Farmers first: A Guide to How Trócaire does Food and Agriculture, Trócaire 2021

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