

Food and Agriculture Organization of the United Nations

Stories Change

Connecting traditional knowledge and innovations for fair and sustainable food systems

FEB 2023 Family Farming Knowledge Platform

www.**fao**.org/**family-farming**

United Nations Decade of FAMILY FARMING 2019-2028





Stories of change: connecting traditional knowledge and innovations for fair and sustainable food systems

Writers

Alethea Kordor Lyngdoh, Bhargavi Nagendra, Brighton Govha, Diana Mapulanga, Edwin Abwino, Georgina Catacora-Vargas, Joseph Karangathi Njoroge, Kushal Poudel, Laura Tabet, Magdalene Amujal and Gillian Avako of Kulika, Nichola Hungerford, Preeti S. Virkar, Doon Valley, Rafal Serafin, Sarah Appiah, Shalini Pathi, Smita Magar, Sostain Moyo.

Technical Coordination

Nathalie Santini

Family Farming Knowledge Platform Family Farming Engagement, Parliamentary Networks and ComDev Initiatives Unit Partnerships and UN Collaboration Division Food and Agriculture Organization of the United Nations

Zdravka Dimitrova

Agroecology Knowledge Hub Scalling up Agroecology Initiative Ecosystem approach to crop production intensifiction Plant Production and Protection Division Food and Agriculture Organization of the United Nations

Editorial team

Doug Reeler & Cristina Temmink Barefoot Guide Connection

Layout and graphic design

Ricardo Rivera, Jorge Leiva & Érika Ortega Sanoja

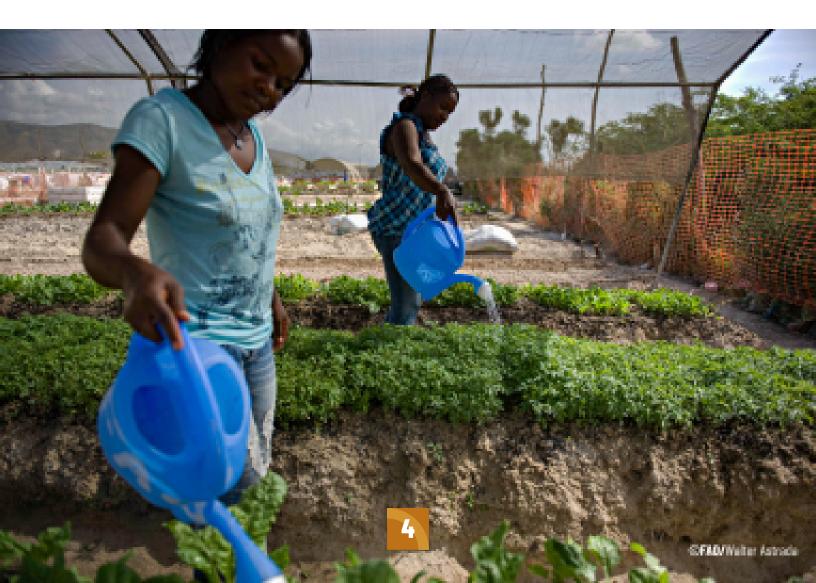
Prosperous and Inclusive Rural Societies Regional Initiative, FAO Regional Office for Latin America and the Caribbean

- Family Farming Knowledge Platform
- <u>Agroecology Knowledge Hub</u>
- Family Farming & Agroecology Community of Practice
- Family Farming & Agroecology Community of Practice for the Africa Region
- Family Farming & Agroecology Community of Practice for the Latin America and The Caribbean Region



Stories of change: Connecting traditional knowledge and innovations for fair and sustainable food systems	5
Learn the story from the storyteller	7
A taste for tradition: Reviving traditional diets using video by Laura Tabet, Egypt	9
Agroforestry Helping in Addressing Effects of Climate by Diana Mapulanga, Zambia	14
Community Food Projects: Emerging from a backyard garden by Sostain Moyo, Chitungwiza, Zimbabwe	17
Community Ownership can create change: Experimental participatory learning brings better life in Timor-Leste by Nichola Hungerford, Timor-Leste	21
Diary of my love for food production: My quest for sustainable agroecology by Brighton Govha, Zimbabwe	25
Encounters during an Agrobiodiversity photo hunt by Alethea Kordor Lyngdoh, India.	28
Grandma and the Bees: My connections to Agroecosystems by Preeti S. Virkar, India	32
Learning by doing: how family farming as a child shaped my life by Joseph Karangathi Njoroge, Kenya	35
Learning to respect local knowledge, the hard way! by Sarah Appiah, Ghana	38
Mushroom hunters: foraging mushrooms with my dad in Jhumlawang by Smita Magar, Nepal	41

My speechless intervention and the discovery of a woman leader in agroecology by Edwin Abwino, Zambia	46
Planting seeds of liberation: Reflections on Allyship in food systems by Shalini Pathi, South India	50
Rediscovering Ancient Seeds and Hope by Kushal Poudel, Nepal	54
Rotti, rice or ragi? Let the women choose by Bhargavi Nagendra, India	60
"Take me with you, mother maize". A tale of maize in peasant woman's livelihoods by Georgina Catacora-Vargas, Bolivia	66
Where is the Food we need? by Rafal Serafin, Poland	70
Who says my land cannot be productive? A farmer's journey to a forest full of food security! by Magdalene Amujal and Gillian Avako, Uganda	80





Stories of change:

Connecting traditional knowledge and innovations for fair and sustainable food systems

In December 2017, the <u>United Nations</u> <u>General Assembly proclaimed the United</u> <u>Nations Decade of Family Farming (UNDAF,</u> <u>2019-2028)</u> thus constituting a framework that recognizes the importance of family farmers, which includes peasants, indigenous people, traditional communities, pastoralists, fisherfolks, upland farmers, and many other groups of food producers that possess a unique potential to promote transformative changes in the way food is grown, produced, processed and distributed.

All over the world, there are thousands of stories of distinctive work carried out anonymously by

family farmers, including women and youth, on successful transitions to more inclusive, sustainable and fair food systems. Those stories are based on co-creation and sharing of traditional knowledge and innovations that are helping to make food systems sustainable, leaving no one behind.

In this context, the Family Farming Knowledge Platform in collaboration with the Barefoot Guide Connection organized a series of "writeshops", writing classes to support practitioners to write their own experience, generating knowledge which highlight the practices, changes, innovations and impacts of what they do in support of family farming.

These writeshops represented an opportunity to share the creative process through which identify, recognize, write and exchange stories and experiences from young people, women, farmers, small-scale producers who work to promote, improve and strengthen family farming and achieve prosperous and inclusive rural societies.

This initiative was conceived to provide a space to highlight the human, cultural and social dimensions of family farming, including the human rights embedded in family farming and its social and economic organization.

The stories presented in this compilation selected among those written during the writeshops, highlight the different ways in which family farmers responsibly and creatively manage their natural resources, landscapes and ecosystems as well as the cultural and symbolic values that define their identity.

About the Barefoot Guide Connection

"The Barefoot Guide Connection is a global community of practice from dozens of countries, on every continent, dedicated to promoting the writing and sharing of real stories, approaches, ideas and resources about effective social development and change practice. Through storytelling and action learning based case study writing we support on-the-ground practitioners to value their experience and appreciate the insights and wisdom they can offer to others, be they other practitioners, programme managers, policymakers, students and academics or donors.

In so doing they provide common reference guides for multi-stakeholder understanding and collaboration around the real work of change. Indeed, Barefoot Guides¹ are used by xmaterials for students learning about development."

1 From the Barefoot Guide Connection website – www. barefootguide.org

About the Family Farming Knowledge Platform

Launched in June 2015 by the Food and Agriculture Organization (FAO), the Family Farming Knowledge Platform (FFKP) gathers digitized quality information on family farming from all over the world; including national laws and regulations, public policies, best practices, relevant data and statistics, researches, articles, and publications. It provides a single access point for international, regional, and national information related to family farming issues; integrating and systematizing existing information to better inform and provide knowledge-based assistance to policy-makers, family farmers' organizations, development experts, as well as to stakeholders in the field, and at the grassroots level.

The Platform is intended for a wide range of users: from Government Officers to Farmers 'Organizations, from Academia to Civil Society Associations and Non-Governmental Organizations. It addresses the needs of institutions, associations, and individuals with an interest in family farming and related topics.

The FFKP is a participatory tool bringing together entities for sharing knowledge, solutions, and action-oriented initiatives around the world. A strong coalition of contributors sharing their knowledge represents the very foundation of this initiative.

www.fao.org/family-farming.org

Learn the **story** from the **storyteller**

R

 \bigcirc

A taste for tradition Reviving traditional diets using video by Laura Tabet, Egypt

A taste for tradition: Reviving traditional diets using video

by Laura Tabet, Egypt

We were launching a rural tourism project just as the Covid-19 pandemic startled the world. How ironic, after waiting years for funding for our local organization Nawaya, we were incapable to do basic field work. We were excited, and decided not to delay important work. As we were unable to meet women, cook and share meals together, we decided to create recipe videos instead.

The videos would focus on heritage dishes, and the aim was to trigger a discussion and brainstorm healthy recipes that were exciting enough to attract visitors seeking a unique dining experience in rural Egypt. We made eight recipe videos with skilled rural women, and we screened them in a safe outdoor setting, wearing masks, to discuss the potential to replicate the recipes at home or for sale.

You can watch the videos here: <u>https://www.</u> <u>ecoagtube.org/channel/nawaya-egypt</u>

The women at the screening were attentive! They did not chat away as the video played. Some recorded the session on their mobiles phone and some took notes. Most of them are illiterate but imprinted the recipes in their minds. After watching the videos, we would open the floor to women to propose heritage recipes they knew and could share, not only with their families, but proudly to visitors from Cairo or even the world.



Women discussing nutrition after screening. Photo by Laura Tabet.

"So, who here will try these recipes at home?" we asked at the end of the screening. "I will try all of them for sure!" "Tonight, I will cook the fereek and liver dish. It looks so easy and I never thought of cooking fereek like rice"! Another lady said she sprouted Fava Beans but never thought to use their stock for molokhia soup. The screenings felt like a great success! We felt confident that upon returning home the women would dig deeper into their parents and grandparents memories for forgotten recipes.



Watching the recipe videos. Photo by Laura Tabet.

Videos with impact

It has been almost six months since the screenings, and we wanted to gather the women again to start working more seriously on the heritage food menus that would become the centerpiece of our rural tour itinerary. Around twenty women were invited to be part of a focus group to assess the impact of the recipe videos.

I was excited as we had just on-boarded Hanan to the Nawaya team, an experienced Monitoring and Evaluation officer. Hanan is also a nutritionist, so I knew the discussion would be rich. I was excited to see which recipes inspired the women, and uncover with them recipes they could proudly serve on a heritage food menu.

Wee hosted the focus group on the land of a village leader, Om Abdallah, who runs a collective food enterprise with the help of her daughter Fatma. Cairo traffic was terrible, so we were late, and arrived as the women were sitting impatiently in the shade.

We sat quickly, avoiding small talk and dove straight to the heart of the matter: a woman's main responsibility as a cook for the family. Men rarely help with anything kitchen related. So it was our prerogative to do two things – to revive heritage foods as a means for women to find work in rural tourism; to revive heritage foods and improve family nutrition. Tourism is also a great mechanism to educate eaters, and shed light on how seasonal recipes and locally processed foods hold the key to stronger health and community.

Abandoning tradition

We quickly discovered that the changing tastes of their children made it challenging for the women to serve these foods at the video recipes at home. Whether young or adolescents, the women ALL agreed that their kids have little or no interest in traditional foods! Actually, some refuse it entirely, and leave a nice homecooked meal to eat junk foods. It is so bad that one mother said her son won't even reheat the food she made him, but instead he'll happily spend his pocket money on crepe, koshari, shawerma or pizza instead.



Molokhia with sprouted fave bean stock. Photo by Laura Tabet.

I thought that far away from Cairo the challenge of junk foods wouldn't be so big. I was wrong. It was worse than I thought. Even at home, the women often buy and cook industrial pasta, white chicken for panée, maggi cubes to replace stock, and regularly buy processed cheese and meats to please their children. Traditions were abruptly eroded by the corporate food brands with colourful fancy packaging, mega billboards, TV adverts with football heroes that attract young people like magnets.

The mothers seemed stuck between two generations, appreciating the taste of traditional foods, but also accepting that their children want to eat differently. The women admitted that almost every family has a member with anemia, diabetes, obesity, and how they often spend money to get dietary advice. The irony is that their struggle with family health can be overcome with a return to traditional diets. We quickly realized how creating a nice balanced menu for heritage food tour, would be an impossibility, if peoples' diets in the heart of a village, were not traditional anymore.

Why eat traditional?

Hanan took a turn in the discussion to ask them about their nutrition knowledge. She asked if they understood the importance of minerals. The women said they knew minerals were important but couldn't explain why. When we asked them the source of minerals in their diets, the women were surprised about how minerals are transferred through soil into fruits and vegetables. The women also lacked confidence on how to serve enough vegetables, whole grain dishes or simply lack the skill to make their own traditional products like pickles, cheeses and dips.

"Your child's health is the best investment you can make for them! It's what matters most! More than school and getting them ready for marriage!" Hanan said with harshness, her voice louder now. I didn't expect her to raise her tone, but I did feel somewhere that it was needed, as the situation is bad and it is so unfair for young children, being denied the opportunity to instill healthy habits. "Da or Dawa....Da or Dawa...." Hanan words echoed throughout – "poison or medicine"- that, is what food is.



Reviving old recipes. Photo by Laura Tabet.

The women were silent at times. I felt a heaviness in my chest. I don't know how they felt, while some joked, some might have felt guilt or shame. Some just trusted that packaged foods were clean and safe. I was hoping Fatma would speak up but she was silent. I wondered if she was thinking of the small fight we had the week prior. Fatma is young, married at 17, was already divorced with a young daughter that is almost two. The other day I scolded her at a farmer's market, we were together representing Nawaya and our work on heritage foods. She had brought her daughter along, and of course, she was bored and tired and cried for her mother's attention. To stop her drama from escalating, Fatma gave her a large packet of ketchup-flavored chips.

As her daughter ran around the market stall, happy with the bag of chips, I expressed my frustration to her: why not give her the healthy food we were here selling here? She looked at me defensively, and then said "you wouldn't understand! The day you become a mother and have children you will understand!" After arguing with her, I sat and stared blankly at her mother, wondering, what we have been doing all these years? There must be a better way to approach this seemingly unsurmountable challenge of healthy eating that mothers deal with on a daily basis.

We need full buy-in

It's not the first time I feel our team at Nawaya needs to carefully craft a strategy to overcome unhealthy eating habits, that will be motivating for the mothers as opposed to cause conflict or shame. During fieldwork in the villages, mothers attend our workshop and bring their young children along and stuff them with junk foods to keep them from crying and disturbing the training. I stay calm, while I m boiling inside, as we talk about nutrition, while their young children munch on Indomie Noodles, Doritos and Molto. If kids learn to enjoy these foods as toddlers, how can we develop interest in traditional breads, cheeses, fermented foods, or simple veggie snack? If mothers accept this reality, how can they be leaders for preserving and promoting heritage foods? Without these heavy discussions on parenting, I now don't see a change for diverse food systems that promote local crops and traditional processing. Also, it is not their fault, not at all, as there is a bigger picture to be seen here where it will take efforts at multiple levels to fight against addictions to junk foods....

To conclude the focus group, Hanan and the women agreed that a first next step would be to find recipes women felt they could cook with confidence to their children. "We need more breakfast recipes – that way at least we know they get a healthy start to the day". As a team, we also noted that we needed to make simplified message on nutrition accompanying the recipes. We need the women's full buy-in, to truly believe in her own ability to trigger change on the family dinner table. While it was just a community screening, it was a recipe for a deep reflection, bubbling emotions to the surface, and digesting what it means to be a mother and what it means to reach for a pack of chips.

Motivating youth

I could have never expected that through rural tourism, we would end up leading nutrition outreach activities! While Covid-19 felt like a stick in our wheels, it is now such a blessing, and it has allowed us to speak more clearly with women on the importance to eat healthily to build our immunity. The strict hygiene measures for Covid-19 have also facilitated increasing awareness on the needed hygiene steps to serve food to visitors.

In our upcoming plans at Nawaya, we decided it is a priority to invite young men and women from these families and re-explore the value of heritage foods. We are now developing a series of social media workshops where the youth themselves will make videos campaigns to tell the stories of their grandmothers' recipes. We can build on the healthy heritage foods that young people are still interested to eat, while shedding light on the dangers of unhealthy eating. By luring young people into gaining video making skill, maybe this way they can start to communicate the gems their traditions hold!

Photo by Laura Tabet.



Agroforestry helping in addressing effects of climate

by Diana Mapulanga, Zambia

Photo by Diana Mapulanga

Agroforestry Helping in Addressing Effects of Climate

by Diana Mapulanga, Zambia

It all started on the day when I escorted our country director to Rufunsa District, which is located in Lusaka Province in Zambia. We were off to meet the village Chieftainess Mphashya, to talk about our intentions to build a community seed bank in her chiefdom. We were met with warm smiles, and after all the mutual exchanges and protocol of greetings, we were offered some refreshments under the tree shade where we sat for the meeting to discuss the community seed bank.



Photo by Diana Mapulanga

At the meeting, I met the Rufunsa District field officer, Mike Ngulube, who told us about a place of wonder called Dream Creations Space. He explained how indigenous tree species were being preserved there and fruit producing trees were planted in between them. I was very curious and asked him to take us there after the meeting.

When we arrived, I was amazed by what I saw. An abundant forest of fruit trees, indigenous trees, long forgotten trees, a variety of grasses, birds and insects. I asked Mike what inspired him to start conserving indigenous tree species. Mike answered eagerly, "These trees were in danger of depletion by the nearby communities, and an idea struck me on how best I could enhance the adoption of agroforestry in my community."

I was keen to know more and so I asked him how he started.

Mike smiled and pointed at the trees, "Dream Creations Space emerged out of the idea of what Community Technology Development Trust (CTDT) was doing in conserving indigenous local seeds. I thought that it would be great if we could extend this to conserving indigenous trees as well at a place which would also become a center for hosting other farmer activities. The first thing I had to do was to find a place where I could plant these trees. I wanted species which could be preserved while introducing fruit producing trees which were not originally there."

At first, I faced many challenges. There was resistance from the community in adopting these practices as many people depended on tree cutting for charcoal production as well as farming. But after we started with a few willing farmers, others began to see the benefits and slowly started adopting this practice."

I was very impressed but wondered how Mike was able to secure the land.

Mike nodded as I asked the question. "Yes, with the support from our head office, we where able to secure this place and the community later got interested. They started to suggest other tree species that we could add which would also be producing foods for them as well as green manure covering crops. To promote agroforestry, green manure covering crops like *lukina*, *glicidea* and *tephrosia* were introduced in the already existing indigenous tree species. Other plants that were introduced in the conservation are bananas, pawpaw, lemons, oranges and avocado."



Photo by Diana Mapulanga

Mike continued to explain that the space not only served as a conservation site but also as a centre for different activities organised by the local farming community, from food and seed fairs to holding farmer meetings under the cool shade produced by the trees.

As Mike continued to describe the different activities, I thought about my home village. I felt sad as most of the trees had been cut down and the use of green manure to cover crops had been totally forgotten. Now only the heavy use of synthetic chemicals was used in farming. Coupled with a lack of information on agroecology, most farmers in my home village have forgotten their old ways of farming. They preferred new methods, not realising that these practices have destroyed their soils, created low yields and caused food insecurity and lack of nutrition. Dream Creations Space made me realise that not all hope was lost for my home village. I could share these agricultural practices with my community. I knew that when using agroforestry, we could restore the ailing soils which were hardly producing enough food.

During my next visit home, I spent some time with my mother who is also a small-scale farmer. On the first day, as we sat down to drink some tea together, I told her about my experience in Rufunsa, and how I had been amazed by the lush forest of trees. I described the diversity of trees and how the fruit trees were planted in between the different species. I told her how my perspective had changed and how much I had learnt about green manure. However, from the expression on her face, I could see that she was reluctant to hear what I had to share.

The next day, while we were walking through her vegetable garden, and she lamented the poor soil and lack of water, I explained everything again to her. This time I spoke slowly, I wanted to give her hope that we could bring back our forests and restore our soils. I described what I had seen on my walk with Mike, in much detail. As I spoke, she talked about the old days when she was a child and how her grandparents used to practise this type of farming.

"My child," she said, "thank you for reminding me of what I had forgotten. I can't wait for the next farming season to put into practise what you have shared with me."

When I left my mother's house many thoughts raced through my head. I thought about agroforestry, and how, especially in the face of climate change, it is very crucial in replenishing and enhancing soil fertility, not only for better yields in areas where soils have eroded, but also for healing the earth, our communities and ourselves.

Computing transformed and a set of the set

Photo by Tatenda-Ishe Moyo

Community Food Projects: Emerging from a backyard garden

By Sostain Moyo, Chitungwiza, Zimbabwe

My wife and I have always dreamt about going back to the rural areas to start farming. Mainly to start growing our own food, spending days tending a flock of chickens, and maybe growing a big garden for our family and perhaps allow our children to enjoy what nature is there to offer them. We are fortunate to have a good provision of land back in our rural area and have always yearned for a homestead, but our thinking was always that this can only happen in the rural areas.

But COVID-19 changed all that. Read on to see how.

It was ten days into the first 21 days of lockdown of the COVID-19 crisis. We, like all other families in our neighborhood had stocked food in the house, using the little cash we had on food, in fear that we would not be able go out and buy, or there would not be any food remaining in the shops and at the marketplace.

And now all the food we had bought was finished. Last night, our little boy Taonaishe was crying and complaining that he was still hungry after his supper was eaten. We all felt this pestering hunger.

"Daddy I am hungry." But there was no more food and no money at this moment. All I could do was just to take him in my arms and cuddle him, while searching my mind for a way to find something to eat. Then I remembered that I had seen spiked cucumbers fruits growing in the garden but I don't even remember how they ended up there. We had seen them growing and started tendering them.



Photo by Tatenda-Ishe Moyo.

I said my boy, "Let's go outside into the garden." When we got into the back yard garden, I headed for the cucumber plants. Their leaves had back grown quite large and healthy, covering a large area too, and some were climbing up our neglected chicken-run fence. I checked around, looking carefully for snakes. Usually, this place is infested by house snakes. So, I was careful and told Taonaishe to stand back.

Nature comes to our rescue with her gifts

My eyes opened wide with excitement, as I saw a bunch of huge, spiked cucumbers there. There

were six or so on this plant. "Come look, young man!" He was so excited to see this. Before I could even pick some cucumbers, he had rushed to call his mum and tell her the good news. In no time the whole family was gathered in the garden, and we were all enjoying the juiciest self-grown cucumbers.

Looking further, we realized that the backyard garden had lots of other plants that we could use as food. We found there plenty of blackjack and amaranth growing in the backyard, both edible and highly nutritious. From this moment we decided to take more care than before of the back yard garden and started growing a variety of vegetables there, including some medicinal herbs.



Photo by Tatenda-Ishe Moyo.

This was the birth of the community food projects I am currently involved. I am teaching families to be self-reliant, to grow their own food and eat plant-based diets, especially in the face of the COVID-19 pandemic.

We continue to enjoy a mix of nature-provided vegetables and those which we ourselves began to grow in the garden as weeks turn into months. This has become our lifestyle and livelihood as a family. My wife and I are so excited because our children are really enjoying themselves, trying new foods, and learning new skills when they are playing productive games with plants in our garden. Now the garden has totally changed. It's no longer neglected as was before. We have set up proper kitchen garden in our backyard.

Woken up by the crisis, we start Project CHENGETA

The COVID-19 crisis was able to teach us that having a good garden, no matter where or how small it can be, is good for survival. The crisis awoke to the fact that we don't need to go back to the rural areas if we want to homestead. We started homesteading here in the city. In our neighborhood, during these extended COVID-19 restrictions, almost every household now grows a garden or just grows something at home, in any small available spaces. In the past most households, including ours, would have neglected backyards gardens, and we would depend on the grocery store shelves to provide their nutrition.

Starting with just a small backyard garden project, my wife and I brought community food projects to Chitungwiza community in response to the COVID-19 induced food and nutrition crisis. We integrated growing food gardens in our homesteading program activities, teaching families to grow their own foods at home, no matter how small their space may be. The two of us started Project CHENGETA concept three years ago. However, it is still going through the process of getting formal registration. "Chengeta" is in our mother tongue, Shona, and means "keeping well protected" or simply means "stewardship". Our mission is to partner with vulnerable and poor families to achieve health, economic selfsufficiency and community stability. We strive to do so in a nurturing, supportive environment where our participants are treated with respect. We help them to build a sense of self-reliance, economically empowered and responsible for their own health and well-being.



Photo by Tatenda-Ishe Moyo.

In the last three years since we started as a business (social enterprise), Project CHENGETA has served over 100 families, including more than 1,500 children. We work with poor young parents, teen parents, families with members with disability, youth and adults living with HIV/ AIDS or in other difficult circumstances who may be striving to build both skills and selfconfidence to make ends meet.

So, with this new initiative, we are seeing opportunities to build food self-sufficiency among poor and struggling families in the face of COVID-19 crisis, and other disaster related situations, building back-better, through home gardens whether in the backyard or front, hanging pots, or in sacks, whichever where there is a little space. Thereby, we have managed to expand it broadly to strengthening community systems, through food partnering with established community-based organizations, local authorities, schools and other local economic development agencies operating in our region.

The basic concept of our home gardening intervention arose from our family experience, where we discovered healthy and nutritious food in our own backyard garden. Nature is there, offering us gifts, if we look.

Homesteading is about creating a lifestyle that is first of all genuine. We are teaching families to recognize their needs, not only on food and nutrition alone, but also on energy, economic, and health needs, and finding out how they can be met creatively and responsibly.

Community ownership can create change: Experimental participatory learning brings better life in Timor-Leste By Nichola Hungerford, Timor-Leste

Community Ownership can create change: Experimental participatory learning brings better life in Timor-Leste

By Nichola Hungerford, Timor-Leste

It was another hot and humid day, another power cut, the generator groaning in the background. Fans were spinning and pumping hot air around as the A/C didn't work with the generator. I looked around the office, everyone seemed bored, scrolling through Facebook, chatting occasionally. I felt sad that there was a listless feeling throughout the building – like people were waiting for something to happen. The staff were as lethargic as the air around them, but it wasn't just today. It was like this every day.

George (my then co-worker) was busy with his work with the FAO on the campaign to prevent Avian Influenza from coming into Timor-Leste. We shared offices with the Extension Workers and other Ministry of Agriculture and Fisheries (the Ministry) staff. I commented to him that there was so much potential in the room that felt wasted with people just sitting there. All the study they did at university or agriculture school, the hope of starting a career in agriculture. The dream that their work could create some change for the country working with farmers and their livestock.

Fast forward 12 years. George is now working as a Project Officer with the Ministry, working on a sustainable agriculture project. He is now based in the centre of Timor-Leste in a little town called Ainaro, high in the mountains, surrounded by cliffs shrouded in clouds. Much less need for A/C there. The rural environment in Timor-Leste is under severe pressure, with rain-fed land used for unsustainable small-scale subsistence farming. Agriculture is the primary source of livelihood in Timor-Leste, with over 80% of the population engaged in it.

Doing what they have always done

Since Independence in 2000, Timor-Leste has had a continuous stream of international agencies and NGO's wanting to help the "new" country with various projects. They would come to a district or suku (village) with great ideas: trying to get the community involved, handing out grants or seeds, running training workshops - often telling them what is the "right" way. But then when the project was over, they would leave again. Sometimes there was change, but often things would return to the way they were. The same could be said for the Ministry – doing what they have always done, sometimes trying these "new" things, but when the project was completed, or the budget cycle was over, things often reverted to the way things were.

George and I were chatting about his new job. He said he felt he was having déjá vu from all those years ago about the Extension Workers. Another location with different faces, but that same feeling of nothing happening.

He felt resentment from the Extension Workers aimed at him, from yet another project being imposed. They seemed reluctant to join in. He detected cynicism from the local head of the Ministry who saw it as just another project that probably wouldn't work and then they would leave again. He said there were different people linked with the project wondering what they could get out of it; from local authorities to farmers wanting handouts to supplement other unrelated things.

Trying a different approach: learning by doing

But George hoped that this project was going to be different, it was why he decided to take up the position. It was taking sustainable watershed planning as the foundation for agricultural development, not something that had been done in Timor-Leste before. Approaching sustainable agriculture through the entire catchment of Bealulik River: sustainability through agriculture, the environment, economically, as well as with a community approach of working together. It was a project by Timor, for Timor, taking agriculture to the next level. Though it was funded by the World Bank, they would be somewhat hands-off.

The aim of the project was close to George's heart, it was learning by doing. It included everyone in the community, especially village leaders, to be actively involved from the beginning and playing the vital role as collective decision makers rather than just as implementers of top-down project planners. George said that it was about building the capacity of Extension Workers, in collaboration with experts from MAF, to be facilitators of the farmers "experimental learning". Rather than giving ineffective recommendations that cover large geographic areas that may not even be useful or relevant to farmers, this method trained Extension Workers and the Ministry staff to work with farmers in testing, assessing, and adapting a variety of options within their specific local conditions. It was also about increasing the knowledge of farmers to make informed decisions on what works best for them, based on their own observations through demonstration plots, and to explain their reasoning for such decisions. There was also hope that the spill over effect of this project would strengthen the Ministry's planning, monitoring and evaluation functions. There was hope that the project would act as

a catalyst for a more effective and responsive agriculture sector for the whole of Timor-Leste.

He said at least we have hope this could happen

Four years later, a different sense of change and hope.

It is now four years into this six-year project. George is sensing change, positive change: in the Extension Workers, in the attitude of the farmers, the Village Chiefs, the senior staff of MAF in Ainaro, even with the driver of the project.

While this part of the project was huge, (175 groups from the 12 suku's in the catchment), he felt the new approach of being inclusive with ownership was starting to pay off. This project seemed fairer than other ones, as everyone from the community had the opportunity to be involved. They all have the same access, which is not often the case in Timor-Leste.

> The aim of the project was close to George's heart, it was learning by doing. It included everyone in the community, especially village leaders, to be actively involved from the beginning

I can see in his mannerisms and attitude, that George has a sense of pride with this project. Much of this was from seeing things coming to fruition and now there were tangible outputs, and a shift in attitudes of all involved. George could see that the Extension Workers were seeing their work as something worthwhile. Previously they really didn't understand their function; they just did their jobs: distributing seeds or tractors, or giving fertiliser, and never really seeing any change. But now they have activities to do and have learnt new skills and techniques. They felt appreciated and instead of criticism from the government, they were feeling involved in the community. They started to really understand what it meant to be an extension worker. They were happy and busy; they have found their feet. He was surprised and proud of the change in the Extension Workers.

He was determined to include the driver in his work because of his interest in farming; and instead of sitting in the car waiting for a meeting to end, the driver was in there learning too: now sharing advice and ideas with the farmers, deep discussions about the decisions they were making. He was finding his feet too.

People participating in their own process

George saw a new positivity that he hadn't seen for a long time. He saw that people were empowered and had control over what they were doing. He believed that this new participatory approach was key to this. While it has been a long, hard few years for everyone involved, with many ups and downs, people were sensing a change and maybe long-term success.

It is very common in Timor-Leste for people to expect certain things in return for going to meetings associated with big projects, like food and transport, t-shirts etc. But now when George and the Extension Workers visit projects or meetings, food from the people's own gardens and coffee are served. No-one asks for handouts.

Everyone always talks about having ownership of a project and when you feel part of a process, truly part of it, then you will get the change you want. But you don't often hear about inspiring government staff who can create that change.

There are many pathways to sustainable agriculture, but maybe one is through the empowerment of Extension Workers that has the potential to be a fabric for long term sustainability in specific context. As George sees it, this project might actually be making that real long-term change, or he is really hoping, but time will tell, the early signs are there. Maybe ownership does create change.

Diary of my love for **food production:** My quest for sustainable agroecology by Brighton Govha, Zimbabwe

Diary of my love for food production: My quest for sustainable agroecology

by Brighton Govha, Zimbabwe

Dear diary. Monday: How did this all begin?

From as early as I can remember, my grandparents inspired me with their love for gardening and growing food. They were enthusiastic, knowledgeable and instinctively knew how to grow vegetables and fruit. As a young child I would spend many days in the home garden with them, helping to weed the garden or pluck the ripe fruit and tender vegetables. During school holidays, I would spend hours outside in the sun with them, putting precious seeds into the ground, or making holes for the seedlings which had been carefully tended. These visits would also coincide with visits to aunts and uncles, and neighbours, where conversations inevitably centred around crops, harvests and food.

Whenever I think back on my life and wonder why, as an adult, I chose to grow food, I realise that this love of seeds, the soil and gardens and my connection with nature rose out of these foundational experiences with my grandparents and the community in which I thrived.

Now I spend most of my time at home in the small town of Norton, about 45 km from the busy central business district of Harare in Zimbabwe. Today in particular, I feel very relaxed as I sit in my room, listening to the whistling sounds from my chicks in a brooder box and some neighbours singing energetically and passionately at a community gathering. Over the past three years, this place has become my new home and it has offered me a serene environment away from the hustle and bustle of the city. I have grown to become a micro-scale farmer working in my garden and chicken coup.



Photo by FAO.

Wednesday: What lockdown brought

I woke up this morning feeling refreshed and renewed. The cool air made me feel alive and happy. As I looked out of my window, I saw my garden, alive and bursting with vegetables and flowers. Gardening has become a daily practice and it has awoken so much energy and passion in me. It was still quite early, when I made myself a cup of tea and went outside to look out across my land. Like so many other days, I could see my neighbours already busy in their gardens. While a few of them prefer to maintain their lawns and grow flowers, most of them are absorbed in backyard farming to grow food. Since the COVID-19 lockdowns, many people in this area became more involved in garden related activities, making great efforts to grow food for their families. I started small, growing some cowpeas and finger millet (rapoko), sweet potatoes, pumpkins and a variety of round nuts and beans.

My interest in my garden has grown, and I have many discussions with my neighbours on what is best to plant and how to care for my crops. I can see that our connections have grown stronger as they see my improved efforts in the garden and in the chicken coup.

Sunday: How things changed

Towards late 2017 when I first planted the garden, I worked on a small portion of land and produced just enough to last a couple of days. However, over the past 3 seasons, I have managed to turn this around. I now produce more than I need and the excess from the garden, I use to feed the chickens. I realise that I love gardening so much and I feel so satisfied when I see the amazing results each time I look at the produce. I have so many questions when I look at the plump tomatoes and the huge round pumpkins. What is the work and biological processes that lead to healthy fresh food? How does nature work to create these nutritious foods? What must I do to keep the soil rich? I no longer just have plans in my head and on paper only, I have become more practical and productive. My energy which has grown exponentially and I am more able to make decisions and take actions. I have realised that through small efforts, it is possible to cut down on expenditure on certain commodities, like eggs that I can easily produce.

This has not always been a smooth road. I knew that certain obstacles would occur in my agroecological venture, particularly as I wanted to ensure operational sustainability and continuity. Since 2017, I had many challenges, the main one being the lack of water. I therefore focused on the limited rainwater available for producing corn. During the dry season, the activities on the land were minimised due to limited amounts of water from our well, however with much planning and hard work, I managed to have 2 boreholes drilled on site in May 2021. This solved our water scarcity.

Tuesday: Looking to the future

My sixth sense tells me that some of my neighbours share this same passion for producing food. Sometimes I feel left behind when I see people, who I think have less knowledge of agroecology, appear to get better results from their efforts. However, I am happy that I can play a part in the production of food for our world. I have come to realise that with effort and determination I can succeed.



Photo by FAO.

I now know that love can only be most real when it is strengthened by the relevant actions and effort. I have taken a position that my love for food production must be complimented by consistent and relevant actions. I am happy that I have a garden which I can use as a platform to showcase sustainable agroecologically sensitive food production approaches. Today I am pleased to say the love I have for my garden has yielded so much happiness!

Encounters during an Agrobiodiversity photo hunt by Alethea Kordor Lyngdoh, India

Photo by Alethea Kordor Lyngdoh

Encounters during an Agrobiodiversity photo hunt

by Alethea Kordor Lyngdoh, India.

It was the monsoon of 2019 when Stefan and I set forth on our agrobiodiversity hunt into the dense forest and other food production systems of Umsawwar community in Meghalaya. Kong Therisa Nongrum and Kong Angela Nongrum, who are custodian farmers from the community, volunteered to lead us on this journey to document and photograph food plants of their village. This initiative was led by my colleague Stefan, who I often call 'Plant Man' because of his expertise in local food plants and agrobiodiversity. This project is part of a publication called "Agrobiodiversity book of Meghalaya and Nagaland" by the North East Slow Food and Agrobiodiversity Society (NESFAS).

Around two hundred and eighty-four food plants can be found in Umsawwar community of Meghalaya, most of which are traditional varieties. Meghalaya is located in the North-Eastern part of India and is also one of the four remaining biodiversity hotspots of the country. Known for its hilly terrain and heavy rains, Meghalaya inhabits three main Indigenous groups, namely, Khasi, Garos and Jaintias. The famous <u>Umngot river</u> also flows in the border of Umsawwar community, and the community members have been at the forefront of a more than a decade long protest against a dam construction.

I was excited for this adventure, but at the same time I was anxious because of my fears of

tripping or slipping as I know it would involve a lot of climbing and walking in areas which do not have paths, and worse, because of my entomophobia, a fear of insects! We were entering a dense forest, which the community members only visit sometimes to collect wild edibles. I was also worried about the fact that it might rain as the weather in my area is always unpredictable and our region is also known to be the wettest place on Earth.

It took us an hour to reach the inside of the forest. Kong Angela seemed excited throughout the journey, asking me, "Have you ever walked this long?" I was delighted to answer, "Yes", all thanks to my habit of walking. It takes around 30-40 minutes of walking from home to reach my work place, which also involves climbing up two sloped hills and a walk down one hill.



Kong Angela demonstrates ways of identifying edible and poisonous wild mushrooms. Photo by Alethea Kordor Lyngdoh.

We proceeded with our walk and I noticed something interesting. Kong Therisa kept taking a piece of every wild food plant that we came across and would ask me not only to photograph them but also to taste them. I liked most of them, but there were some which I thought tasted strange, even weird. After sometime, she took out an extra *jaiħkyrshah* (a traditional drape that also works as an apron for the Khasi people) from her bag and kept filling it with food plants that we managed to find in abundance during our hunt. The *jaiħkyrshah* was tied in such a way that it served as a carry bag. I joined them in this process and filled my pockets and bag with as many food plants I could collect.



Kong Therisa and Kong Angela collecting wild food plants. Photo by Alethea Kordor Lyngdoh.

At some point we stopped for a long time in the middle of this dense forest. As Stefan was identifying the food plants with the help of the others and I was taking the photographs, all of us also got engaged in a conversation. Kong Therisa and Kong Angela told us about a time when they managed to chase away a wild bear that came into the community's jhum fields just a few weeks ago. They also shared that since the olden days, every once in a while; the community would feast on a wild bear. Kong Angela shared, "One bear was enough for the whole community to feast on."

While I came across numerous food plants, especially wild, one thing boggled my mind. There were many food plants that we could not name in English. So with the help of the communities, we documented them with the local names only. On top of that, there was no evidence from the scientific or research field on their nutritional values. Yet these foods remain the primary source of our communities' diets. According to them, *jamyrdoh* (chameleon plant) is consumed to increase the hemoglobin of a person. However, these varieties of food plants face a major threat of loss because they are mostly neglected, undocumented and eventually underutilised.

On our way to another food production location, we met Kong Bhinda Nongrum, a custodian farmer from the community. She was working in her field which was at least an hour's walk away from her house. They have to travel that far to grow their food and sometimes even farther when they have to go to their jhum fields. It takes hard work by those farmers who are still growing food the traditional way, in the hills, the forest, the mountains. Some of the indigenous farmers in this region still practice the age-old jhum cultivation (also known as shifting cultivation) while at the same time, this traditional food production method is facing numerous threats- from land systems change, climate change, criticism, etc.

Growing food with their own hands, with no chemical inputs and watching them do it with so much care was a delight. How can all this be underappreciated? Conventional or traditional farming requires a lot of hard work. But as Indigenous Peoples, they have been growing food for years, as their ancestors have done for centuries. Besides getting enough to feed and sustain their families, the surplus is also sold in the local markets for just enough income for other necessities.

We seldom pause to think about who grows our food and how it is grown. Yet our communities have relied on traditional food systems for

centuries, which have in many cases been proven to be sustainable. However, as much as we know of this good practice, unfortunately the communities also share their concerns, "Our forests are getting smaller, our soil is losing its health, and our young people do not want to follow our footsteps and they move away from home". These are serious concerns that may be the problems for the lifelong tradition of food production. However, our communities have also come out stronger, working towards reviving, defending, and promoting their Indigenous Food Systems. As custodians of our biodiversity and caretakers of the land, food and nutrition, Indigenous Peoples' initiatives are significant, no matter how small.

Stefan, Kong Angela and Kong Therisa identifying food plants. Photo by Alethea Kordor Lyngdoh.



Grandma and the Bees: My connections to Agroecosystems by Preeti S. Virkar, India

Grandma and the Bees: My connections to Agroecosystems

by Preeti S. Virkar, India

I spent my summer vacations at my grandma's after my 6th-grade examinations. Grandma lives in a small village in Kerala in India. It was always fun to be at her place, spending my days playing, helping in the kitchen and feeding the cows. I rarely visited grandma every year as I lived far away from my paternal home. Grandma was happy to have my company yet must have been about anxious how she could keep me busy for a whole month with no modern toys to play with. On the other hand, I was mindful not to annoy her with my pranks and was on my best behaviour.

The warm and humid weather kept me mostly outdoors in grandma's colossal garden, playing with bare feet and hands in the soil. The hot weather and my careless playing around obviously gave me an eye condition quite common in the tropics called a "Stye". It was big and painful, making my bubbly self quiet and sluggish. Grandma noticed and must have felt pity to see her little one in agony, but she wasn't the kind who mellowed down when crisis struck. She had a solution to everything and offered me a dab of honey from a small glass bottle that she treasured in her wooden cupboard. After applying the honey dab every morning, the stye disappeared within 3 days, as if nothing had happened. The honey, to my surprise, cured my condition, and I became curious to know where this miraculous cure came from.

Coincidently, my uncle took up an adventure in the coming week to harvest the stingless bee honey from its nest in the crack of a stone wall. These bees were tiny like mosquitoes, and when I saw them rushing out, I wanted to run in any direction. My uncle informed me these bees do not sting but only tickle. This reassured me a little, yet it took some courage to stand there. Within seconds, several bees flew over my face, and they tickled just as my uncle told me. I caught a few, and they seemed sticky. Maybe it was their way to tickle predators off! But I was fascinated by how nature gave us the gift of bees that produced honey with medicinal value. Little did I know then that this summer vacation would be my gateway to a lifelong vocation, a connection to bees and their importance to ecosystems.



Photo by FAO

Twelve years in future, I was a PhD candidate exploring bees in the forests and agroecosystems of Doon Valley at the foothills of the Himalayas in India. My doctoral research was a unique opportunity to explore and understand bees in various directions. It introduced me to a plethora of bee facts. There are approximately 20000 bee species across the world. Bees are essential for their pollination services, helping in fruit and seed production of flowering crops. Honeybees pollinate up to 80% of the approximately 100 food crops globally, ensuring food security. They also maintain the biodiversity of flowering plants. Many indigenous communities worldwide depend on honeybees for their honey and other by-products for medicine, cultural values and beekeeping as a livelihood.

Unfortunately, bees and many other pollinators are declining worldwide. The main drivers of bee declines are monocultures, agricultural chemicals, habitat fragmentation and diseases. Learning about the threats bees face triggered my instinct to work towards their conservation.

My research gave me insights into the amazing world of native wild bees. The bees consisted of groups such as the honeybees, stingless bees, leafcutters, bumblebees, carpenter bees and many more. I saw that natural ecosystems are essential for bees to survive. Wilderness in or around agroecosystems is vital to bees as they provide wildflowers and nesting habitats for their survival. And the best way to mimic nature in agroecosystems is to have biodiversity of many different types of flowering crops growing and keeping wildflowers on farm boundaries intact.

While working on bees, Navdanya Biodiversity Farm in India was one of my study sites. Navdanya rejuvenated biodiversity-based agroecological farming cultures with rich indigenous knowledge of organic farming. Here, I learned that the farmers in the Himalayas traditionally the biodiverse practice mixed farming technique of "Baranaja" (Bara = twelve and Anaj = seeds of crops). The interface between these different food crops encourages wildflowers, thus providing food and nesting habitats to bees when flowering crops are absent. Houses in the Himalayas were built with hollow spaces in walls with tiny openings at places to let native honeybees nest inside them. Thus, the farmers already knew bees and their behaviours far more than any scientist. Unfortunately, modern agricultural policies have started luring farmers to shift to chemical monocultures over health through food diversity. It fosters extracting from Nature rather than caring for the Earth and the wellbeing of all.

These realities strengthened my determination to do my bit to conserve bees. The best way to contribute was through my doctoral study outcomesand the learning journeys from farmers' age-old knowledge. Working in agroecosystems helped me appreciate that farmers have time tested wisdom in comprehending Nature. I began connecting farmers to the importance of bees in productivity and food security through my research findings and their rich indigenous knowledge. Navdanya Biodiversity Farm played a crucial role in providing me with a platform to reach out to thousands of farmers. Over the last 9 years, I have learned and shared many bee and biodiversity insights with the farmers through this platform. Navdanya is a firm believer and practitioner in the philosophy of "Vasudhaiv Kutumbakam" - the Earth as one family and all species as its members with irreplaceable roles to play. With Navdanya's efforts, the farmers and I can embrace this philosophy and foster it.

What began with a childhood experience of grandma's indigenous knowledge of medicinal honey from stingless bees moulded my career. Grandma and the bees connected me to agroecology. And I hope my story inspires many more.

Learning by doing How family farming as a child shaped my life by Joseph Karangathi Njoroge, Kenya

Learning by doing: how family farming as a child shaped my life

by Joseph Karangathi Njoroge, Kenya

I grew up in a place known as Kabazi, Subukia Constituency and Nakuru County in Kenya. As a child of a family farming household, I had to participate in farming activities alongside my education. The family depended on its member's labour to be able to provide adequate and nutritious food to the family.

Every evening during dinner, our parents gave us duties or roles that we should accomplish after school the next day. Even at weekends we would get some duties to undertake. Some of the duties included weeding, fodder cutting, pruning, grazing sheep, cleaning the sheep pen, firewood collection, threshing maize, sorting and cleaning beans, among others.

Our neighbors saw us as hard-working children and congratulated our parents for bringing us up in this way, since not all families were able to involve their children in farming. Even though we were so involved in farming activities, I performed well in school and that kept me motivated to pursue my education.

Each one of the five children in our family got used to the roles given out daily. These were alternated to ensure we got experience doing different activities. The one who failed to accomplish the duties given to him/her were reprimanded and those who accomplished them were encouraged and praised for a job well done. Towards the end of each season, we were rewarded with prizes. Some of the rewards given to us included new clothes, books, some trips to relatives and other surprises that our parents thought of. These rewards motivated us as we entered the next season and we looked forward to doing better.

I wondered whether all children had the same experience in their homes and so I started enquiring from friends in our village and at school. I discovered that most of my friends were going through the same experiences, but some did not. In the case of the few friends who didn't experience the same, their parents were able to hire labour for the farming activities, but in my view, they missed out on an important part of their education.

Critical thinking, leadership and confidence

Our parents wanted both formal and informal education for us and involving us in farming activities was part of that informal education. The tasks we were given were sometimes challenging, demanding critical thinking from us to come up with innovative and relevant solutions. These challenges unlocked my problem-solving skills and boosted my ability to learn at school. The informal and formal education blended well and made me an allround person with practical skills and ability to handle concepts delivered through the formal education. Both types of education enriched each other in many ways.

My informal education enabled me to integrate farming into my lifestyle and helped to develop my confidence significantly. As I became a teenager, In terms of my leadership development, my parents started engaging me in the planning of farming activities and providing feedback on the performance of crops and livestock enterprises. I became involved in making decisions on those enterprises that were to be initiated or expanded in the farm.

Career influence by involvement in family farming

I developed a passion for farming and the interest continued even when I entered high school and afterwards at college when I pursued a course in organic farming, rural development and extension. I worked for over ten years as an extension officer and gained good experience working with family farmers. Later I established an NGO known as Maendeleo Endelevu Action Program (MEAP) that use participatory extension service to family farmers, where farmers contribute in identifying their needs and participate in addressing them. I enjoy working with farmers because of the orientation I was given at a young age.

Today, I involve my children in farming and home-based activities as a vital part of their education. I also encourage other farmers to share and involve their children in farming to provide hands-on education where the children learn by doing and through direct experience.

The impact of over-emphasizing academic education

Due to the over-emphasis on academic performance for children, parents have been reducing the time they involve children in farming and others never involve them. The school curriculum likewise does not provide opportunities for practical and informal education. This trend does not only deny children the opportunity to acquire informal education but also makes them less interested in family farming. As a result, there is limited intergenerational knowledge transfer between parents and children and an increase in rural urban migration by young people leaving the older population to do the farming. With fewer energetic young people involved in farming, there is increased likelihood of lower production capacity that affects both food and nutrition security among citizens in rural and urban areas.

It is therefore my urgent call for parents, school administrators and stakeholders to consider creating space for children to have access to both informal and formal education especially in family farming to grow them more fully as human beings and to facilitate continued production capacity for both food and nutrition security.



Photo by Joseph Karangathi Njoroge

Learning to **respect local knowledge**, the **hard way**! by Sarah Appiah, Ghana

Learning to respect local knowledge, the hard way!

by Sarah Appiah, Ghana

It was a sunny Saturday morning, full of life and energy as we arrived in one of the beautiful and serene farming communities in the hinterlands. Whilstonecouldeasilybeputoffbytheroughness of the roads to the community, the freshness of the air in such forest zones becomes soothing to the soul and one could unconsciously forget the toil of such travel. I must emphasize that joining a team of researchers for a stakeholder dialogue in that community, on one of the controversial guestions that had remained unanswered in my mind, was a joy and I arrived full of anticipation. I was intrigued about why local farmers will shun an idea or new farming practice that could reduce the cost of farming and perhaps increase the yield. I kept asking myself: "Why would they be so convinced about their traditional way of doing things? Are they getting any better results, or are there better options they know of?"

Mr. Agyekum, the district extension officer, began to lead a discussion on the topic among local farmers in Badukrom, a small farming community in the Ahafo Region of Ghana. The discussion started in small groups, on the question: "Why do local farmers fail to adopt new farming practices?" The participants of the meeting included cocoa farmers, vegetable growers, community level extension officers and the research team. As I move around with a few others to monitor and note the responses from the groups, it was illuminating hearing the responses of these local folks.

Prior to this meeting, a project was launched in the area that aimed to reduce inorganic fertilizer usage among cocoa farmers by introducing no or low-cost organic fertilizers to farmers. The program aimed to improve good farming practices, improve yields and more importantly to reduce the cost of farming for these farmers. Trained community agriculture extension officers organized both off-farm and on-farm practical trainings to educate the local farmers on the new farming practices. From the initial feasibility report, they had seemed to support the idea. What then could have caused their disconnect, I wondered?

"

Oh, how mistaken we have always been thinking that we (as agronomists) know what was best for them. Why have we not thought about involving some of these locals in the development and validation of these modern practices?

As the discussions went on, we realized from their responses that the project did not take into consideration the premium local farmers place on traditional and social knowledge they have learnt overtime from their elders and colleagues with regards to fertilizer application. Culturally, certain brands of inorganic fertilizers have been branded as gold standards among farmers in the area. And these peer group

knowledge/ practices appeared stronger than the scientific knowledge or new practice they cannot testify to. Others had knowledge of other traditional means of fertilizer application and pest control, such as the use of the neem tree leaves and the likes that were not mentioned as part of the new practice. Citing examples of how this traditional knowledge has worked for some of them over the years, they appeared to suggest they know of better options traditionally that may work better on their farms than what they were introduced to. This may not necessarily be so, I thought, but one could now see the missing link. We have to respect their knowledge if we want them to own and adopt the new ideas.

Oh, how mistaken we have always been thinking that we (as agronomists) know what was best for them. Why have we not thought about involving some of these locals in the development and validation of these modern practices?

Then I began to listen to the responses more critically. The cultural and other socioeconomic factors, indigenous knowledge among others had a huge role to play in the process of adoption irrespective of how good or resounding a modern practice is. There we realized the context and the culture of the people is everything! And these perhaps explain why intervention projects worth millions of dollars have become white elephants in Africa.

Mushroom hunters: foraging mushrooms with my dad in Jhumlawang by Smita Magar, Nepal

Mushroom hunters: foraging mushrooms with my dad in Jhumlawang

by Smita Magar, Nepal

It was a good day. Sun and cloud were playing hide and seek creating a *komorebi* (sunbeam) effect in the forest near Syaubaari, Jhumlawang, where my dad and I were looking for edible wild mushrooms. It had rained the night before, so the ground was damp and squishy, giving leeches a chance to try to climb up my gumboots and onto my legs.

But I was not concerned. I had put on thick, long socks. The squelching earth under my feet felt soft as I took a deep breath of air that smelled of woods and decaying leaves. Then I noticed an unusual looking mushroom in the distance. I walked towards it quickly and crouched next to the big decaying log on which it was growing. Hidden behind the inner parts of the log's bark was a bunch of whitish-coloured mushrooms with branches that had blunt roundish tips. I realised I had never seen such a mushroom before. I wondered if it was edible. "Should I pick it or not?" I bent down looking closer. "What if it is poisonous?" I thought.

'Baba!'

'Babaaa!'

'Babaaaaa ooooooo!'

I called for my dad, louder each time, because the nearby Tumbasha rivulet had swelled up and was making too much noise for us to hear each other. He had gone a little further into the forest, where he used to look in previous years, to check other logs for *horma* (oyster) mushrooms.

"Is it edible?" I asked as I pointed at the mushroom. He crouched next to me, checked it and smiled.

"You have found the perfect mushroom!" he said proudly, "It is a coveted one."

Myfeelings of doubt and confusion were replaced with happiness when I saw how delighted and proud he was of my find. All morning we had not found enough mushrooms to have as a *tarkari* (curry) for our dinner.

"We call it *musakane* (mouse-ear)," he laughed.

He showed me the blunt looking tips of the bunch which were shaped like the ears of mouse. "Do you see the similarities?" he asked.



Photo by instagram.com/teentaare

I nodded happily. The similarities made me laugh. A warm feeling rose inside me, and we stood together. "I wonder what it tastes like?" I asked quickly.

"It is slightly crunchy and tastes divine with chillies, onions, garlic and tomato", he explained while my mouth watered thinking about the delicacy we were going to have for dinner. "Mmmmm, adding 'timmur (sichuan pepper) is a must!" my father continued as he licked his lips.



Photo by instagram.com/teentaare

My dad asked me to check the log for more *musakane* mushrooms. He explained that they are usually found in abundance. I walked round the log, crouched on my knees, and checked underneath it and lo and behold! There were more!

I was so excited!

"Just find the root of the bunch and give a gentle tug," my dad advised when he saw me struggle to pick them up. As we picked one bunch after the other, our bag was also getting full. I was about to pick the last one when he stopped me.

"Let's leave this one," he said, smiling. "We need something for next year too, don't we?"

I was happy to do so. If it was like a 'seed' for next year, then that was good. But if someone else came foraging and found it, then they would also get some *musakane* mushrooms like us for their dinner. When we returned home that day, I was extremely pleased with myself for finding a full bag of mushrooms and a new species at that. But this was not an unusual feeling. With each visit to the forest with my dad, I had always learnt something different about mushrooms. He would take me to the forest areas where varieties of mushrooms could be found and in great detail, he would describe the type of trees and logs which would have a particular type of mushroom and in which month of the year they flourished. He taught me how to distinguish between the mushrooms which were edible, and which were not. He was also cautious when it came to certain mushrooms and insisted that I not touch the ones which were poisonous. He would go into great lengths to explain how to recognise them, to look for subtle differences in colour and shape and distinctive markings. I always felt safe with him around.

As we walked together, each with our hand woven bags and walking sticks, he would tell me stories of how he learnt to recognise edible and non-edible mushrooms from his parents, his shepherd uncles, or his cow-herder cousins. He would show me the mushrooms and tell me about their nutritional and medicinal values, and how we could make them tastier for our tastebuds.



Photo by instagram.com/teentaare

"To find mushrooms, you must be familiar with forest, trees and know your logs," he would repeat on each visit we took. I enjoyed these moments immensely with him. So, I grew up eagerly waiting for mushroom season, for my mushroom hunting walks with him in the nearby forest and stories of mushrooms that followed.

Therefore, on the day I found *musakane* in August 2019, it was like reliving my childhood with my dad. After decades of separation, we were connecting again over wild mushroom foraging.



Photo by instagram.com/teentaare

As a young girl, I had been sent to Kathmandu from Jhumlawang, Rukum when Maoist insurgency began in the country, to continue my further education. With the ongoing civil war and no other means of connection except unreliable postal system, the learning about mushrooms stopped. When I was finally able to return to my village during a cease fire, nine years had already passed. And it was not the mushroom season. To my disappointment, the other few visits I could make in the following years were in different seasons too.

However, in this gap, I had a profound realisation. While I was studying in Durham, England I used to take long walks in the woods behind the Durham University looking for familiar herbs, flowers and fruits, trees and bushes, landscape, and mushrooms. And when I found the mushrooms, the thrill and comfort I felt made my homesickness a little less and breathing a little easier. I realised that finding mushrooms was like connecting with my dad, my village, my roots. No matter which part of the world I was in, the physical distance no longer mattered. When I saw the mushrooms I would be happy because it brought back memories of me walking with him in the forest, foraging mushrooms, bonding over mushrooms, learning about mushrooms, and listening to stories about people and mushrooms of Jhumlawang.

But I could never dare to touch the mushrooms found in the forests of Europe. Even when they looked so very similar to the ones found in Jhumlawang, I never had the confidence to give a gentle tug and pick them up for dinner. I could only look, take pictures, and experience the happiness of my find. There was no one to pat me on the back and look at me with pride and smiling eyes for my discovery. No one to stand next to me to tell me which months of the year, which trees and which logs held the most delicious mushrooms on this side of the world. In fact, to my utter disbelief, I came to learn that in many countries foraging mushrooms was highly discouraged and in some it was illegal. So, while finding mushrooms in a foreign land took me to my happy childhood of foraging with my dad in Jhumlawang and gave me a sense of being closer to the home, it also made me feel not quite at home.

Having spent too long feeling not quite at home, to my delight, I was able to return to Jhumlawang in March 2021 for a longer stay. It was a just few weeks before the six-month-long wild mushroom season was to begin. Right after the dry spell of winter when people of Jhumlawang struggle to find vegetables for curry, the mushroom season is welcomed with excitement and relief. Then the forest comes alive with different types of mushrooms throughout the season, as if it is taking turns to feed the locals one after another, as if it is ensuring they recover from the dry spell of the winter. So, children and adults alike make plans for foraging tours. They go alone or in groups as soon as it rains for a few days in May and the forest is alive with not only the chirping of birds but also their giggles, sounds of calling each other and singing. A sudden rendezvous can happen amongst friends and checking each other's bags to see what was found, then exchanging and sharing of mushrooms to ensure that all will get to eat enough is a common occurrence. Once they return from the foraging, mushrooms and other wild vegetables are also gifted to the elderly or the ones who no longer manage to go foraging.



Photo by instagram.com/teentaare

Not to miss this chance, my dad, now older, slower, and weaker than I remembered he used to be, excitedly planned for our mushroom foraging walks.

"What is there for my vegetarian daughter to eat but mushrooms!" he laughed and insisted on going foraging. I was concerned for him as he was not well, and COVID -19 cases were on the rise. But he was adamant about it. So, one fine day, we strolled off into the forest, our bags over our shoulders, our pointed walking sticks prodding the earth as we checked every log. He walked in front as he always did, looking for the logs he knew that used to have mushrooms. Many of the logs were no longer there.

"The ones I knew have long decayed away" he sighed during our search and then he philosophically added, "Reminds one of own decaying away, doesn't it?"

I smiled at him, trying to reassure him, but feeling like a giant against his now smaller frame.

Even after half a day of searching, we could not find enough mushrooms to even fill the pot for the day's dinner. My father could see my frustration and disappointment.

"The eight-months' long drought of last year must be the reason that there are not many mushrooms this season," he spoke softly, summarising our frustration. But we did not give up hope of finding more. We walked further to the log where we had found *musakane* two years back. But to our disappointment, there was no *musakane* nor other types of mushrooms either. The log had almost decayed away too.

"Don't you worry," he consoled me, "We will find something." True to his prediction we found some *mauripane* mushrooms on our way back. *Mauripane* is popular amongst locals with its woody flavour and is generally cooked with chillies, potatoes, garlic, tomato, and Sichuan pepper. I had easily recognised it on the bark of a rayesh tree as I had been introduced to it by him during one of our foraging walks in my childhood. I raised my head and looked at him for confirmation and there it was: a smile and pride at my find.



My speechless intervention and the discovery of a **woman** leader in agroecology

by Edwin Abwino, Zambia

Photo by Diana Mapulanga - CTDT

My speechless intervention and the discovery of a woman leader in agroecology

by Edwin Abwino, Zambia

On a working day of June 2018 under my previous organization, I visited Shibuyunji district to conduct my usual technical support to the extension staff as well as project beneficiaries. Having had a short meeting with the extension staff, we immediately proceeded into the field to conduct on-site visits. I felt enthusiastic that I had an opportunity to be in the field to share knowledge with the extension staff and farmers.

On the way, I saw a woman in the field by the roadside spraying chemicals without protective clothing. From the onlook, she had been using chemicals for a number of years considering the way she smoothly handled the sprayer.

A sudden urge rose inside me and I quickly asked the driver to stop the vehicle. I climbed out of the vehicle and immediately smelt the toxic chemical being sprayed by the woman. As I was watching her, a number of people passing were looking to see why we had stopped. On the other hand, the woman seemed only interested in getting the whole field sprayed and totally ignored my presence. As I smelt the strong stench of the chemical, I felt like I was the one spraying it!

Spraying chemicals without protective clothing is extremely dangerous as some of the chemicals can be inhaled, causing long term effects on a human being. Her field being beside the main road might affect a number of passersby. As I walked nearer, she suddenly took interest in my presence, and I think she could tell that I had something to say to her. She stopped spraying and waited for me to speak.

I did not know what to say or where to begin. So, I just stood there with my mouth open, speechless. She then greeted me in the traditional way and I greeted her back. "My name is Edwin Abwino and I work with an NGO that fosters agroecological farming," I said.

> Spraying chemicals without protective clothing is extremely dangerous as some of the chemicals can be inhaled, causing long term effects on a human being.

She replied by saying, "my name is Mrs. Anna Banda". And so began our conversation. She was a widow who had been growing maize for several years. She told me that she had five school going children and farming is her only source of income. I felt sympathy for her considering the responsibilities she bore alone. Immediately I spoke out what was on my mind. "Mrs. Anna Banda, may I know why you are spraying without protective clothing? Do you know that it is dangerous for you and it can harm your body," I asked?

She responded that there was nothing she could do except use the herbicides to control weeds in her field. I could see from her face and her expressions that she meant every word she spoke. She told me that she did not use protective clothing as it was expensive to buy and even to find in that rural part of the country. I spoke to her about agroecological practices which were sustainable for her soils and involved non-use of synthetic chemicals. She looked at me and for a moment, unsure, perhaps being skeptical. I further explained to her the benefits of agroecological farming and that the resources involved in such production systems are within her reach. Having shared that information with her, I then proceeded with my trip to see other farmers.



Figure 1: Mrs Banda with establishing an agroforestry nursery. Photo by Diana Mapulanga - CTDT.

In 2021 I joined Community Technology Development Trust (CTDT), a Zambian owned NGO whose work aims to build resilient farming communities, it promotes the management and conservation of agrobiodiversity, addresses household food and nutrition security, climate change mainstreaming, response to seed policy environment and gender mainstreaming.

During one of my field visits to Shibuyunji, I visited Mrs. Banda to check how she was doing on her farm. Upon arrival, I found her in the field this time with a hoe weeding and she had also engaged two men for labor. I saw that the maize crop seemed different from the previous one I had found three years ago. This one looked healthy and had very few weeds. Mrs. Banda stood up with a smile and a sense of appreciation. I was shocked to notice that she had recognized me after a long time. She walked towards me as I approached her. We hugged and she immediately narrated how she had tremendously improved in her production.

She narrated that after we had met, CTDT had sponsored her for a training in Sustainable Organic Agriculture which had changed her way of farming. She was now using environmentally friendly practices for her agriculture production. The moment I shared with her that I was working with CTDT, she got very excited. "I am very happy to learn that you are with the organization that has trained me in agroecological practices," she said. I later on invited Mrs. Banda for a training in agroforestry which she attended.

Mrs. Banda now practices agroecological practices such as agroforestry, crop rotation which have improved her soils on her farm. The costs of her inputs have also reduced due to lowering the use of external inputs such as synthetic fertilizers, hybrid seeds and herbicides. She said that the savings she was making in production were channeled to supporting her five school going children. "Mr. Abwino, I now use open pollinated varieties of maize accessed from the Community Seed Bank established by the community through the support from CTDT. Mr. Abwino, the seed allows me to recycle every season and I have reduced on the amount of chemicals I use on my farm."

In the absence of synthetic chemicals, Mrs. Banda now uses animal manure, compost, green manures, well-planned crop rotation, conservation tillage to gradually reduce weeds in her field and open pollinated seed varieties that enable her to recycle seeds each and every season. Her yields have tremendously increased due to improved soil fertility and use of other Good Agriculture Practices (GAP). Mrs. Banda no longer needs to use herbicides to control her weeds. Conservation tillage has gradually reduced the amount of weedseeds sitting in the soils of her field.



Figure 2: Mrs. Banda participating in agroforestry training. Photo by Diana Mapulanga - CTDT.

In addition, Mrs. Banda has become a model farmer for her community. She spearheads a Farmer Field School on Participatory Plant Breeding (PPB) where 25 farmers periodically gather to learn and share research knowledge. Field days have been conducted on her field as a window of disseminating agroecological practices to larger masses in the community. Her fellow farmers in Shibuyunji district can no longer resist the attractiveness in benefits of agroecological practices being pioneered by Mrs. Banda in the area

When I think back to that day in June 2018, I am somehow glad that I found her spraying her crops and that my sudden urge to stop, even though I was speechless, led to this great woman finding a healthy and natural way to farm and then to become a community leader!

Planting seeds of **liberation:** Reflections on Allyship in food systems by Shalini Pathi, South India

Planting seeds of liberation: Reflections on Allyship in food systems

by Shalini Pathi, South India

If you have come here to help me, you are wasting your time. But if you have come because your liberation is bound up with mine, then let us work together. - Lila Watson

It was the harvest festival in January called Sankranti on the land of the Deccan Plateau in the State of Telangana in South India. We were in the office of the Deccan Development Society in Zaheerabad Block in Medak district. And since I am from the capital city of Hyderabad, it was close to two hours from my residence to reach that place.



Photo by Shalini Pathi

It was a special and a festive season. Women from all over the villages, dressed in traditional sarees and tribal women in lambada dresses, were all excited for the "Seed Festival". I could smell the grains everywhere and I could hear the sound of the bangles of women settling down under the tree with their produce of millet.

Just a few months before that, I remember participating in the "Gattu" festival ritual in the same place. On that day, the seeds that were about to be planted were worshipped in front of the local deity. And now after a few months, we are here with the women to celebrate the "Suggi Panduga" or simply called the harvest festival. It is a festival celebrating farmers' produce and marking the end of harvesting season and a subsequent time for harvesting.

The role of urban consumers in food systems

I am a member of the urban consumer group called "Beyond Organic Hyderabad". Members like us have gathered there to witness the festival, invited by the women organic farmers of the society belonging to all the villages of the district the society works with.



Photo by Shalini Pathi

We all traveled in a bus along with the group from the city and we reached the place in the next two hours. I was feeling the excitement of the other people on the bus. Most of them came with their families especially with children to give them an experience of the farming and ecology of the place. When we arrived, I noticed that the women and the organizers were really happy to receive us and were making all the arrangements to make sure that the place was comfortable for all of us.

Our group of urban consumers took turns to meet the women farmers. They sat down and received the grains from the hands of the very farmers who produced it. And then we ended the ritual by celebrating and showcasing different varieties of traditional indigenous millets and food grains grown by them.

It was the first time that I was there, and I felt proud to be part of the group and also in awe of the way the idea was conceptualized. As urban consumers, we got an opportunity to honor the women farming community of our State by investing our money as an input for the farmers. Women farmers use this investment to start farming and later urban consumers receive the harvest from them. It felt like a great moment of symbiosis that I read in the textbooks but only experienced now.

Building resilience and capacity during the pandemic

It was a proud moment that during the pandemic and lockdown, when the entire nation was grappling with food insecurity, women from this society were able to remain food secure. Women farmers also were able to harvest the millets and other indigenous varieties and supply these to all of us. By doing so, they not only developed the capacity to mitigate their vulnerability but also helped us remain nutritionally secure.

We were able to be part of the model which that helped us to understand the farming process and the greater ecology. We were able to form that connection with the land and the farmers instead of being distant consumers. We felt accountable and an important stakeholder in the process. Women organic farmers were receiving support from us to have a functional food system and to create a consistent and streamlined process to take care of their farming needs. And in the same process they were supporting us with healthy and affordable food.

Events like these, helped bridge the gap between the women farmers who are the producers and urban citizens who are the consumers. These were moments of joy, gratitude and shared accountability, not just something to think or talk about but to feel the joy of being a part of the process and to commit to doing something together.

I also noticed that after becoming members of the urban consumer group, people from the city started valuing food and farmers more. We were more connected to the food. And the members wanted their children to learn more about food systems lime this and to be champions to advocate for it.

And as everyone was speaking about their experience, I noticed that the women farmers were grateful. But I felt that it was the urban citizens who had to be grateful that we got this opportunity. As an urban citizen, my health and nutritional security is all in the hands of the farmers. And yet, there were less than a hundred of us who were a part of the group.

I started questioning myself about the lack of respect that we as a society still give our farmer who feeds us every day. We are all in symbiosis. It is vital to create markets like this to us for mutual support, so that they are secure in their producing and making a fair living and we are secure in having a healthy supply of food.

I started questioning the mainstream idea and representation of a male farmer. More than half of the labour force in agriculture in India is female, yet women neither own the land nor are they considered farmers in their own right.

The role of allies in creating sustainable food systems

The most important question we face is our role as allies. Allies cannot be content with the status quo and benefit from the oppression. The women farmers belong to the oppressed caste in the hierarchy of the Indian caste system, from Backward Caste (BC) and Dalit (Scheduled caste-SC) and Tribals (ST's) communities. Traditionally most of the oppressed caste communities don't own any land. They also lack social or economic capital to move up the ladder and achieve mobility and thus prosperity. As allies, it is important for us to recognise this and support each other in dismantling the caste and gender hierarchies. And while doing so, it is important that we don't see ourselves as superior. Because none of us is free until all of us are free!



Photo by Shalini Pathi

I feel that much more needs to be done. I am glad that I am able to be a member of the urban consumer group to support the farmers to continue to grow food and achieve food and nutritional security for themselves and for us. But I also believe my role cannot end there. Because food systems are inextricably tied to greater social structures. And especially the structures that perpetuate oppression.

So, my role starts as a responsible consumer but must not end there. I believe I must still be angry and use this anger as a creative force to continue the work and to ask the right and difficult questions. To the group, to the community, to the urban community and to the society at large and surely to the state:

- How do the existing inequalities get reproduced and reflected in the food systems that we are a part of?
- Why do women farmers still not have a greater share of land, representation and access to capital to farm?
- How can urban communities become true allies in this process to create sustainable food systems in the state, country and the world?
- How do we create food systems that contribute to greater diversity, sustainability and bring back nutritional security that is fair to all the masses?

These and many questions are something that I am grappling with.

So, while I am grateful, I am also angry. And I think we must appreciate and acknowledge these both so that we truly become allies in achieving gender equality and annihilate caste while achieving ecological justice.

Rediscovering Ancient Seeds and Hope by Kushal Poudel, Nepal

Photo by Kushal Poudel

Rediscovering Ancient Seeds and Hope

by Kushal Poudel¹, Nepal

Dilemma

It had been a year since I completed my bachelor's degree in agriculture, but the dilemma of what to do next still continued. "Should I find a job or get a master's degree? If I am going for master's degree, which subject should I choose, what is my field of interest?" As I weighed up my strengths and the things I loved; mathematics, working with computers, data and statistics, teaching courses on Microsoft Office, I thought that maybe Data Science was my field of interest. However, I was equally driven towards the subjects related to environment and sustainability. I was in an extreme dilemma. All my friends were either studying, working or starting their own businesses.

I felt soaked by depressing thoughts. I had a bachelors with people expecting me to be fully independent and I was doing nothing! On top of that it was COVID-19 pandemic. With nowhere to go, the internet was my only friend. I started watching documentaries and taking online classes. I began with courses related to data science but after a while my interest started to fade.

I had started to watch environmental documentaries and movies and slowly I got

drawn into issues related to sustainability and climate change, loss of biodiversity, chemical pollution, food related pandemic, plastic pollution and many more. I could feel a deep yearning growing inside. I should save the coral reefs, I should stop plastics from entering the ocean, I should stop chemicals being used in agriculture, I should stop industrial agriculture, I should talk about green washing, I should save bees and other pollinators, I should save biodiversity and I should make people aware about the junk food.... Every time I knew some new issues about sustainability, I also wanted to do something for those issues.



Photo by Kushal Poudel.

Connection

So, I started to join each and every webinar and discussion related to sustainability which I found online. I listened and learned more about this issue. I connected with Ms. Shilshila Acharya, the CEO of an NGO working in Nepal in the field of sustainability and learned that her team had been conducting courses online



¹ Links: <u>https://www.recordnepal.com/planting-indigenous-crops-to-build-climate-resilience, https://ekantipur.com/pho-to_feature/2021/07/21/16268614847015835.html, https://www.youtube.com/watch?v=62yHkpilQ2o&ab_channel=TheRe-cordNepal, https://www.eadarsha.com/eng/in-a-path-of-success-farming-on-rocky-land-in-annapurna/. Contact Details: Kushal Poudel, Nepal. Khoj Pathashala Pvt. Ltd. <u>kuslpdl@gmail.com, https://www.linkedin.com/in/kushalpoudel/</u></u>

called 'Understanding Sustainability'. I enrolled. This was a life changing course for me. I felt that I had found the missing link in my understanding and was finally able to connect the threads to understand that the current condition of world – whether it was COVID-19 or Climate Change – was the result of human action or inaction. But CHANGE is inevitable and our individual and collective action is the only solution to save the mother earth.

Exploration

I spoke to someone I had met during one of the workshops related to Ancient Agriculture Wisdom. He was Dr. Chalise from my hometown. Dr. Chalise was a retired bank manager, but he had also worked in the field of exploring ancient agriculture wisdom and our forgotten and neglected food crops. He had collected seeds of different tuber crops from all over Nepal and was promoting their use. These tuber crops, which once were staple food crops of every Nepali residing in Hilly region, were now neglected and limited to a specific festival called "Mage Sakranti" and to a specific ethnic group.



Photo by Kushal Poudel.

Once the lockdown was lowered, I went to visit him at his home. We talked about the current scenario of agriculture and how 30 years of Agriculture Development in Nepal had failed. Nepal once used to export food but was now importing billions worth of agricultural commodities. He gave me the deeper understanding of Nepalese Agriculture and what was going wrong. He told me how development programs had failed as they were not aligned with our needs and conditions as they were prepared by funding agencies from developed countries and with their own mindsets that did not apply to Nepal. It became clear to me that I needed to understand our geography, our soil, our crops, our farming technique, our food and our overall culture.



Photo by Kushal Poudel.

I belong to the land of Everest, and I was fortunate enough to be born under a foothill of Mount Annapurna in a remote village. It was normal for a village kid to engage with his mother in agriculture related works, going into forests and wandering the rivers. My mother used to tell me stories from our ancient scriptures of Mahabharata and Ramayana and my grandfather used to tell me about our ancestry and our culture. Fortunately, with an interest in culture and tradition, I had taken a Sanskrit Language Course for about a year to enrich my understanding about our ancient culture and wisdom.



Photo by Kushal Poudel.

One day, during dinner, I asked my father about how the farming was during his days. He told me in detail about how they were self-sufficient in food, how they used to farm and the crops they used to grow. He told me that there used to be aromatic rice, rice with medicinal properties, finger millet which was much sweeter than the present varieties and many more, but all of these landraces² were lost and we were now farming imported, modern crops. The productivity was also decreasing, and so people had to buy from the market. The real meaning of the name Mount Annapurna, after which my village was named, signifies food abundance. In Sanskrit, Anna means grain or food and Purna means abundance. In my village, people celebrate every agricultural season and carefully maintain the fertile terraces to convert ounces of grains into tons of food, but this real meaning of Annapurna was lost from my village. I realised that this is not only the story of the tuber crops and my village but is the story of every village and of every crop. With the introduction of new and hybrid seeds, modern farming techniques and changes in our lifestyle, we have lost more than 50% of our agriculture biodiversity and we are importing 80% of seed and billions worth of chemical input that is harming our soil and environment. This is distorting our whole food system and our lifestyle.

At my next meeting with Dr. Chalise, we were discussing our culture and traditions. Among our cultural practices is Bala Chaaturdashi a famous Nepali Hindu festival. Everyone comes together at different blessed and holy sanctuaries of Hindu God Shiva where they offer Satbeej. Satbeej is the mix of varieties of holy grains, fruits and wild fruits along with coins to departed family members. Those plant materials, which can be grown and are used for plant propagation, fall under Satbeej. In other words, Satbeej are local crops along with wild edible fruits that are still available locally. He beautifully connected this festival with the promoting agriculture biodiversity and how this festival imparts the message to save seeds, the very source of life.

I had learned that the solution to our modern, corrupted food system was working the way nature does, farming naturally, using local crop varieties, understanding indigenous knowledge, knowing our culture and going back to roots. And this is also the solution to the greatest human threat of climate change. Natural farming is an ideal way to capture carbon back into the soil with our plants "simple" technique of photosynthesis.

From chaos to order and hope

With this realization, and my connection with nature and culture, I decided that I will work and devote myself to the field of regeneration.

² A landrace is a domesticated, locally adapted, traditional variety of a species of animal or plant that has developed over time, through adaptation to its natural and cultural environment of agriculture and pastoralism, and due to isolation from other populations of the species. It typically displays greater genetic diversity than types subjected to formal breeding practices.

I started with this forgotten and neglected tuber crops in collaboration with Dr. Chalise. I travelled from village to village collecting planting materials of tuber crops. But, collecting was not only the solution as we needed areas to plant, to conserve and to promote them. So, two months prior to the plantation season, we went in search of a plantation. We found this in my own village! We managed to negotiate with a local school to rent it for 10 years.



Photo by Kushal Poudel.

Instead of fertile agricultural land, we had chosen a neglected, rocky area with very low soil profile and a slope of 30-45 degree on which were growing small trees and little grasses. We undertook this challenge of regenerating this marginal land so that we could showcase it. If this kind of land could be regenerated, then everything was possible. In this neglected area, we planted the hope for neglected food crops. We used bamboo to make terraces and filling them with soil, manure and dried leaves from the forest. And, in the areas with no soil, we farmed in sacks filled with soil and manure. After planting these crops, they didn't sprout for more than a month and we were really demotivated. Then one day the rain fell, and the plants started to sprout, along with our hope. Every day, when I visited the farm, I witnessed the change. The changes from a small sprout to tillers and leaf, flowers and fruit. This was amazing and energizing, helping me forget the hardship and the chaos I had felt earlier.



Photo by Kushal Poudel.

Our work started with the seed fund that I had received as a loan plus some money from Dr Chalise. Later on, likeminded people started to come. At present we are operating on our own funds and haven't approached any funding partner to work with us on this initiative. We believe that we will showcase our work rather than go and seek funds. If anyone is interested to collaborate with us and will work for the same purpose, we are open to them. We are planning to develop this as a research farm. Now we are growing more than 30 varieties of plantation crops in less than a year with an agroecology approach. We are determined to rejuvenate this land with diverse crops and ancient ways of farming, known as Rishi Krishi. We will also be teaching this way of farming and conserving mother nature to others as well.

Today, while writing this story, I remember a conversation with my friend during our college

days. He had asked me, "Kushal, what do you think you will do in the future?" I had replied that I wanted to build a research farm. I had forgotten this, but now I realise that I had rediscovered the hidden seed inside me. Through the chaos my interest in saving mother nature and our ancient wisdom has emerged. Now I want to explore how our ancestors were connected to mother nature and how they interacted and shared this knowledge with the world.

Photo by Kushal Poudel



Rotti, rice or ragi? Let the women chocse by Bhargavi Nagendra, India

Rotti, rice or ragi? Let the women choose

by Bhargavi Nagendra, India

It was early February 2020. I was headed off with my camera crew, our field officer – Kumar and our NGO partner from Bagalkot to visit and film some Fiar Price shops. There were muttered rumors of a virus called COVID. WhatsApp messages, sounding the alarm of a pandemic, were traveling faster than the virus itself. But at that point the threat was still incomprehensible to us and seemed far away. Thankfully, it did not stop this very important tour of our project.

Our first stop was in the main city area of Ilkal, a few miles away from the District Headquarters. Ilkal is known for its very distinctive traditional saree woven by artists in North Karnataka. The Ilkal saree, a 6-to-9-yard of fabric, commonly worn by the women in India, is made of cotton as well as silk. The loose end or pallu of the Ilkal saree consists of alternate color stripes woven in pure silk and the use of a form of embroidery called Kasuti which reflect traditional patterns like palanquins, elephants and lotuses.

It was not very difficult to find the newly constructed shop as the local residents knew it well and could easily guide us to it. Fair Price shops have been important landmarks in India since the 1960s and are commonly called ration shops.

We were early and the shop had not yet opened. We were to meet our community elected members; the four Citizen Monitors, Ms. Saroja, Ms. Prema, Ms. Usha and Ms. Deepa by ten o'clock. They were part of the 716 other Citizen Monitors, across the state of Karnataka, we had been working with over the last 3 years. I realized that ten o'clock was early for them as they would have had to finish their household and farm chores, prepare and send their children to school and arrive here on foot. As a project lead, I had learnt this early on, after having been made to wait for more than an hour or two, but I knew that they would try their best to be on time as we were all eager to meet each other again.



Photo by thestoriesofchange.com/handloom-ilkal-saree

While we waited, Mr. Manjunath, our NGO partner, had managed to contact the Citizen Vigilance Committee (CVC) member of the shop. Unlike other shops across the state, we were lucky to find at least one of the Government selected CVC members because CVCs have ceased to exist in other places or many of them are not even aware that they are a part of the CVC committee.

This committee, if effectively functional as per the regulations, could transform the last-mile delivery of the Public Distribution System. It could enhance the accessibility of food for the most marginalized by ensuring transparency and accountability of the system. The committee has three women members selected randomly from the list of ration cardholders of a shop. Since each shop would have at least 500 ration cardholders - meaning 500 families - all the women of the shop could get the chance of being a CVC member at least once in their lifetime and serve their village, town or city. But this would only happen in a utopian world of a policymaker or practitioner. In our project, we had recorded stories of the computerselected CVC members not knowing that they were selected! Some had migrated out of that location; some were even dead, and databases were not updated. In cases where CVC members were documented to be present, they told us that they had not received any training in their roles and responsibilities from the government. Reviving these committees has hardly been a priority for the state.

It was already getting hot and we were still exhausted from our long travels. As the shop was yet to open, we decided to start interviewing the government selected CVC member who had taken time off to talk to us. This CVC member was a schoolteacher and was fairly acquainted with this Fair Price Shop where she had her ration card. She looked anxiously at the camera. Like many others she told us that she had not received any training from the government on her duties and responsibilities as a CVC member. She had only interacted with the Food Inspector once or twice in her long tenure of four years and had never met her other committee members. It was surprising that she had not heard of or attended our special Grama Sabha that was conducted as a part of our intervention.

Although *Grama Sabhas* are arranged only annually or for special occasions by the local Government, we had included this format of discussion in our intervention to revive the decentralized decision-making process. These meetings are attended by all the village inhabitants, local leaders and officials and provide a platform for the community members to discuss and take decisions on issues related to their ration cards. It was in one such meeting that Ms. Saroja, Ms. Prema, Ms. Usha and Ms. Deepa were elected by their community members to get trained by us and help resolve their woes of accessing food grains.

We could hear an old Splendor motorbike arrive near the shop. The shop owner's son, Mr. Suresh, had arrived just as we were wrapping up the interview and he came with a friend who helped him run the shop. He greeted me and shouted "Namaskaara madam!" as he arrived.

We got many shots of Mr. Suresh opening the store door to feed into our documentary as a creative filler, something that the Director of the movie wanted to add-in. The pandemic had just started but they had managed to keep a sanitiser bottle at the store entrance. I was impressed, but I didn't have the heart to tell them that it was not sanitiser in the bottle, but hand wash soap!

When Mr. Suresh's father, the manager and owner, came to the shop, he already knew why we were there. The NGO partner had explained to him that his shop was one of the best performing shops as per our intervention and we wanted to listen to his side of the story and get visuals for the film. Our project was ending after three years, and we were touring across the state to capture stories of change for our report and documentary. Since our CMs were yet to arrive, we decided to interview the eagerly waiting shop owner. He looked like he was in his 60s. His dark eyes were bright and interested. I sensed that he was an observant person. Although we had to prompt some answers to the questions, I was surprised that he was able to answer most of them without any help. I was amazed and pleased that he did not take any credit for the improvements in his shop but owed it all to the Citizen Monitors who were trained to take up the role of a CVC member. He told us that his shop was now compliant with all the regulations including maintaining shop timings, displaying

records, ration details, samples, putting up a complaint box and keeping the store clean. The beneficiaries would now know the times the shop keeper would be available and the days the shop would be closed. They would also be able to write down their issues or suggestions and drop it into the complaint box if they wanted it to reach the shopkeeper and expected an action towards it. Mr. Suresh attributed all of this to the constant nudge he got from the monthly visits by the Citizen Monitors. He felt that he was ready to face any surprise inspection by the government officials. The CMs had also helped raise his concerns to the Food inspectors.

He seemed quite delighted with the new shop that he had recently shifted to after many complaints about his old shop. I was very curious to know why they had changed the location. According to our metrics, this intervention was one of the biggest improvements among all the shops. Convincing a shop owner to shift to a new space and finding a new place in less than four months of interventions was very impressive. Even we had not anticipated this level of commitment from our volunteers. They continued to surprise us.

During the interview, our four Citizen Monitors had arrived. As we wrapped up our conversation with the shopkeeper, I prepared them for their interviews facing the camera. I felt that this recording meant a lot to them because all of them had taken a lot of effort to show up dressed nicely. They wore colorful sarees, with fresh flowers in their hair, colorful bangles matching their sarees and had neatly combed plaits. This made me very happy.

Even after Mr. Kumar prepared them by taking them through all the activities they had undertaken since the time they were elected, they buckled under pressure when they faced the camera. Our team acknowledged that the experience of speaking in front of a camera was indeed a daunting task, but no amount of encouragement eased them. We tried various locations around the shop, but it got even worse because many onlookers started crowding and scared our CMs further.

We almost gave up and decided to change the location once again for the interview. Our plan now was to capture the location of the old shop that had become the biggest hindrance to access the food rations for families enrolled in this shop. Our CVC members had described it as an isolated place with no street lamps and they had also reported instances when they were stalked and catcalled by drunk men in that area. It was a long walk from the busy main road and the afternoon sun did not make it any easier. I could imagine what it would be like to walk from here back home, carrying 20-25 kgs of food grains with no last mile transport. Under the Public Distribution Scheme, the biggest food distribution network in the world, each member of the household is counted in the ration card and is given 3 kgs of rice, 2 kgs of wheat and sometimes 1 kg of pulses at a subsidized or free price to people below the poverty line. They include some of the most marginalized sections of the country and India currently caters to 23.68 crore ration card holders and 80.75 crore beneficiary's dependent on the system (1 crore = 10 million).

When we arrived, I could immediately see why the shop had to move to a new location. The old shop was in a desolate building with iron rods used for construction poking out, concrete blocks showing and paint missing. With one wrong step, anything could go wrong especially if children accompanying mothers to collect their rations were left unattended. The hygiene of the shop in handling and distributing food grains had also been a concern among the consumers and buildings like this were easy targets for pests. In another study site, the Fair Price Shop was next to a cattle shed and this ended up contaminating the food stored in the shop! Hunger levels of people can be met by increasing the quantity of food but only the quality of the food can improve health and nutrition of a population.

I could see the camera crew growing impatient because the four CMs were still hesitating to speak even after changing multiple locations. We were running out of ideas and decided to take a chai (tea) break at a local store. I quietly asked the women what was bothering them. One of them looked up at me and said politely, "We find it really hard to speak freely with the shop keeper's son and his friend always circling around trying to eavesdrop during the interviews!"

How did I not realize this?

The camera crew, our FRO and I looked at each other. We had to come up with a plan. The only way to keep Mr. Suresh and his friend away was by distracting them. We split the camera crew and I decided to take Mr. Suresh with me to a food grain storage plant along with a cameraman to get his story of the problems he faces as a shop owner. However, I could see the limitations of the interventions. Even though we have trained these women with the information required, supported them to be able to identify the right and wrong, we could only push them up to a limit. They were still worried that Mr. Suresh would use their interview to take extreme action against them. We had to reassure them that nothing like this would happen. Our role in the community is limited during the intervention and we had to respect the invisible boundaries set in the community. Afterall, the CMs and their families would continue to live in the same community even after we leave.

The women now looked visibly at ease, and they did not stop narrating their story even after one hour. Ms. Saroja, Ms. Prema, Ms. Usha and Ms. Deepa told us that even though they were clueless when they got elected, now they were ready to speak confidently about entitlements, grievance redressal systems, compliance requirement of ration shops and were able to reach out to their Food Inspectors if required.

The newly found respect they had gained in their networks had motivated them to fight for many more causes! The Public Affairs Center, the organization I worked with, had taken up this project to explore effective models for improving community participation in the PDS.



Photo by agrifarming.in/jowar-farming

After a lot of trial and error we learnt that women who were a part of Self-Help Groups, when elected and trained, could bring about tremendous improvements in their Fair Price Shops, and make up for lack of state capacity. Our stories show that they could beautifully bridge the gap between the communities and government too. At this moment I was ecstatic. Their answers had not required any prompting from us! They were able to carry out the functions that a government selected CVC member, Food inspectors and the department had ignored for many years. While some of these issues seem transactional, it has grown into a bigger monster that will soon make the system more cumbersome and dysfunctional- impacting hunger levels.

They were proud of their achievements and now wanted to take up the most compelling battle with the Government. This was to request for a diverse and nutritious food basket as a part of their ration. They were upset that they were forced to switch from eating jowar, a type of millet largely made up their diet historically to rice. These women know what they want on their plates, and I know they will fight for the right diet to nurture their children and communities. Empowering them with the right information and agency will ensure that the benefits reach every person in the village.

A letter was sent later to the Commissioner of the Department demanding other food grains to be added to the ration for better nutrition based on the discussions in the Grama Sabha. Making systems more transparent and accountable will help many more to be informed, included and help them ask the right questions to the authorities! Tutorial videos, awareness pamphlets, a <u>documentary</u>, and a toolkit were made to get many more beneficiaries to be informed and involved. After the interviews, I went off to a local restaurant for a quiet meal. While I was reflecting on my conversations with our NGO partners, Citizen Monitors, Government Officials and my senior colleagues, I was snapped back to reality with something that sounded like claps from the kitchen. The sound of perfecting the dough came from the women in the kitchen making jowar rotti (millet-based bread), a bread eaten in the semi-arid regions of this country. I realised that our systems need constant shaping, nudging, flattening of bumps to make them function smoothly and effectively just like the smooth and round rottis made in the hands of the local women.

But also mind you, these rottis may not suit the ragi millet lovers of South Karnataka. Solutions need to be tailored to suit the local situations. Rotti, rice, or ragi, women will show us the way forward.

I wonder then, how many types of cuisines should we cater to in India alone?

Let me think about it while I relish my aromatic groundnut based hot shenga obbatu and a dallop of hot ghee with my team.





"Take me with **you**, **mother maize**" A tale of maize in peasant woman's livelihoods *by Georgina Catacora-Vargas, Bolivia*

Photo by Georgina Catacora-Vargas

"Take me with you, mother maize". A tale of maize in peasant woman's livelihoods

by Georgina Catacora-Vargas, Bolivia

Sara's childhood was full of sunshine. She remembers herself in farming fields under the sun, in the dry valleys of Bolivia. Many seasons had lacked rain which dried the soil and the air she breathed. The landscape became a palette of brown colours, intensifying the feeling of heat. Sara grew up planting seeds of different varieties of maize, every summer, in the furrows made with her father's hoe. Although at times she became dispirited, she tenderly recalls the voice of her father saying, "Keep going Sara!" and, with that, helping her to remain focused and hopeful for a future colorful maize harvest.

Sara's family and her ancestors are those who had developed the rich maize landraces in Bolivia, making the Andes an important center of genetic diversity of this crop. I got to meet her through research carried out by myself and a colleague, interested in the social and ecological dynamics and roles of women around maize landraces.

In peasant communities "maize is like a mother", once I've been told. She dresses with bright colors to provide a generous source of nourishment. She transforms into many traditional foods. Maize provides means of work and income to many women. She also heals if you get to learn the secrets of grandmas on which parts are medicinal. She shelters wisdom that is kindly passed from women to women through generations. Now, Sara is 45 years old. She is a single mother of three. Every summer she still sows maize. It is not an easy task, but the challenge of cultivating by herself is balanced by the confidence she has that the different varieties of maize will guarantee food and nutrition to her family. When talking about her past, she recalls what she learned from her father at the field, and from her mother at the kitchen and backyard. She passes those memories and knowledge to her kids.



Photo by Georgina Catacora-Vargas.

But she remembers the maize landraces that her parents used to grow and regrets that some of them are not available anymore. The reason, she tells me is that commercial varieties are slowly replacing them, eroding the genetic and cultural richness developed and sheltered for millennia in each maize landrace. Droughts cause loss of harvests and, therefore, of seeds reproduced and conserved by peasants. Traditional maize foods substituted by processed ones drain the motivation to plant different native maize varieties. Low prices paid to peasants discourage them to cultivate the maize landraces.

While listening to Sara, I hear deep and longstanding memories threatened by the current context, affects the women more than the men. "For women there is no help" she laments. "You have to be married or be a man to get a loan or any other type of assistance". Sara's words make me realize that her resilience lies on the support of her family and community, her own knowledge, the seeds she conserves, the agrobiodiversity -mostly landraces- she maintains, and the restoration and care for the life of her soil through agroecological approaches.



Photo by Georgina Catacora-Vargas.

Last season came with plentiful rain, blessing Sara with a good harvest. She produced eight maize landraces, each one with a different color, size, texture, and use. Her plot is rather small, but agroecologically managed, and so is biodiverse and productive. Among other vegetables and roots, she harvested enough maize to dry and store, both as grain and seeds. She got a surplus to sell as fresh maize cobs and as dried grains in the local maize grain market, where only women meet and trade. Some Tuesdays, when the grain market takes place, she woke up before the birds when it was still dark, to sell dry maize to an intermediary woman trader. In those journeys she returned home before the sunrise, celebrating that this year her family has food and income secured. "Perhaps my father came this season to help me", she says with a smile.

"

Sara's family and her ancestors are those who had developed the rich maize landraces in Bolivia, making the Andes an important center of genetic diversity of this crop.

"Sara, you planted more maize varieties this season. Where did you get them come from?", I ask.

"My midwife's grandmother gave them to me," Sara replies. "She had them hidden, almost forgotten, in her house roof. She was happy to share them. She told me that 'Now my seeds will keep alive."

"What triggered you to search for these varieties?" I asked her.

"It was the memory of my parents in my childhood. Sometimes we feel embarrassed about planting old traditional varieties because others plant the new, modern ones. But the new ones get sick easily while the old ones are very resistant. Now I have eight maize landraces. I will feed my children with them and I will find even more varieties."

Listening to Sara is like witnessing the power of memory and feelings. I recognize that what we

cultivate and what we eat, builds strong ties with our personal lives. "I grew up with maize," Sara says, "and if I lose my maize seeds, I will be poor. Our seeds are the richness that we, the peasants, have."

Sara keeps busy with her farming and home chores, and she is somehow shy. She has no time and, perhaps, not the personality for being a local leader. Yet, her journey of cultivating and recovering maize landraces speaks to and teaches her children, relatives, and neighbors. With her I learned that everyone can contribute to recover, conserve and re-value local agricultural varieties, and to contribute to revert their loss. Resilience lies in family and community connection.

This peasant women deeply inspired me. From her modest life, she shows that it is possible to foster strength, and the constant reproduction of human and non-human life, and to re-create intergenerational wisdom. She is a testimony of the wealth of biodiversity and the knowledge that peasant woman nurture, many times silently, despite the challenging, unfavorable contexts they must face.

In Quichua, a mayor native language in the Bolivian valleys, "Sara" means "maize", and that there is a traditional saying that recites "apamuy sara mama", which -as a kind of pray for protection and guidance- translates as "take me with you, mother maize". In Sara's community, at every Carnival, people dance with maize leaves carried on their backs inside native fabrics, as a way to celebrate and pay tribute to her, the maize. After all, it is true that it is more than a crop, but a truly caring mother, as portraited in the memory and narrative of peasants who grew up and were made with this bountiful grain, like Sara.

Where is the Food we need?

by Rafal Serafin, Poland

Photo by Fundacja Partnerstwo dla Srodowiska

Where is the Food we need?

by Rafal Serafin, Poland

It never ceases to amaze me why it's so difficult to buy locally produced food that is tasty, seasonal, fresh and chemical-free directly from farmers. Why do government policies and programmes always seem to favour big agro-business and supermarket culture?

It's Thursday. I'm on my way to collect this week's food order. I'm running late again. My wife, Marta, made the order on-line on Tuesday, but has taken our daughters to horse-riding.

The short drive to the Rohatyna tavern, where the Liszki Basket Club has its collection point is always an opportunity to reflect on where we are with access to locally-produced food in Poland. Increasing the contribution of locally-produced food in Poland's food economy has been a concern of mine for many years now: first as a campaigner and now as an IT and organisational solutions provider for those wanting to establish or grow local markets for locally produced food in their area.

Unlike much of Europe, Poland is a powerhouse of small farms. With its 1.3 million mostly small farmers, Poland should be awash with locallyproduced food. But that's just not the case. There are 130.000 farms in my region of Malopolska. Most are small, family operations – less than 4 hectares in size, often fragmented in several pieces and focused on producing for their own needs. There's lots of part-time farming and important food traditions. These are holdings that survived the attempts of the communists to nationalise farmland and create state farms after World War II.

Most farmers produce primarily for their own needs because they can't connect to the consumer who wants to buy their products. At the same time, supermarkets would have us believe that there is no alternative to what they have to offer. And the supermarkets in my area in and around Krakow are certainly NOT focused on offering food produced by Malopolska farmers. They would rather convert them into their customers.

The Liszki Basket is a possible solution. Located just outside of Krakow, it operates as a kind of virtual marketplace, where you can buy products directly from farms in the area. Just as in a physical market, each week farmers put on offer what they have to sell. Consumers, who have joined the Club, can order on-line and choose a collection point. In these Covid times, there is also home-delivery. But my family always likes to collect in person from the Rohatyna tavern. This week, Marta did the ordering and my task is to collect and pay for the order. We are consumers who have been buying regularly through the Club for nearly five years. It's a once-a-week domestic ritual for us now.

But why only once a week? Perhaps I can talk to Dagmara who started the Club and has been nurturing it ever since. Once a week is not enough. I had to go to Biedronka – the local supermarket just a few days ago and ended up buying vegetables. Couldn't wait till Thursday. We could and should be buying from the Club at least twice a week.

Difficult beginnings

When Dagmara moved to the village of Kaszow, just outside of Krakow, she wanted to have

access to food produced by local farmers. Eating locally produced food seemed the best way of assuring quality, freshness and authenticity. It stands to reason that farmers keep the best for themselves and their families. She managed to persuade a group of 5 or 6 farmers from the Liszki area to sell part of what they produced through what would become for them a new distribution and sales channel.



Rohatyna tavern – Liszki Basket collection point. Photo by Rafal Serafin.

Barbara and Krystyna, who are today stalwarts of the Liszki Basketl, were not convinced to begin with. They never aspired to setting up businesses or trading, but they were interested in some extra income from selling what they already produced and very much interested in finding ways to involve their children who had moved to the city and turned their back on the part-time farming family traditions. The Liszki Basket has given them these things and more. Krystyna has been selling regularly also at a farmers market in Krakow, attracting customers to the Liszki Basket, whereas Barbara no longer gets up to get the 6 am bus to clean offices in Krakow. She's focused on producing different flavoured versions of her pickled gherkins, which now generate a regular income. Her husband has adapted the kitchen and built storage. And her son helps out with the marketing.

Having also moved to Kaszow with my family, I helped Dagmara turn her Liszki Basket idea into a reality as part of my work at an environmental NGO. But it was Dagmara who had to interest local farmers in the scheme on the one hand, and on the other to cajole all our friends to buy regularly from the farmer group. There was no software. Just the telephone and email, coupled with organising an informal collection point on Krystyna's farm, located in the middle of our village of Kaszow. It was not easy. Because just a few years ago, our village was seen by Cracovians as being in the middle of nowhere, whereas local farmers were suspicious about city folks.

We don't want to get into any formalised selling system, farmers told us. We have enough problems with sanitary inspectors, tax inspectors and other types of inspectors poking their nose into our affairs. And anyway, we only deal with people we know. That's what the farmers told us. As local food advocates, we were astounded to discover that regulations prevented farmers from processing and selling food from their farms to customers. To do so, they had to register as businesses and lose their farmer status. That was new to me. So, we connected with the Agricultural Chamber and campaigned successfully with them and other local food advocates for policy and regulatory changes that now allow farmers to process and sell their products directly to customers. There were dozens of meetings with parliamentarians and government officials, media events, conferences and awareness raising in schools. It's all taken for granted today.

More about the Liszki Basket: Film: <u>https://www.youtube.com/watch?v=GS3jg6fr_80</u>, Weekly shop: <u>https://zakupy.ko-szyklisiecki.pl</u>, Good practice description: <u>https://prostoodrolnika.pl/wp-content/uploads/2019/12/Buyers-Club-good-practiceSept2019.pdf</u>, IT PLM software: <u>https://local-food.pl/en/it-plm-software/</u>, Short food supply chain solutions: <u>https://local-food.pl</u>.

Competing in the market-place

Fast-forward 5 years. Today, there are over 30 farmers selling and more than 400 consumers regularly buying over a 100 products via a sophisticated software platform that was developed and tested by the farmers and consumers coming together to form what is today the Liszki Basket Club. It's a pretty slick operation today using an IT platform - you couldn't manage all the transactions and processes with just a pencil and piece of paper. The IT platform is the key in that it enables all the intermediary functions of packaging, logistics, settling transactions, marketing, collection points, quality assurance and product development to be shared among the producers and consumers involved. There's no need for volunteers as in food coops or community supported agriculture.



My order this week – ready for collection. Photo by Rafal Serafin.

But increasing sales and keeping costs in check continues to be a challenge. This means that Barbara, Krystyna and the other farmers involved are now not only tracking their own costs and sales volumes on the IT platform, but are figuring out what can be done with others to increase sales volumes without resorting to intermediaries. In other words, what would it take for my family to buy more from them?

So, still on my way to collect this week's food order, I couldn't help feeling pleased with myself as I arrived at Rohatyna. Thanks to the Liszki Club, my family has had regular access to locally-produced and healthy food. I feel as if I know all the 30 or so farmers involved, so I know who is producing the food. Typhoon potatoes from Krystyna, pickled gherkins from Barbara, organic apples from Adam, traditional hams and sausage from Artur and seasonal vegetables from Łukasz.



Photo by Fundacja Partnerstwo dla Srodowiska.

Innovating the hard way

I shouted out a greeting to the young girl at the collection point and made straight for the wooden crate marked with my number and filled with our order. I loaded everything into my basket and bags and made my way to the desk to pay for my order. The IT platform enabling Liszki Basket operations is pretty much taken for granted. It was developed and rolled out over several months through a process of the initial group of producers and consumers working with software developers and community organisers, including Dagmara and me. The software is constantly being adapted to changing needs and is being provided alongside organisational solutions to support Basket initiatives in other parts of Poland and perhaps also internationally.

"Why are they so slow to introduce on-line payment?" I thought to myself. "I really must talk to Dagmara." In other parts of Poland, the software platform has been adapted to support payments on-line and offers a whole range of new features. Having waited my turn in the queue, payment took just a few seconds. For the girl at the desk, I was just one of 400+ customers. I couldn't remember her name, though I remember Dagmara telling me she was the daughter of our Liszki Basket farmers. It's great to have the farmers' families involved. And even better for me to be seen primarily as a consumer rather than initiator or founder. Dagmara is also in the background these days. It's the farmers and their products that are front-and-centre. But Dagmara is the one that still makes things happen.



It's Thursday - boxes ready for collection. Photo by Rafal Serafin.

I'm sure there is good reason why they're not rushing into on-line payments. The Liszki Basket Association, which operates the Liszki Basket and has rights to the software, brings together the farmers involved. They're very good at protecting their interests, especially when it comes to introducing improvements. We need to talk through the risks, costs and benefits of introducing on-line payments and trialling the logistics module we have been working on together. Perhaps there's something I haven't considered. This is important because for advocates of locally-produced food, the task now is to figure out how farmers can collaborate better with each other and with consumers to outcompete supermarkets and their expensive marketing of industrialised food that too often masquerades as locally-produced food.

Better software and on-line marketing is part of the solution, but only part. Much better to think in terms of what it would take for families like mine to buy less or nothing from the supermarket, and buy instead from the Liszki Club. For my family, on-line marketing will not make a difference. But buying twice a week might.



Janusz supplies traditional bread. Photo by Fundacja Partnerstwo dla Srodowiska.

What pleases me most is that there are so many advocates of locally-produced food these

days. More and more farmers are interested in selling directly to consumers. In turn, more and more consumers are taking food seriously. It's no longer an ideological thing. The focus now is on working out practical organisational and collaborative solutions that put farmers and consumers in charge rather than intermediaries. The government has included an emphasis on markets for local food in its priorities. That's what Covid has done. It's shaken the food system as we've known it to date. It's not just efficiency in providing cheap, year-round food that now matters. It's also food security and adoption of healthy diets. Access to food and connecting consumers with those who produce it is now important. Many are realising that it's good to have farmers in your community.

Not such a rosy future for small farmers

But can the growing interest in local food be turned into increased sales in the Liszki Basket? Running the Liszki Basket continues to be a struggle. The onslaught of supermarket culture is hard to deal with, especially as it has taken on the rhetoric of locally-produced food in what is now pretty aggressive marketing. Portugueseowned retail is Poland's largest supermarket chain with the German and French ones not far behind. These companies control Poland's food retail market with multi-million dollar advertising and expansion to rural areas with the introduction of smaller shops. Now they're promoting local, fresh and organic food in just the same way the Liszki Basket was just a few years earlier.

A new portuguese owned retail supermarket opened up a couple of years ago near the Liszki Basket collection point, along with the outward sprawl of Krakow that is turning our rural area into suburbia. The threat to the Liszki Basket is tangible, irrespective of national government declarations that locally-produced food and the farmers that produce it are a priority. The grantaid to support local food initiatives, along with tax and other incentives for small farmers, won't make much of a difference in the short term. It's the marketplace here and now that matters.

> Unlike much of Europe, Poland is a powerhouse of small farms. With its 1.3 million mostly small farmers, Poland should be awash with locally-produced food. But that's just not the case.

The Liszki Basket offers something different to the local supermarket, which always seems to be full of customers. The Basket is all about access to fresh, authentic, seasonal and tasty food of known origin, putting money in the pockets of those farming in our area - keeping them in farming, keeping our traditions and landscapes alive! We're talking about decent livelihoods and rural living. I just don't believe in the big chains rhetoric. They just paid a huge fine for mislabelling imported food as Polishproduced food. Food fraud is the order of the day. One thing I know for sure is that they don't see our local Liszki farmers as suppliers. They're more interested in turning them into consumers. As consumers we will lose also if our farmers disappear. But convenience coupled with marketing are big things. Convenience trumps everything.

I wondered about the other Liszki Basket customers – how are they thinking about these things? Are they also getting frustrated? Perhaps we can find ways of making the Liszki Basket more convenient. What will it take to get them involved in testing out our new logistics solution based on making better use of all the transport and storage resources in the control of the producers and consumers in our Club? What about all those people from Krakow who have moved out of the City. Certainly, the farmers involved will have ideas as many of them sell also to shops, the farmers' market in Krakow and organise on-farm sales. Another reason to talk to Dagmara.



Artur continues the tradition of cold cuts, which have made Liszki famous. Photo by Fundacja Partnerstwo dla Srodowiska.

That brings us to Dagmara. She's the one who started the Liszki Basket Club and is still very much shaping its operations because she is always talking with the farmers and the consumers. She's not an intermediary, but rather sees her role as serving or nurturing the Basket. And she's always ready to work with me in trying to help others who are trying to initiate Basketlike local markets. Many of our local governments are now getting involved and ready to make the necessary investments in mobilising farmers and consumers, software and organisational arrangements. That's another consequence of Covid. It's good to have farmers farming in your jurisdiction.

Reframing the intermediary

Until recently, no-one really stood up for the small farmer. And over the past 20 years, we've lost much of our small-scale food processing capability. Consumers celebrated the advent of supermarkets and supermarket culture after years of communism and food shortages. But now consumers are taking more of an interest in what they eat and where their food comes from. But this is not enough to mainstream markets for locally-produced food in our food system. Our Liszki Basket experience suggests start-up funding is only part of the story. You need a Dagmara with an interest in creating and nurturing the market through organising collaborations between farmers and also between farmers and consumers. That's not easy. You need IT tools to enable decentralised transactions, logistics and marketing that keep producers and consumers in charge rather than intermediaries. Software solutions make this possible, but they will not be sufficient. You also need some form of legal entity under the control of the Basket that enables tracking and processing many transactions without having to resort to an intermediary or causing bottlenecks. All this has to be in compliance with prevailing tax and sanitary regulations. No-one said creating local markets was easy. It's even more difficult, when you are up against the supermarket culture, where it is the intermediary

who shapes the market. But the solution needs to be people-centred that's for sure.

The challenge now is how to compete in the marketplace by growing in scale and impact without resorting to intermediaries who tend to extract the lion's share of the value generated.



Tadeusz and his family is a Liszki Basket stalwart. Photo by Fundacja Partnerstwo dla Srodowiska.

In reframing agricultural and rural development policy, the Polish government is now seeking to work out how to replicate initiatives such as the Liszki Basket across Poland. What is still not fully appreciated is that the power of the Liszki Basket, or more precisely the farmers involved in it, comes from the fact that it is farmers like Barbara, Artur and Krystyna who have become visible to consumers. Households like mine know all the farmers involved and all the products they produce. We have our preferences, but we can always choose. In turn, the farmers know their consumers. Almost everyone who was involved at the beginning is still involved - buying regularly. I don't recall an occasion where someone made an order and did not turn up to collect and pay for it. There's tremendous loyalty, but it is based more on mutual benefit and a sharing of risks

and costs than on a joint organisational structure such as a cooperative.

Put simply, those involved extract individual benefit from joint or collective action. But to compete in the marketplace, the Liszki Basket needs to constantly grow and adapt. The IT platform co-created with farmers, consumers and IT people is an opportunity for this. It's a platform because it operates like a virtual farmers' market. It provides for variety and can be scaled in terms of the range of products offered for sale, the numbers of producers and consumers involved and sales volumes. But it's the farmers and consumers who must be in control rather than intermediaries. That's why local governments and other organisations that don't aspire to profiting as transaction intermediaries need to take on the role played by Dagmara. The value and benefit stems from local food markets - rather than supermarkets growing and prospering around us.

As director of the Polish Environmental Partnership Foundation, which had received a large grant from the Swiss Government, I was very visible in the first years of the project. With Dagmara, it was the same. She had developed the initial concept of the Basket and helped to secure the money to get things going. The producers (and consumers) involved were pretty much invisible at the start. That's all changed. Both Dagmara and I as initiators and shapers are pretty much invisible and taken for granted today. It is the farmers, like Barbara and Krystyna, who are visible, along with their products. They are pretty much in charge. The focus is not on grant-aid or subsidies, but on improving sales. That's why we'll succeed in working out how to introduce a second market day, along with on-line financial transactions. But it will mean working out together the best solution. There's a good reason why it hasn't happened yet.



Stanisława is a Liszki Basket producer. Photo by Fundacja Partnerstwo dla Srodowiska.

The key has been to make the invisible more visible. When something's invisible we can't see it, even when we look. We don't know what we don't know. Making organisations, relationships, interactions, assumptions, and individuals more visible means freeing them from their assumptions and the assumptions of others. It's about the rules of the game. Once these become visible, they can be changed. It's when the rules are invisible that we are prisoners of what we don't know.

But the Basket is not just about making farmers and their products more visible, it's also about understanding the role of the intermediary and also making that role more visible in order to find ways of sharing it among buyers and sellers. With new IT technology solutions, social media, circular and solidarity economy and smallscale food processing solutions, local markets for locally-produced food with many-to-many transactions can be scaled as never before with no single individual or organisation 'in charge'.

Transforming our food system

What is now at stake is not just a logistical or business re-arrangement, but a paradigm shift or transformation of the way our food system can operate. The key lies in providing an IT platform that offers ways of decentralising and sharing the intermediary functions in ways that cultivate collective self-confidence and agency among the producers and consumers who have hitherto had little or no voice. Local food systems, like the Liszki Basket, are becoming a counterpoint to the hierarchical, centralised command-andcontrol solutions so favoured by agro-business and foreign-owned supermarket chains. By competing in the marketplace the Liszki Basket, and other initiatives like it, are demonstrating that horizontal or decentralised alternatives to business-as-usual are not just desirable, but possible This is an obvious threat to corporate culture and a real difficulty for government bureaucratic culture, which struggles to let complex systems sort themselves out with their emphasis on interactive and adaptive learning.



The Liszki Basket organises also direct selling days. Photo by Fundacja Partnerstwo dla Srodowiska.

Yet with our million or so farmers now more visible than ever, changing consumer preferences, coupled with a recognition that the landscapes, biodiversity and cultural and natural heritage we cherish, we have a real chance in Poland to reorient our food systems to something that is more horizontal and more sustainable. By treating our small and parttime farmers as a resource and opportunity as opposed to a burden and problem, we can create the conditions for many Liszki Basket initiatives across Poland. If farmers remain invisible and taken for granted, it will all be business as usual with agro-business, supermarket culture and big government, tightening their grip on the food market, asserting that local markets for locallyproduced food are simply not viable. But the fact that the farmers themselves in Poland no longer want to stay invisible represents our best chance for a food system in Poland that is not just more sustainable than what we have now, but one which provides us with the fresh, tasty, seasonal, chemical-free food we want as consumers.

Bringing home this week's groceries from the Basket made me think of all those others in Poland and around the world who have had the chance to buy directly from farmers. There's more and more of us. It was somehow reassuring to think that there are so many farmers and consumers today trying to work out new ways of growing, making available or accessing locally-produced food. I was certainly not alone. Self-organising local food arrangements need to proliferate in ever new ways and become more of a mainstream, so as to contribute to climate protection, soil restoration, water retention, community resilience and all those things they talked about in New York at the UN Food Summit. The need is for more space for interaction and learning between those involved in trying to do the same thing as us in the Liszki Basket in different parts of Poland and indeed in different countries and contexts around the world. That reminded me. "I must contact my friend Choongo in Lusaka to find out more about how he is dealing with mobilephone transactions in his farmers' market in Lusaka. They might have some good advice for our farmers in the Liszki Basket."

Who says my land anot be productive? A farmer's journey to a forest full of food security! by Magdalene Amujal and Gillian Avako, Uganda

Who says my land cannot be productive? A farmer's journey to a forest full of food security!

by Magdalene Amujal and Gillian Avako, Uganda

We are Magdalene and Gillian, trainers working for Kulika Uganda. We are passionate about seeing that people engaged in agriculture adopt sustainable farming practices which are easy to implement and have benefits for the people and the planet.



Legume shrub of Caliandara for animal fodder. Photo by Magdalene Amujal.

Kulika is a non-government organization working with rural communities to empower people to build their livelihoods and that of their communities with skills and technologies in Ecological Organic Agriculture alongside, social and business education and creative capacity building.

Let us introduce to you Lovinsa, a farmer who lives with her husband and five children in Lutisi Village, Namayumba Sub-county, Wakiso district where they have two acres of land. The family used to grow bananas and legumes on this land but until they came to us they could not meet their food and income needs. Lovinsa was always looking for ways of increasing the productivity of their limited land and improving her farming activities. In her community, extension service workers hardly reached the farmers and this meant that farmers couldn't get support to improve their farming methods.



Sweet Potatoes and maize. Photo by Magdalene Amujal.

When she learnt about Kulika Training Center through her friends, she made an effort to visit. During the visit, she was introduced to different agricultural technologies and practices. With encouragement and support from family and group members, Lovinsa then, full of excitement, registered to attend an eleven months Ecological Organic Agriculture Training course organized by Kulika Uganda. From the course, Lovinsa learnt of a basket of options for family farming from which she could make choices.

She was particularly interested in the food forest as a sustainable way of improving her farming systems. Lovinsa learnt ecological organic agricultural technologies and practices such as planting in rows, making organic manures, looking after livestock, agroforestry and integrating animals and crops. As trainers, part of the challenge of teaching this course is to help the farmers to let go of their conventional ways of farming which is not always easy. For example, training farmers to switch from one crop combination to a more convenient one is usually met with some resistance"



Plaintain (Matokee). Photo by Magdalene Amujal.

The training has 11 modules, all structured to support the improvement of household agriculture. The trainees' learning is divided into residential blocks (at Kulika Training Centre) and on-farm periods in between to allow utilization of knowledge and skills learnt. This enabled Lovinsa to practice what she learnt.

The frequent follow up visits by Kulika field officers coupled with her own interest and commitment meant that Lovinsa and family members would develop confidence in the processes and started believing in themselves. This unlocked her potential that led to the success of her food forest.

She worked hard and followed all the steps, establishing a food forest in a quarter of an acre with the help of her family members as well as the group members. All the materials for establishing the food forests were obtained from her own savings and from the group members.

Lovinsa learnt that household waste is valuable in contributing to the fertility of the

land. She established rubbish holes for both biodegradable (crop refuse and peelings) and non-biodegradable materials (plastics, broken bottles etc.). That contributed not only to the manure for the plants but also to better sanitation at home.



Sack mound vegetable growing. Photo by Magdalene Amujal.

A food forest is a garden which has all types of food crops all year round, regardless of the season. In the garden, there is maximization of the productivity of the land as the crops are carefully established following their characteristics e.g. feeding habits, nutrient needs, growth patterns and maturity periods. This promotes biodiversity and stabilizes the ecosystem. With all this in place, disease and pest incidences are reduced.



Pumpkin on an anti-hill. Photo by Magdalene Amujal.

Kulika Uganda provided the extension support to help her set up the garden and build her capacity to practice what she had learnt. You should pay her food forest a visit now. If you do, you will be inspired to find a wide variety of vegetables, bananas, potatoes, maize, fruits, leguminous plants (caliandara, climbing beans) and cassava. With this mixture of crops, by the second month of the first season Lovinsa was able to feed the family with vegetables.



Jack Fruit. Photo by Magdalene Amujal.

In her own words, moreover with a smile on her face, Lovinsa told us; "As a family, we were so malnourished. Consuming a variety of foods from our forest garden, we now eat a balanced diet and we are healthier. Even our neighbors comment on how healthy we look! When I have visitors, I do not worry about what to feed them. I simply go to my forest garden, get the food and prepare."

"I used to suffer so much during the dry season without green vegetables, but now I can enjoy vegetables throughout the year. This is because we use different manures to fertilize the soils and practice mulching. We have also channeled most of the runoff water into the gardens and with all that, our crops are sustained longer than before. We also adopted a small garden near the homestead where vegetables like kale are planted".

She told us she was now so happy that she did not need to spray her crops with harmful chemical pesticides. With the knowledge she got, she would easily prepare her own bio pesticides and bio fertilizers using locally available materials. The husband added: "Our home used to be dirty, but with these new technologies, especially the making of organic manure from the household waste we improved the hygiene in our home". That practice saved the family income from buying chemical pesticides and at the same time improved the soil fertility.



Pawpaw tree. Photo by Magdalene Amujal.

We at Kulika are encouraging farmers to revive traditional approaches to farming from our ancestors, and to be proud of their local and indigenous knowledge, combining them with modern organic, permaculture innovations. Moving away from harmful chemical pesticides and fertilizers not only produces better food and saves input costs but it also restores the soil which absorbs carbon dioxide and can contribute to climate cooling. After six months, Lovinsa and her family realized that the pilot forest garden could not give them the needed income, as most of the crops were consumed by the family members. So, she demarcated another ¹/₄ an acre for a second food forest. Although the food forest was established, the family had to wait for six more months to begin earning income from vegetables and other crops.

From their savings, the family added livestock to their farm: 2 pigs and 10 local chickens and a cow. This became an additional source of manure to enrich the fertility of the land.

With the improvements on the farm, Lovinsa started receiving visitors. Agriculture extension officers and other organizations came to learn about the food forest. She became a role model in her community. She got additional income from organizations who took their farmers to learn from her food forest garden and she was also hired to train groups of farmers by other development partners.

The family was now able to meet their basic needs: "We have enough food to eat at home and we enjoy a lot of fruits. My parents are able to provide us with books and pens for our education." one of the children told us with a proud smile.



Mango tree. Photo by Magdalene Amujal.

Lovinsa realized that a family can become food secure if the land is made productive by using simple and effective technologies. Her home became a meeting venue for her ten group members and they would always learn from her garden. Lovinsa remarks with lovely sense of a leader:

"I want all my group members to adopt the food forests in their homes because I have experienced how beneficial it is!"



Avocado. Photo by Magdalene Amujal.

Whenever they visit Lovinsa, they observed new improvements in her garden such as new seedlings planted, healthy crops and also her family commitment to the success of the garden. They realized that a family can grow a variety of food using food forest technology on a small piece of land! This was motivating to the members.

They all expressed an interest to start their own garden with the help of their new trainer! Thereafter the group members worked together on a rotational basis to establish forest gardens in each member's home.

The members also established a routine for visiting each other to encourage, advise, learn and pool labor to support one another where needed.

The members told us "We now have a learning center and agricultural trainer in our reach. We can access home-grown agricultural extension assistance easily!"

She is receptive to technologies that add value to her agricultural production. She has new ideas on how to improve her farming methods and to increase her income. Lovinsa observed that with the increased number of visitors to her farm, it was important for her to incrementally improve the quality of her work.

She plans to continue training the group members and provide her services to other

organizations. Her farm has been registered as a model farm that hosts other farmers during Kulika's 11-month training.

Kulika Uganda has continued supporting the family and other group members through extension visits and connections to other partners. Through social innovation, Kulika will ensure that Lovinsa becomes part of a training team to not only build the capacity of other farmers but as a source of encouragement and inspiration.

There are too many farmers needing support. It is through the experiences of local farmers like Lovinsa that the new ecological approaches, like food forests, can spread horizontally, far and wide. We need to cultivate local models, like Lovinsa, to spread the skills and technologies through farmer-to-farmers extension outreach.

Dairy cow. Photo by Magdalene Amujal.





- Family Farming Knowledge Platform
- Agroecology Knowledge Hub
- Family Farming & Agroecology Community of Practice
- Family Farming & Agroecology Community of Practice for the Africa Region
- Family Farming & Agroecology Community of Practice