When Nature Leads: Synecoculture in Northern Cameroon

Final report on technical assistance provided by CTCN to Terre des jeunes and CASE for a project in the communes of Garoua and Figuil between June 2024 and October 2025

March 24th, 2026

The leaders of the APES-Wantoumi local associations visit the Nyakira community plot in Garoua, early July 2025. Photo: Terre des jeunes.

République du Cameroun **United Nations** **CTCN** **Terre des jeunes** **CASE**

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Abstract

Smallholder farmers in northern Cameroon are experiencing severe climate stresses, including rising temperatures, declining water availability, and reduced crop productivity. These impacts are undermining food security, civil unrest, and increasing vulnerability, particularly among women, who face structural barriers to land access and bear disproportionate responsibility for household subsistence.

In response, project stakeholders assessed available adaptation options and identified **synecoculture**—a biodiversity-based, pesticide-free agricultural system—as a promising nature-based solution aligned with national climate priorities and Cameroon's NDC commitments to promote climate-resilient agriculture.

With the support of the Ministry of the Environment and partner organizations, a pilot initiative was launched in the municipalities of Garoua (capital of the Northern region) and Figuil (rural village) in the North Region of Cameroon. A diagnostic assessment, conducted through interviews, group discussions, and field visits, identified key needs related to water access, cooperative formalization, training, and technical capacity.

Twelve pilot parcels were then selected and divided into conventional and synecoculture plots to enable comparative analysis of productivity, water use, and environmental performance. The project helped 500 participants—70% women and predominantly youth—while generating openly accessible data to inform future scaling.

Preliminary findings indicate strong community interest in the tenets of synecoculture: biodiversity, organic inputs, and sustainable land management. Persistent challenges, including insecure land tenure, limited infrastructure, and low technical capacity, underscore the need for continued institutional support.

Keywords: climate adaptation, nature-based solutions, synecoculture, food security, water scarcity, capacity-building, resilience, Cameroon.

Background

Environmental issues faced by small-scale agricultural producers in Northern Cameroun

Increased heat due to climate change

Northern Cameroon, already dry and hot, has seen a temperature increase of 1.5 degrees Celsius over historical averages, and is projected to see a warming of up to 4.9 degrees Celsius over historical averages by 2100, comparable with global averages[1].

Rising temperatures in northern Cameroon threaten agriculture and livelihoods. Prolonged heatwaves reduce crop yields, dry up water sources, and increase the risk of food insecurity. Farmers struggle to adapt, as traditional methods become less effective. These climate shifts intensify poverty and migration in already vulnerable communities across the region.

Decreased access to water

Access to water in northern Cameroon is steadily decreasing due to prolonged droughts, erratic rainfall, and rising temperatures linked to climate change. Rivers and seasonal streams are drying up, while groundwater levels drop, making wells and boreholes less reliable. This growing scarcity affects households, agriculture, and livestock, threatening food security and health. Women and children, often responsible for

[1] https://www.carbonbrief.org/ interactive map, 2025-07-26, and Zeke Hausfather, “State of the climate: 2025 close behind 2024 as the hottest start to a year”, April 24, 2025, Carbon Brief (https://www.carbonbrief.org/state-of-the-climate-2025-close-behind-2024-as-the-hottest-start-to-a-year/).

collecting water, must travel longer distances, increasing their vulnerability. Tensions over limited water sources are also rising among communities, leading to heightened civil unrest.

Lower farming yields

Traditional crops like millet and sorghum are producing less, leaving families with shrinking food supplies. This decline is especially troubling because most households already live on the edge of food insecurity, with little margin for loss. When harvests fail, people face hunger, malnutrition, and are often forced to sell assets or migrate. The weakening of subsistence agriculture—the main livelihood for many—threatens community resilience.

Potential approaches

Faced with increased heat, lower water supplies and decreased yields, the business as usual approach seems risky, and the stakeholders have examined two main approaches: improvements to business as usual approach by increasing its efficiency; and looking at nature-based solutions (NBSs).

Business as usual

Land preparation is commonly done through repeated tilling using hand hoes or animal-drawn plows. This practice, while effective for short-term soil aeration, often leads to long-term degradation and erosion.

Farmers primarily grow staple crops such as millet, maize, sorghum, and groundnuts. To boost yields, chemical fertilizers are increasingly used, particularly urea and NPK blends. Pesticides and herbicides are also applied to control pests and weeds, often

without proper guidance or protective equipment. This can lead to environmental damage, pest resistance, and health risks for farmers and their families.

Conventional practices typically involve monocropping—planting a single crop in the same field each season. This reduces biodiversity and increases vulnerability to pests, diseases, and climate shocks. Water availability remains highly dependent on seasonal rains, and few smallholders have access to irrigation systems.

While conventional farming methods have helped meet immediate food needs, they are becoming less sustainable due to soil depletion, reduced productivity, and increasing input costs.

The business as usual approach would entail smarter use of pesticides and herbicides through training; and increased knowledge of crop prices for better decision-making. However, the conventional approach has the inescapable effects of impoverishing soils, a worldwide problem; and its high dependence on food markets make it unreliable for impoverished farmers with little buffer for mistakes. Further, although conventional farming can work in a stable climate, it is shown to have drastically decreased yields with variable temperatures and water availability.

Nature-based solutions (NBS)

Permaculture

Permaculture is a nature-based solution (NBS) and ecological design system that mimics the patterns found in natural ecosystems. Its aim is to design sustainable, self-sufficient systems that work in harmony with nature and humans while also preserving and restoring the environment and withstanding climate challenges. Permaculture originated in Australia in the 1970s and has slowly spread across the globe. The agricultural aspects of permaculture focus on growing food and managing land in ways that are regenerative and efficient. It replaces monoculture with polyculture and it does

not use pesticides or chemical fertilizers. It seeks to minimize waste by reusing and recycling its resources in closed loop systems that use multiple species and approaches to create resilience. While its focus is on agriculture, the scope of permaculture is broad and encompasses gardens, farms as well as whole communities. It can be applied to urban design, community building, economics, education and energy use.

Synecoculture

Synecoculture, short for synecological farming, is a nature-based solution (NBS) that has similar principles to permaculture but differs in scope and strategies. (It is not to be confused with syntropic farming, which originated in Brazil and seeks to mimic natural forest succession.) Synecoculture uses plant synergy to grow **nutrient dense food in smaller spaces** than typically needed in conventional farming. It goes beyond organic or permaculture methods by embracing maximum ecological complexity. Synecoculture's core philosophy is to attain biodiversity maximization by using dense polyculture that mimics natural ecosystems and minimizes human intervention. Synecoculture was developed and formalized in 2010 by Dr. Masatoshi Funabashi at Sony Computer Science Laboratories (Sony CSL) in Japan. It was designed to create highly biodiverse and productive ecosystems without the use of synthetic fertilizers, pesticides, or tilling. Instead of cultivating a few selected crops as seen in monoculture, synecoculture fosters a dense mixture of edible, medicinal, and useful plants that are grown together in close proximity, which creates a kind of chaos but also promotes natural pest control, improves soil health, and increases resilience to disease and climate change. Species are selected and arranged based on their interactions such as providing mutual benefits like nitrogen fixation, shade provision, or root symbiosis. On top of high yield food production, the benefits of synecoculture are that it contributes to soil restoration, water retention, carbon sequestration, and increased biodiversity.

Why synecoculture as a pilot project?

Synecoculture farming is currently being implemented in countries that are experiencing environmental stresses and food insecurity. It can be well adapted to countries with limited resources and in regions facing drought and high temperatures. It is ideal for use in small communities where subsistence farming is the norm. Over time, less human labor and cost is required; but it requires a higher upfront investment in knowledge, such as a deep ecological understanding of plant species' interactions, but then it has the benefit of lower ongoing financial costs. Cameroon is one such country where labour costs are cheap and drought is rampant, particularly in the north where our project is located. Cameroon's national climate adaptation plan promotes agro-climatological research and climate-resilient agricultural practices. Agriculture is a key focus in Cameroon's national climate strategy (NDC - Nationally Determined Contribution), with an emphasis on climate-smart farming.

Together with the approval of the Ministry of the Environment for the Protection of Nature and Sustainable Development (MINEPDED), this has led to the creation of our pilot project which brings synecoculture to two plots of land in Northern Cameroon, in the municipalities of Garoua 2 and in Figuil (Mayo-Louti). Our project aims to improve agricultural yields and offer sustainable alternatives for subsistence farmers by making the results easily accessible to the public.

Trap plants, used in synecoculture, attract certain pests away from economically important crops. They are irresistible to some pests, and thanks to their attractiveness, the pests leave other plants useful for consumption alone.

Presentation of the Project

Goals of the project

See the section “Results and lessons learned”, further in this document, to see how the following project goals were actually met.

Goal 1: Open metrics to compare conventional and synecocultural farming

We wanted to generate transparent, comparable metrics assessing the performance of conventional and synecocultural farming systems. By establishing parallel plots in Garoua 2 and Figuil, the initiative aims to evaluate differences in productivity, water efficiency, soil health, and overall climate resilience. Specifically, the steering committee collaborated with a synecoculture expert to define the following metrics to be tracked:

Metric	**Hypothesis (expectation)**
M1 : Amount spent on chemical inputs	Synecoculture plots require fewer (as little as no) chemical inputs; and conventional plots require more chemical inputs as the season progresses.
M2 : Observed biodiversity	Synecoculture plots exhibit a higher level of biodiversity.
M3 : Concern over water scarcity	Synecoculture plots are better at retaining water.
M4.1 : Concern over food security	Synecoculture plots increase food security
M4.2 : Concern over food quality	Synecoculture plots provide better quality food
M4.3 : Commercial value of food produced	Synecoculture plots provide higher value yields.

M4.4 : Number of harvests	Synecoculture plots provide more harvests; a key tenet of synecoculture is continuous harvesting.
M5 : Concern over pests in plants	Because of the lack of chemical inputs, concern is higher in synecoculture plots.

	Full methodology and metrics are available at https://www.terredesjeunes.org/synecoculture/metriques/

Goal 2: Build technical capacity of 500 participants, with 70% women and strong youth engagement.

We want project participants to continue using synecoculture techniques after the project's end. Several hands-on training sessions in synecoculture practices were planned, with the goal of directly training about 500 participants, with a particular focus on women and young people, who play a central role in local food production but often have limited access to agricultural training and resources. (Men tend to be more active in cash crops.) Workshops, field demonstrations, and collaborative learning activities provide participants with practical knowledge in ecological farming, soil management, and sustainable irrigation techniques.

Goal 3: Improve water-use efficiency and promote sustainable water management practices.

We estimate that synecoculture, being high-density and high-variety agriculture, will create conditions for soil to retain water more efficiently than conventional agriculture. This has been identified as a key concern of stakeholders during the survey (see "The Survey" section.)

Goal 4: Support farmers in adopting biodiversity-based, pesticide-free agricultural methods.

Monoculture and pesticide use contribute to soil depletion, a worldwide issue. The project promotes the adoption of biodiversity-based agricultural systems that minimize reliance on chemical pesticides and fertilizers. Through practical demonstrations and training sessions, farmers are introduced to synecoculture techniques that rely on dense polycultures and beneficial plant interactions to maintain soil health and naturally control pests.

Goal 5: Strengthen cooperative structures and enhance access to legal land tenure.

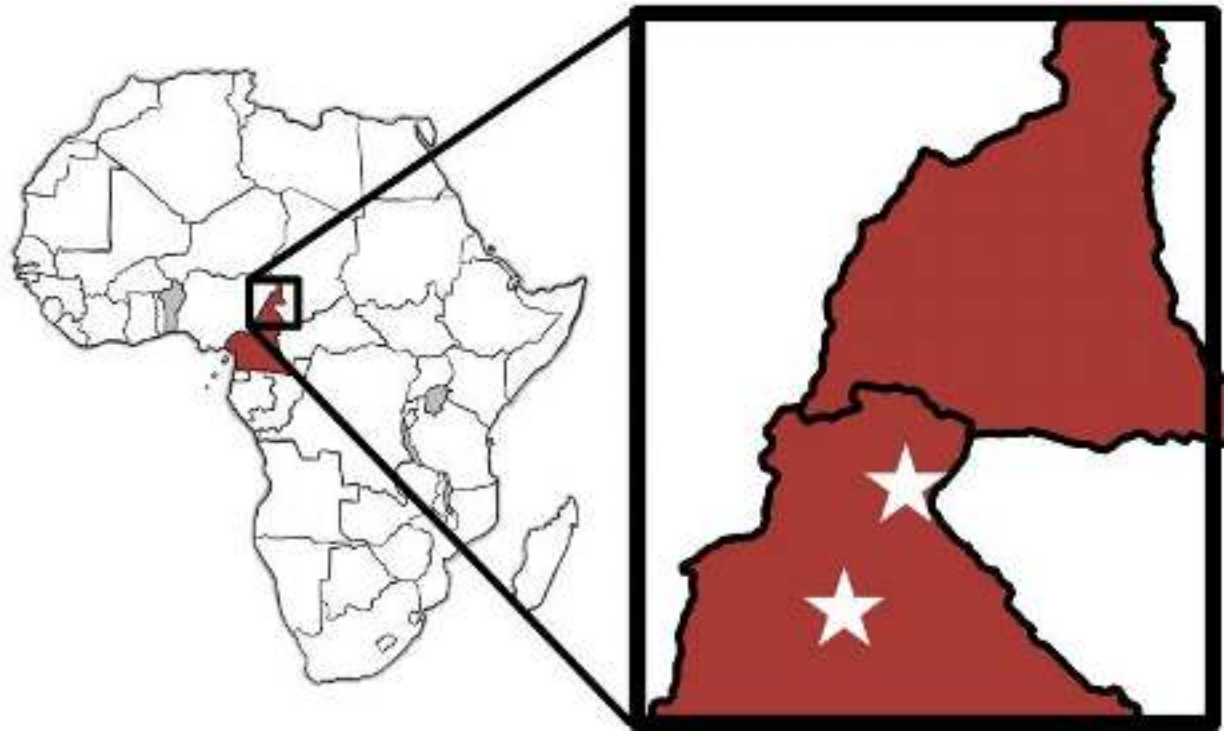
Strong local organizations are essential for the long-term sustainability of agricultural initiatives. During the survey, stakeholders stated the concern that economic control over agricultural production is crucial for change to stick. The project therefore supports participating groups in strengthening their cooperative structures and improving organizational capacity. This includes encouraging the formalization of producer groups, promoting transparent governance practices, and facilitating dialogue with local authorities regarding land access and tenure security. By reinforcing cooperative frameworks and improving institutional recognition, the project aims to help farmers access training opportunities, financial support, and public programs that can strengthen their agricultural activities.

Goal 6: Demonstrate a replicable nature-based solution for climate-resilient agriculture in northern Cameroon and elsewhere.

Ultimately, the project seeks to demonstrate that synecoculture can serve as a practical and replicable nature-based solution for climate-resilient agriculture in northern Cameroon. By testing the approach in real farming contexts and documenting its outcomes, the initiative aims to provide a model that can be adapted and scaled in other communities facing similar environmental challenges. The pilot sites serve as learning platforms where farmers, institutions, and development partners can observe the benefits of biodiversity-based farming systems and explore opportunities for broader implementation in similar climates and economic contexts.

The partners already have a network of eager participants in several French-speaking African countries as well as Haiti (see “Next steps and international expansion”).

Location of the project



The synecoculture pilot sites are located in the northern region of Cameroon, within the municipalities of Garoua 2 (Benoué Division, **the bottom star in the map, above**) and Figuil (Mayo-Louti Division, **the top star in the map, above**). A total of 12 parcels—distributed across local schools and community fields—were selected in collaboration with municipal authorities and beneficiary groups. These sites range from 240 m^2 to 1,460 m^2 and represent typical smallholder agricultural settings affected by heat stress, declining water availability, and land degradation. The parcels are public or community-managed spaces, accessible to local residents, youth groups, and women's associations participating in the project.

Gender aspects of the project

The steering committee developed the Gender Assessment and Action Plan (GAAP) to ensure gender considerations were fully integrated into the design, delivery, and evaluation of the technical assistance, rather than treated as an add-on. Because the updated CTCN GAAP template was not available until the final months of the project, a working version was used during implementation.

From the start, women were involved at every stage. Women farmers' associations were represented on the steering committee, participated in needs assessments, and helped shape key decisions. Trainings were organized to be accessible and culturally appropriate, taking into account religious diversity and women's time constraints. Youth were also engaged by locating pilot plots near schools so students could learn alongside their communities.

The gender assessment identified common challenges, including women's limited control over land, heavy domestic workloads, restricted access to credit and inputs, and low representation in leadership roles. In response, the project worked through cooperatives to improve access to land and resources, scheduled trainings around daily responsibilities, used practical hands-on learning approaches, and prioritized local training sites to reduce mobility barriers.

Women ultimately became the main drivers of the project's success. About 60% of direct beneficiaries were women, and they made up at least 70% of those trained in synecoculture techniques. Many reported improved access to resources, greater confidence in applying new practices, and stronger influence in community and cooperative decisions. Higher and more reliable yields also helped increase and stabilize household incomes.

The partners

CTCN

The Climate Technology Centre and Network (CTCN) — https://www.ctc-n.org/ — facilitates the connection between countries and climate technology solutions. It is part of the United Nations Environment Programme (UNEP).

Terre des jeunes

Terre des jeunes — https://www.terredesjeunes.org/ — is a network of NGOs based in Montreal, Canada, and active in 14 countries, focusing on community-managed environmental volunteerism since 1985.

CASE

CASE — Care Society and Environment Cameroon — is an environmental NGO active in Northern Cameroon.

In addition to CTNC, Terre des jeunes and CASE, the Government of Cameroon through its representative Témothée Kagombe, UNEP focal point in Cameroon, local communities in Garoua and Figuil, and Municipal officials and school representatives are active in the project.

Stakeholder involvement, governance, and management mode

Stakeholder involvement in the project is structured to ensure inclusive participation and transparent governance throughout implementation. Local authorities, municipal technical services, community-based organizations, and producer groups—especially women's cooperatives—are engaged from the outset in the planning, validation, and monitoring of activities. Governance is coordinated through a multi-stakeholder steering committee that provides strategic oversight, reviews progress, and ensures alignment with national and municipal development priorities. Day-to-day management is led by the implementing partner in collaboration with local focal points, who facilitate community engagement, data collection, and capacity-building activities. This management mode promotes shared ownership, accountability, and sustained uptake of project outcomes by institutions and beneficiary communities.

The Survey

Introduction to the survey

Once a steering committee with all stakeholders was put into place, our first step was to conduct a survey to determine the community's needs and expectations. The survey phase lasted about two months.

Our team began by identifying the necessary stakeholders that would benefit from our project. Our project manager in the field was joined by an investigator who also served as a French interpreter of the local dialect Fulfulde. The team held regular interviews with stakeholders. Together a diagnostic survey was developed to assess the needs of the stakeholders and to identify potential benefits and pitfalls. The survey yielded findings, conclusions and recommendations which we then used to proceed with our mission.

For the methodology of the survey, a mixed-methods approach to data collection was used. This included 23 interviews, 4 group discussions and local field visits which touched 47 respondents and included 30 women. Our team analyzed documents such as the project framework, budget, activity timeline, and reports, and supplemented this with qualitative and quantitative data gathered from government officials and project beneficiaries. Ethical principles such as respect for autonomy, informed consent, and data confidentiality were followed. The survey included a scale of 1 to 5 to assess the evaluation of the respondents' needs. The survey faced challenges such as limited access to some stakeholders and time constraints but mitigated risks through cross-checking data and applying mixed methods.

Analysis of Stakeholders Needs

Land Access

Our survey started by asking whether small-scale farmers organizations had access to cultivable land and whether each potential beneficiary organization has legal status. It found that 84% of farmers lacked legal ownership consisting of titles, donation or transfer certificates, and women faced significant cultural barriers to land inheritance. In regards to land tenure practices, we found that seasonal land rental is common and even land transfers through traditional leaders were often insecure. Questions on their legal structure revealed that most groups were not cooperatives legalized under Law No.92/006/14 August 1992, which limited their access to recognition, support or funding. Our observation was that there was a strong need to assist these groups in formalizing as legal cooperatives. Once legalized, these farmers could then be eligible for state support and receiving agricultural credits from banks.

Needs of all Stakeholders

Next, we questioned the performance and needs of small agricultural producers. We discovered that most of their economic activity was based on agriculture and small

trade. The seeds they used for farming were a combination of heirloom and improved variety. Seed demand surpassed the available supply, even though certain organizations like MINADER (Ministère de l'Agriculture et du Développement Rural) and technical partners provided improved seeds via grants. The fertilizers they used were a combination of chemical, foliar and organic. A large range of the farmers' needs were for tools and equipment, such as protective gear, inputs, water, security and fuel. Our survey revealed that these tools and materials were costly and often unaffordable for small-scale farmers.

As for the sectoral ministries, their priorities were:

- logistical support for travel and field monitoring;
- help with legal structuring to form and register cooperatives;
- training on the manufacture of eco-friendly fertilizers and insecticides;
- the establishment of local committees to oversee the project activities.

We identified that the specific needs for all stakeholders were for training seminars to build capacity in synecoculture techniques as well as the need for water infrastructure development. It should be noted that 100% of respondents stressed the critical need for better water access, whether for conventional or synecoculture farming.

Project Objectives and Expectations of Stakeholders

We looked at the relevance of our project objectives and how they aligned with the real needs of farmers on the ground. In order to do this, we asked three questions of our stakeholders and documented their responses, as follows:

1. We began by asking about the pilot community's **expectations regarding synecoculture techniques**. Their first expectation concerned a more efficient use of water and an overall increase in agricultural productivity. There was a strong interest in the development and adoption of improved farming and irrigation techniques that prioritize water conservation. Enhancing health and hygiene conditions within the community was also seen as an important outcome. Better management of natural resources was emphasized, particularly through improved data collection related to water use. This includes tracking water volume, irrigation schedules, groundwater levels, and total water consumption for crops. In addition, raising awareness about water-saving practices and sustainable farming methods was considered essential. Improved access to markets and outlets for selling synecoculture products was another key expectation. Lastly, stakeholders expressed interest in conducting a comparative analysis between conventional farming and synecoculture to better understand their respective differences and benefits.

2. We asked what **comparative advantages do organic fertilizers have in relation to chemical fertilizers**. Our survey showed that organic fertilizers, which are derived from plant or animal matter, offer several environmental and agricultural benefits compared to chemical fertilizers. They help preserve biodiversity, improve soil structure, fertility and microbial activity, all of which strengthens plant resistance to disease and pests. There is also less risk of contaminating ground water when compared to chemical fertilizers. Another perceived advantage of organic fertilizer is that it is slow release, therefore acting over a longer period. However, this process is temperature dependent with release proving more efficient in hot soil. A perceived disadvantage is that organic fertilizer has a lower nutrient concentration which requires a volume of 3 to 4 times more than chemical fertilizers to have the same effect. The disadvantages of chemical fertilizers are that over time they can deplete soil health, increase erosion and there is a risk of overdose, uneven plant growth, and lawn scorching.

A portion of the nutrients not absorbed by plants can contaminate groundwater. Additionally, the synthetic nitrogen fertilizer industry is responsible for emitting greenhouse gases. Their conclusion was that while chemical fertilizers act quickly, organic fertilizers offer long-term benefits for soil health and the environment, making them a more sustainable option.

3. Finally, we asked what were the **challenges and subsequent recommendations identified for the success of the project** at various levels. Several key challenges were highlighted. First, there is a significant need for capacity building, as there is currently insufficient technical knowledge and equipment available for practicing synecoculture. This also points to the necessity of improving both the technical and organizational capacities of synecoculture associations.

   Addressing low productivity will require the introduction of improved seeds and agricultural inputs, along with the establishment of robust phytosanitary monitoring and crop protection systems. Land use and infrastructure pose another challenge, as only 15% of arable and irrigable land is currently used, indicating a substantial underutilization of available resources. Finally, the lack of reliable data presents a barrier to effective monitoring and evaluation, making it difficult to support informed decision-making and assess project outcomes accurately.

   For project stakeholders, it is recommended to foster networking among workshop participants, form mixed municipal teams to guide the implementation of roadmaps, and develop localized municipal action plans. Additionally, there should be a strong focus on strengthening training in critical areas such as soil fertility management and crop protection within the practice of synecoculture. For technical and financial partners, the recommendations include training producers in the production of bio-fertilizers, supporting the establishment of synecological farming fields, and providing subsidies for seeds and other agricultural inputs. It is also important to facilitate the marketing and

distribution of agricultural products to ensure the economic sustainability of these efforts.

Conclusions

Conclusions of the survey reveal significant disparities among participants, largely due to the varied backgrounds of those involved in the project. While representatives from the environmental and agricultural ministries demonstrated a solid understanding of the topics discussed, and those from the education ministry showed reasonable familiarity, members of peasant organizations had only basic knowledge of the concepts related to synecoculture. This knowledge gap presents a clear challenge for educating and raising awareness among farmers to help them adopt synecoculture techniques effectively. Additionally, introducing solar-powered irrigation as an alternative to thermal pumping offers a sustainable solution, especially in off-grid regions like northern Cameroon, where the project is focused. Solar irrigation can enhance agricultural productivity and support access to drinking water.

Analysis of the investigation and plan of action

Selection of 12 parcels, each split into two sections

The steering committee selected 12 parcels (6 in Garoua and 6 in Figuil) based on availability and community interest. In order to be able to better compare conventional and synecocultural farming, the team worked with local communities to select the parcels, and separate each parcel into two sections, one conventional and one synecocultural.

The project team assigned an ID to each parcel, and parcel information can be found in the following pages.

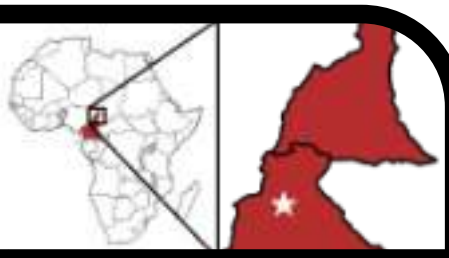
Parcels in Garoua

ID	Name	School or community	Persons involved	% women and girls	m2	Syneco culture species	Conventional species
GENG	NGOURORE	School	74	64%	330	12	3
GET	TONGO	School	59	86%	980	12	3
GENY	NYAKIRA	School	115	91%	560	12	3
GCM	MBILGA	Community	84	79%	1190	12	3
GCA	L'APES-WAN TOUMI	Community	66	97%	240	12	3
GCN	NYAKIRA	Community	46	93%	340	12	3

Public School Parcel

Ngourore, Garoua

Parcel Code: GENG



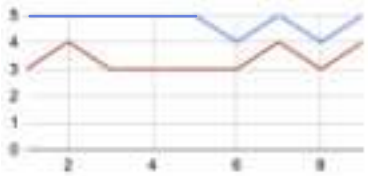
(*) terredesjeunes.org/synecoculture/metriques/

Land area: 330m²

● 12 species in synecoculture
Oseille de Guinée
Gombo
Tomate
Carotte
Kelin Kelin (lalo)
Concombre
Amarenthe noire
Piment
Melon
Anacardier (noix de cajou)
Moringa
Papaye

● 3 species in conventional
Maïs
Arachide (peanuts)
Foléré (hibiscus)

Some metrics (*)
Over 9 months (Mar. - Nov. 2025)



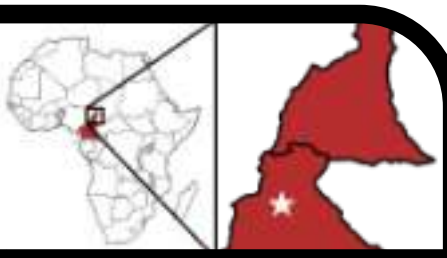
M4.1 Food security
0 = worried; 5 = satisfied

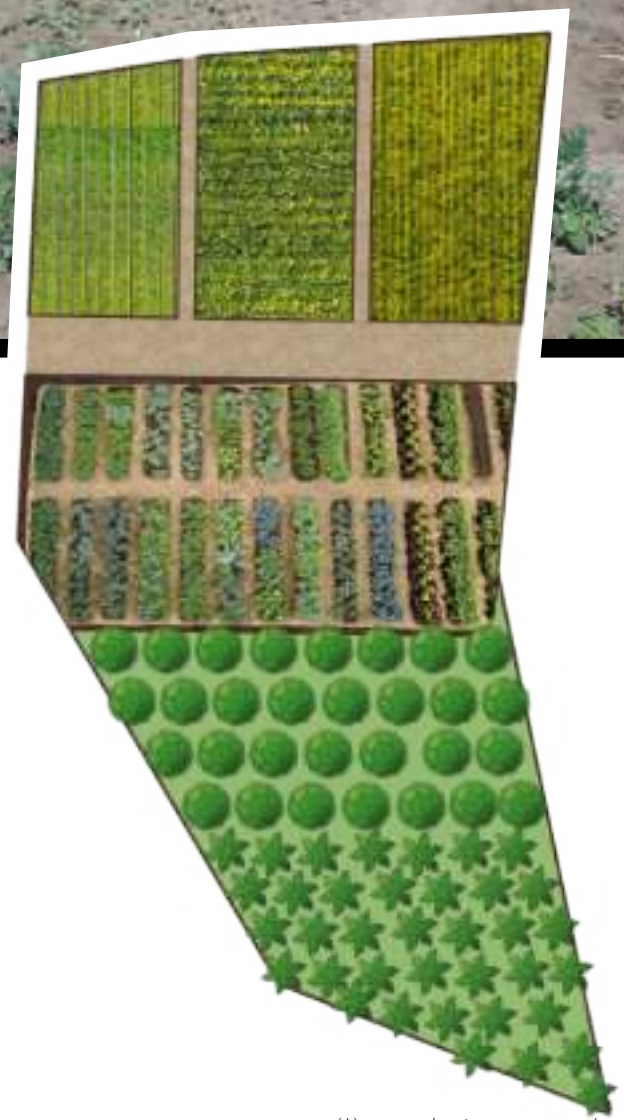
M4.3 Food sales
Francs CFA (1 euro = 650 CFA)

Public School Parcel

Tongo, Garoua

Parcel Code: GET





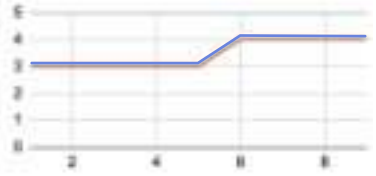
(*) terredesjeunes.org/synecoculture/metriques/

Land area: 980m²

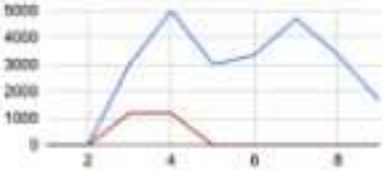
● 12 species in synecoculture
Oseille de Guinée
Gombo
Tomate
Carotte
Kelin Kelin (lalo)
Concombre
Amarenthe noire
Piment
Melon
Anacardier (noix de cajou)
Moringa
Papaye

● 3 species in conventional
Maïs
Arachide (peanuts)
Foléré (hibiscus)

Some metrics (*)
Over 9 months (Mar. - Nov. 2025)



M4.1 Food security
0 = worried; 5 = satisfied

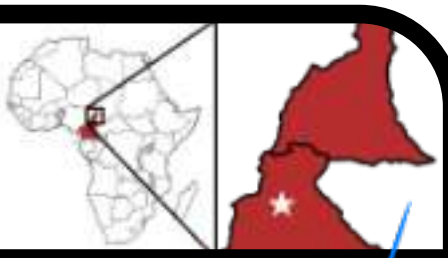


M4.3 Food sales
Francs CFA (1 euro = 650 CFA)

Public School Parcel

Nyakira (school), Garoua

Parcel Code: GENY



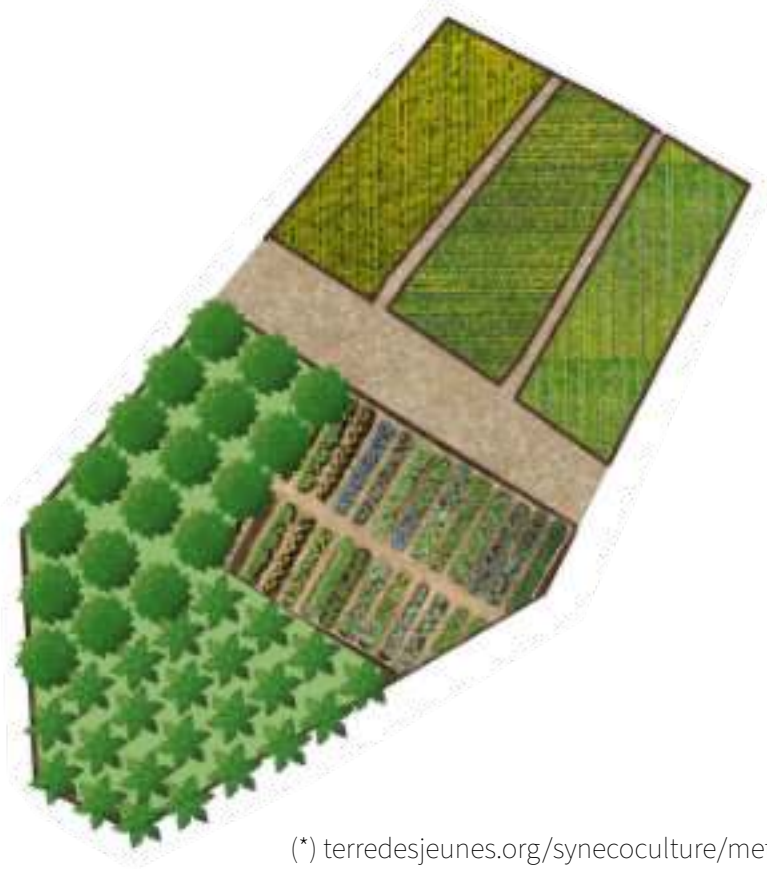
Land area: 560m²

- **12 species in synecoculture**

Oseille de Guinée
Gombo
Tomate
Carotte
Kelin Kelin (lalo)
Concombre
Amarenthe noire
Piment
Melon
Anacardier (noix de cajou)
Moringa
Papaye

- **3 species in conventional**

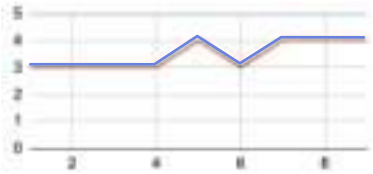
Maïs
Arachide (peanuts)
Foléré (hibiscus)



(*) terredesjeunes.org/synecoculture/metriques/

Some metrics (*)

Over 9 months (Mar. - Nov. 2025)



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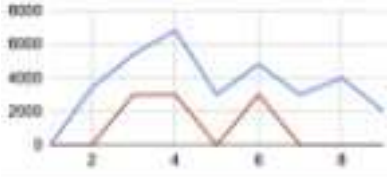


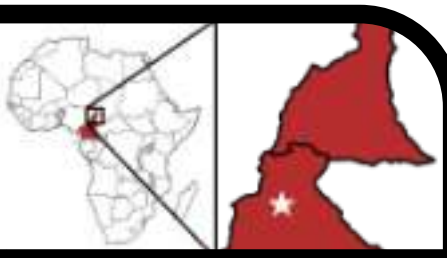
M4.3 Food sales

Francs CFA (1 euro = 650 CFA)

Community Parcel

Mbilga, Garoua

Parcel Code: GCM



(*) terredesjeunes.org/synecoculture/metriques/

Land area: 1190m²

- **12 species in synecoculture**

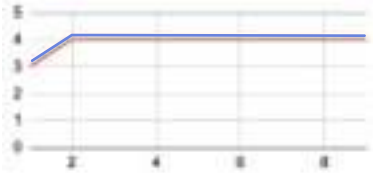
Oseille de Guinée
Gombo
Tomate
Carotte
Kelin Kelin (lalo)
Concombre
Amarenthe noire
Piment
Melon
Anacardier (noix de cajou)
Moringa
Papaye

- **3 species in conventional**

Maïs
Arachide (peanuts)
Foléré (hibiscus)

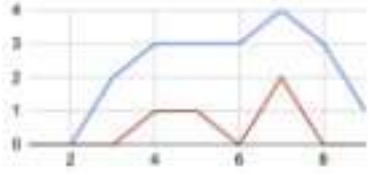
Some metrics (*)

Over 9 months (Mar. - Nov. 2025)



M4.1 Food security

0 = worried; 5 = satisfied



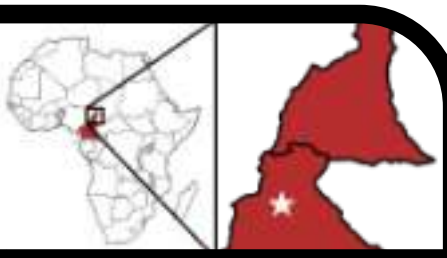
M4.3 Food sales

Francs CFA (1 euro = 650 CFA)

Community Parcel

L'Apes-Wantoumi, Garoua

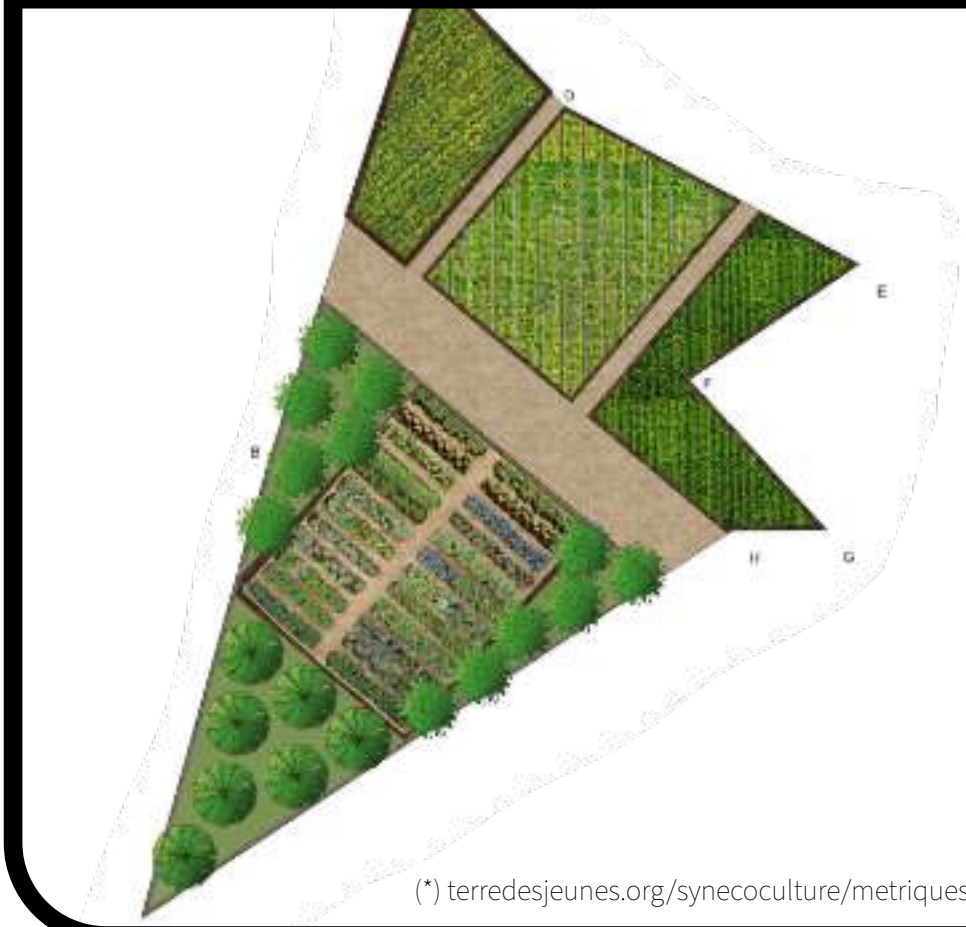
Parcel Code: GCA



Land area: 240m²

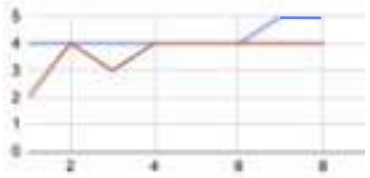
● 12 species in synecoculture
Oseille de Guinée
Gombo
Tomate
Carotte
Kelin Kelin (lalo)
Concombre
Amarenthe noire
Piment
Melon
Anacardier (noix de cajou)
Moringa
Papaye

● 3 species in conventional
Maïs
Arachide (peanuts)
Foléré (hibiscus)



(*) terredesjeunes.org/synecoculture/metriques/

Some metrics (*)
Over 9 months (Mar. - Nov. 2025)



M4.1 Food security
0 = worried; 5 = satisfied

M4.3 Food sales
Francs CFA (1 euro = 650 CFA)

Community Parcel

Nyakira Comm., Garoua

Parcel Code: GCN

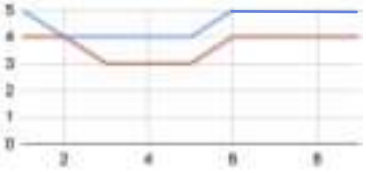
(*) terredesjeunes.org/synecoculture/metriques/

Land area: 430m²

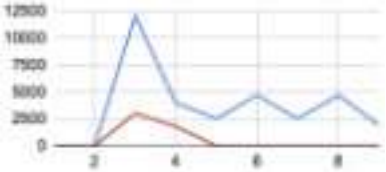
● 12 species in synecoculture
Oseille de Guinée
Gombo
Tomate
Carotte
Kelin Kelin (lalo)
Concombre
Amarenthe noire
Piment
Melon
Anacardier (noix de cajou)
Moringa
Papaye

● 3 species in conventional
Maïs
Arachide (peanuts)
Foléré (hibiscus)

Some metrics (*)
Over 9 months (Mar. - Nov. 2025)



M4.1 Food security
0 = worried; 5 = satisfied



M4.3 Food sales
Francs CFA (1 euro = 650 CFA)

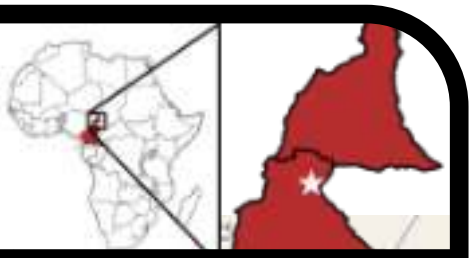
Parcels in Figuil

ID	Name	School or community	Persons involved	% women and girls	m2	Syneco culture species	Conventional species
FEDA	DAHAL	School	85	87%	700	12	3
FEI	INDJODE	School	86	97%	680	12	3
FEDE	DELELE	School	44	91%	340	12	3
FCK	KERENG	Community	34	86%	780	12	3
FCB	BAWAKA	Community	52	98%	440	12	3
FCW	WAFANGO	Community	68	93%	1460	12	2

Public School Parcel

Dahal, Figuil

Parcel Code: FEDA



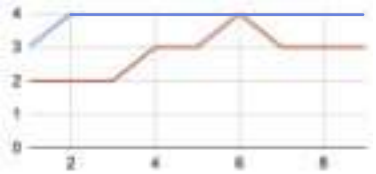
Land area: 700m²

● 12 species in synecoculture
Oseille de Guinée
Gombo
Tomate
Carotte
Kelin Kelin (lalo)
Concombre
Amarenthe noire
Piment
Melon
Anacardier (noix de cajou)
Moringa
Papaye

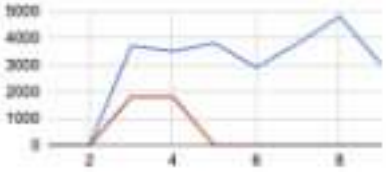
● 3 species in conventional
Maïs
Arachide (peanuts)
Foléré (hibiscus)

(*) terredesjeunes.org/synecoculture/metriques/

Some metrics (*)
Over 9 months (Mar. - Nov. 2025)



M4.1 Food security
0 = worried; 5 = satisfied



M4.3 Food sales
Francs CFA (1 euro = 650 CFA)

Public School Parcel

Indjode, Figuil

Parcel Code: FEI

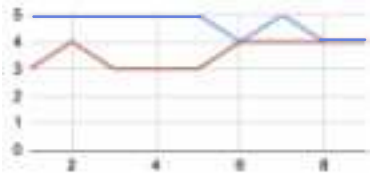
(*) terredesjeunes.org/synecoculture/metriques/

Land area: 680m²

● 12 species in synecoculture
Oseille de Guinée
Gombo
Tomate
Carotte
Kelin Kelin (lalo)
Concombre
Amarenthe noire
Piment
Melon
Anacardier (noix de cajou)
Moringa
Papaye

● 3 species in conventional
Maïs
Arachide (peanuts)
Foléré (hibiscus)

Some metrics (*)
Over 9 months (Mar. - Nov. 2025)



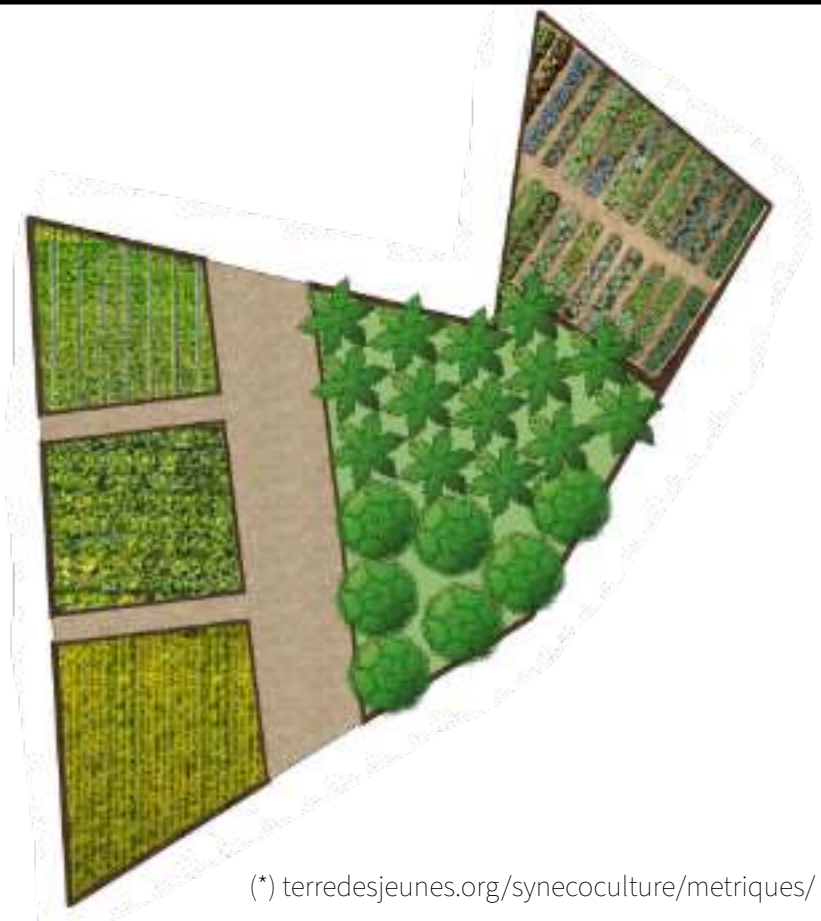
M4.1 Food security
0 = worried; 5 = satisfied

M4.3 Food sales
Francs CFA (1 euro = 650 CFA)

Public School Parcel

Delele, Figuil

Parcel Code: FEDE



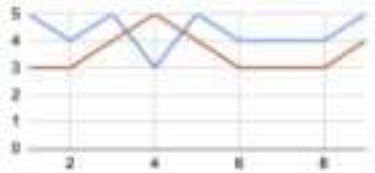
(*) terredesjeunes.org/synecoculture/metriques/

Land area: 340m²

● 12 species in synecoculture
Oseille de Guinée
Gombo
Tomate
Carotte
Kelin Kelin (lalo)
Concombre
Amarenthe noire
Piment
Melon
Anacardier (noix de cajou)
Moringa
Papaye

● 3 species in conventional
Maïs
Arachide (peanuts)
Foléré (hibiscus)

Some metrics (*)
Over 9 months (Mar. - Nov. 2025)



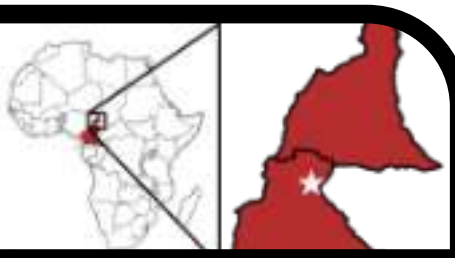
M4.1 Food security
0 = worried; 5 = satisfied

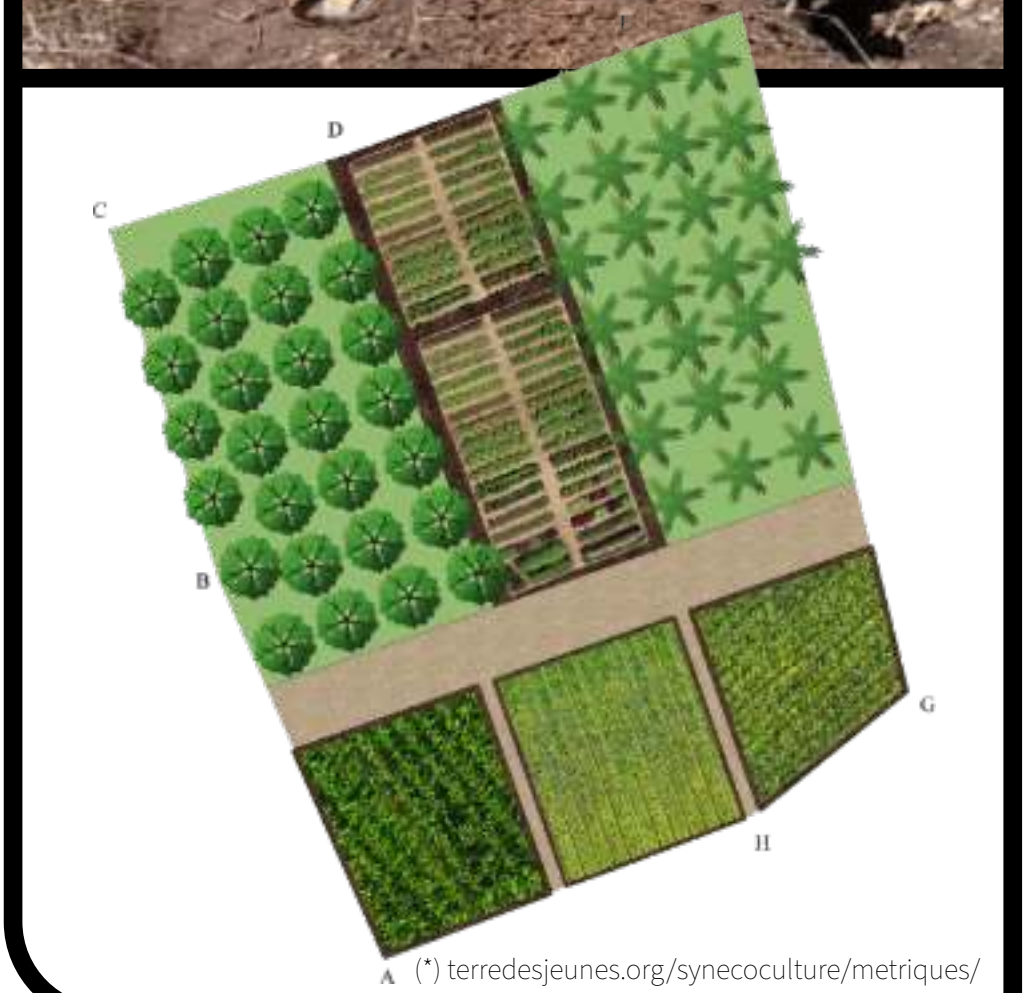
M4.3 Food sales
Francs CFA (1 euro = 650 CFA)

Community Parcel

Kereng, Figuil

Parcel Code: FCK





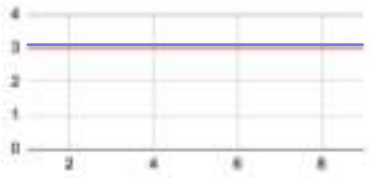
(*) terredesjeunes.org/synecoculture/metriques/

Land area: 780m²

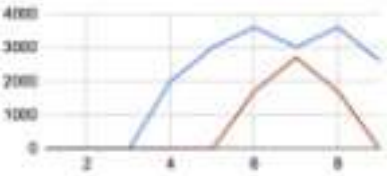
● 12 species in synecoculture
Oseille de Guinée
Gombo
Tomate
Carotte
Kelin Kelin (lalo)
Amarenthe blanche
Amarenthe noire
Piment
Melon
Anacardier (noix de cajou)
Moringa
Papaye

● 3 species in conventional
Maïs
Arachide (peanuts)
Foléré (hibiscus)

Some metrics (*)
Over 9 months (Mar. - Nov. 2025)



M4.1 Food security
0 = worried; 5 = satisfied

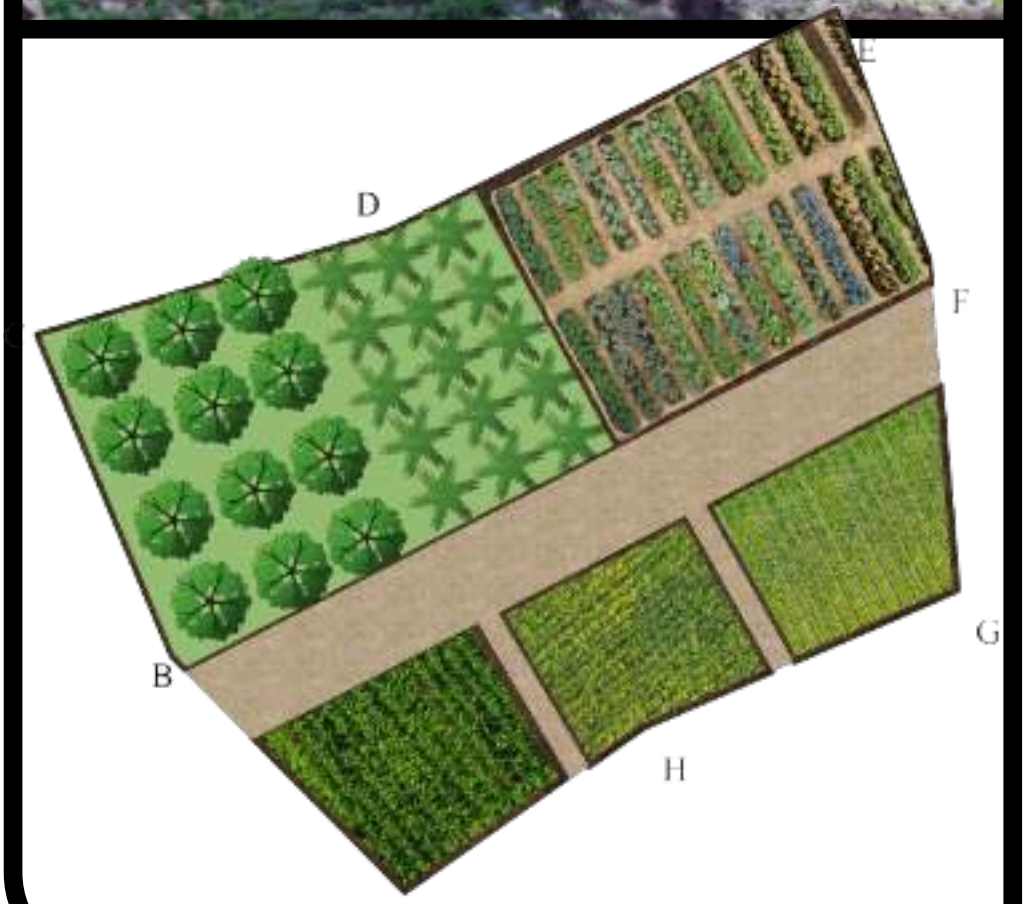


M4.3 Food sales
Francs CFA (1 euro = 650 CFA)

Community Parcel

Bawaka, Figuil

Parcel Code: FCB



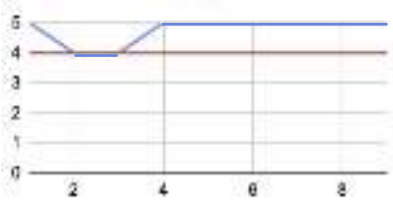
(*) terredesjeunes.org/synecoculture/metriques/

Land area: 440m²

● 12 species in synecoculture
Oseille de Guinée
Gombo
Tomate
Carotte
Kelin Kelin (lalo)
Amarenthe blanche
Amarenthe noire
Piment
Melon
Anacardier (noix de cajou)
Moringa
Papaye

● 3 species in conventional
Maïs
Arachide (peanuts)
Foléré (hibiscus)

Some metrics (*)
Over 9 months (Mar. - Nov. 2025)



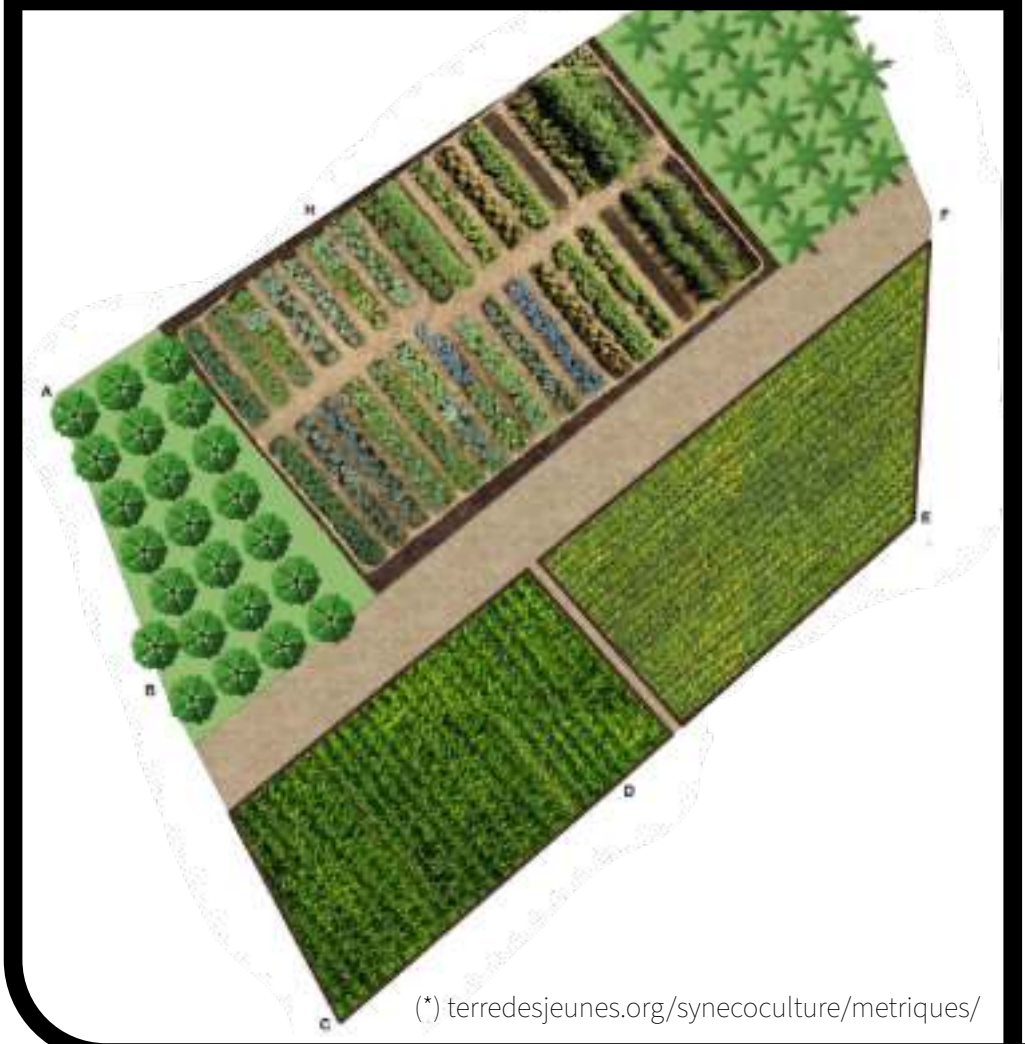
M4.1 Food security
0 = worried; 5 = satisfied

M4.3 Food sales
Francs CFA (1 euro = 650 CFA)

Community Parcel

Wafango, Figuil

Parcel Code: FCW



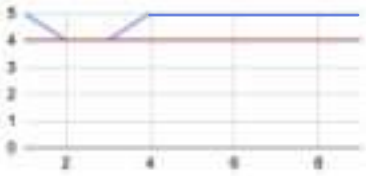
(*) terredesjeunes.org/synecoculture/metriques/

Land area: 1460m²

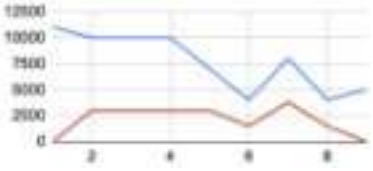
● 12 species in synecoculture
Oseille de Guinée
Gombo
Tomate
Carotte
Kelin Kelin (lalo)
Amarenthe blanche
Amarenthe noire
Piment
Melon
Anacardier (noix de cajou)
Moringa
Papaye

● 2 species in conventional
Maïs
Arachide (peanuts)

Some metrics (*)
Over 9 months (Mar. - Nov. 2025)



M4.1 Food security
0 = worried; 5 = satisfied



M4.3 Food sales
Francs CFA (1 euro = 650 CFA)

Planting and harvesting

Planting and harvesting for the synecoculture pilot in Garoua and Figuil involved 12 community-selected parcels, each split into conventional and synecocultural sections. Synecoculture plots were planted with 12 complementary species per parcel to enhance biodiversity, soil fertility, and pest resilience, while conventional plots included three staple crops. Planting took place in June–July 2025, with over 500 participants—70% women—trained in organic fertilization, sustainable irrigation, and ecological farming practices. Harvests were staggered according to crop cycles, allowing participants to observe differences in yield, water use, and ecosystem health between synecoculture and conventional methods. The process generated valuable data for comparison, capacity-building, and the promotion of climate-resilient agriculture in northern Cameroon.

Budget, management, expenses, reporting

The total project budget was **166,835** USD.

The team calculated that an equivalent amount was provided in-kind by project stakeholders in the form of:

- Volunteer work by field workers in Cameroon
- Volunteer work by the project manager in Montreal
- Land provided for the project free of charge
- Equipment above the 15,000 USD maximum allowed under the program rules

The funds were managed by Terre des jeunes transnational (TDJT - Quebec registration 1162564182).

About 4% of funds were lost to transfer fees and USD - CAD - XAF exchange loss.

TDJT regularly transferred funds to CASE in Cameroon upon receipt and approval of monthly financial and metrics reports.

TDJT performed internal auditing through spot checks of expense reports, confirming that expenses were supported by invoices or expense notes, relevant to the project, and correctly categorized. In the case funds were used to purchase equipment, photos and descriptions of the equipment were confirmed to be in line with the expenses. The Cameroon economy being highly informal and cash-based, in some cases it was impossible to obtain official receipts; in such cases, staff was expected to provide expense notes explaining the nature and amount of the expense.

The management team held weekly one-hour WhatsApp calls, where the local team provided and walked through a written weekly activity report with information such as actions performed, photos, names of participants.

Activities and timeline

The team adhered to timeline for 17 months between June 2024 and October 2025 :

Deliverable 1: planning	June - July 2024
Deliverable 2: stakeholder identification	July 2024
Deliverable 3: survey of needs	July - September 2024
Deliverable 4: analysis of the survey	September - November 2024
Deliverable 5: implementation of synecoculture	December 2024 - August 2025
Deliverable 6: sustainable strategy (documentation, international internship)	August - October 2025

Results and lessons learned

The pilot demonstrated that synecoculture improves biodiversity, soil health, and water retention compared with conventional farming. Participants—particularly women and youth—gained practical skills in ecological farming, organic fertilization, and sustainable irrigation. Key lessons include the need for hands-on training, secure land access, and adequate water infrastructure to support adoption. Systematic data collection and open documentation proved essential for monitoring performance, promoting learning, and guiding the expansion of climate-resilient agriculture in northern Cameroon.

Results for goal 1: Open metrics to compare conventional and synecocultural farming

	*Open source (CC BY 4 open license), fully documented metrics, with underlying anonymized data, and methodology are publicly available at https://www.terredesjeunes.org/synecoculture/metriques/*

We believe that hard data on the performance of synecoculture vs conventional agriculture, and farmers' level of satisfaction, will be beneficial to decisionmakers determining whether and where to support synecoculture.

Each of the projects' 12 plots were divided into two sections, conventional and synecoculture; and each section had a farmer responsible for it. On a monthly basis, our field officers would collect answers about our metrics from the 24 lead farmers and provide them to the field accountant, who would send them via WhatsApp in an excel

sheet to our Montreal-based staff who then put them in publicly-available Google Sheets spreadsheet using an open source license (see link above).

Results are generally in line with expectations, except for water usage:

Metric	**Observed result**	**Analysis**
M1 : Amount spent on chemical inputs	Synecoculture plots required close to zero chemical inputs, whereas conventional plots required a few euros worth of inputs.	Even though the amount saved is minimal, in the case of poor communities with very little income, the difference is relevant and makes farmers more self-sufficient.
M2 : Observed biodiversity	On a scale of 1 to 5 of observed biodiversity (higher = better), synecoculture plots scored about one point higher than conventional plots.	Synecoculture plots exhibit a higher level of biodiversity.
M3 : Concern over water scarcity	On a scale of 1 to 5, both synecoculture and conventional plots scored very high for concern over water scarcity (higher = more concern)	We had thought that synecoculture plots are better at conserving water, but it turns out there is no material benefit over conventional agriculture.
M4.1 : Concern over food security	On a scale of 1 to 5 of concern over food security (higher = worse), synecoculture plots scored about one point lower than conventional plots.	Farmers on synecoculture plots report less food security stress.
M4.2 : Concern over food quality	On a scale of 1 to 5 of concern over food security (higher = better), synecoculture plots scored about 1 ½ point higher than conventional plots.	Synecoculture plots are perceived to provide better quality food, perhaps because more diverse food is perceived as better.

M4.3 : Commercial value of food produced	Synecoculture plots provided about 3 times the sales value for food produced than conventional plots, at about 3,000 CFA francs vs. 1,000 CFA francs.	Synecoculture plots provide higher value yields and more money for farmers. The yield provided by conventional plots is completely used to buy up chemical inputs, meaning zero income for subsistence farmers on small conventional plots.
M4.4 : Number of harvests	Synecoculture provides about double the harvests when compared to conventional plots.	Synecoculture plots provide more harvests; a key tenet of synecoculture is continuous harvesting.
M5 : Concern over pests in plants	On a scale of 1 to 5 of observed pest nuisance (higher = better), synecoculture plots scored about one point higher than conventional plots.	Contrary to our assumptions, even without chemical inputs, synecoculture plots are perceived to have less pest nuisance.

Some caveats: the personnel were not trained in statistics, and we were not able to guarantee a double-blind protocol.

Results for goals 2 and 4: Build technical capacity of 500 participants, especially women, for biodiversity-based, pesticide-free agricultural methods.

We consider this goal attained, as women's farmers associations have continued practicing synecoculture techniques on the following plots of land, most of which are in the area of the original project but one of which (6) is outside that region, demonstrating replicability:

#	Plot name	GPS coordinates

1	Bidzar (Figuil)	9,88°, 14,1159°
2	Association des Femmes de Sarkissanou (Figuil)	9,75°, 13,93°
3	GIC FEAK, jardin communautaire de Kolé Ouro Baima (Figuil)	9,78°, 13,96°
4	EP Indjode (Figuil)	9,88320°, 14,04517°
5	Jardin communautaire de Bilga (Garoua)	9,368706°, 13,459305°
6	Site ACPS (Khan, Littoral)	4,11052° N, 10,60226° E

Synecoculture after the end of CTCN financing

Thus, local communities have demonstrated an interest in synecoculture; and have invested their own time and money on their plots of land, investing in solar powered water pumps and purchasing land on which to pursue synecoculture.

Results for goal 3: Improve water-use efficiency and promote sustainable water management practices.

This is one goal which was not attained. At the start of the project, we believed that synecoculture would help with water management, as it favors a richer soil which better holds moisture. The project has shown no evidence of this, as both our conventional and synecoculture plots suffered from drought, and farmers on both plots of land were very worried about water scarcity. The community, using their own funds, dug wells, purchased water pumps to alleviate the acute water shortage.

Results for goal 5: Strengthen cooperative structures and enhance access to legal land tenure.

Organizing groups of farmers into cooperatives, providing them with more autonomy through control over income (albeit modest), and providing training and access to

political decisionmakers; all of these results will, we hope, give small-scale farmers greater leverage in understanding and affecting change.

Results for goal 6: Demonstrate a replicable nature-based solution for climate-resilient agriculture in northern Cameroon and elsewhere.

Through videos, training documents, social media presence (see “Documentation (artifacts)”, below) and the successful international internship, and presentations in Japan (TICAD9, August 2025, where the field project lead Ruth Langsi Yeloma was present) and Morocco (planned, see “Next steps and international expansion”, below), the Project is now known beyond the borders of Northern Cameroon.

Also, the partners already have a network of eager participants in several French-speaking African countries as well as Haiti (see “Next steps and international expansion”) who did not know about synecoculture previously and who are willing to give it a try, through the network of Terre des jeunes.

Through these efforts and metrics data, we are confident that the Project has a high probability of success if replicated within Northern Cameroon, elsewhere in Cameroon, and beyond.

Documentation (artifacts)

Among the goals of the project is to continue after the end of the main financing phase. In addition to training sessions (which resulted, as you can see in the “Results and lessons learned” section, in local participants continuing to use synecoculture techniques still today), the steering committee decided to create a number of documents (which we call project artifacts) and make sure they are publicly and freely available so that other projects may benefit from synecoculture. In addition to open metrics (see “Results and lessons learned”), the following artifacts are publicly available:

Website and social media presence

	The official project website is https://www.terredesjeunes.org/synecoculture and contains a number of documents, metrics, and information about synecoculture; it is hosted by Terre des jeunes.

Video documentation

	 ***Local climate resilience through synecoculture in Cameroon*** *4 minutes, by Miranda Tasker, documentary filmmaker with CTCN.* *https://www.youtube.com/watch?v=9CAh0-cqPxQ*

	 ***Haoua découvre la synécoculture*** *11 minutes, produced by the field team.* *https://www.youtube.com/watch?v=g_sX5Wd4lNc*

Guidebook

The field team has created a 40-page guidebook (available in French) destined to primary school teachers, explaining the basics of synecoculture to school-age children, along with exercises, separated into modules.

	Guide pratique de Synécoculture *À l'usage des enseignants de l'école primaire* *(French)* *By Terre des jeunes*

International internship

Two interns from Chad and Congo Brazzaville participate in synecoculture techniques in Garoua and Figuil

As part of the project's capacity-building component, a three-week internship was organized between April 24 and May 16, 2025, bringing together two trainees with agroecological backgrounds from Chad and Congo Brazzaville to participate in field-based training in synecoculture. The program aimed to strengthen knowledge of biodiversity-based agriculture and encourage the transfer of sustainable farming practices to other regions.

The training combined theoretical learning with practical field experience. Participants visited demonstration plots established by the Project and observed the application of synecoculture techniques in comparison with conventional agricultural systems. Workshops were also organized with local farmers' organizations and community members living near the project sites. These sessions typically included a theoretical component introducing the principles of synecoculture followed by hands-on field activities allowing participants to practice planting techniques and ecosystem management.

The training highlighted several key lessons. Successful synecoculture systems require reliable water management, careful observation of local ecosystems, and protection of plots from external disturbances such as grazing animals. The practice also emphasizes soil health through composting and the use of natural fertilizers.

Beyond technical aspects, the experience reinforced the importance of collaboration among farmers, community organizations, and agricultural institutions. Strengthening such networks will be essential for scaling up synecoculture practices and supporting sustainable agricultural development across the region.

Next steps and international expansion

We believe that conventional farming methods are unsustainable, especially in the face of climate change. Based on our experience, synecoculture can form part of the solution, making small-scale farming resilient, and empower small farmers to regain agency in their work.

In order for that to work, the Project cannot end with the initial round of financing. It must go on in Northern Cameroon, in other parts of Cameroon, of Africa, and the world.

See “Results and lessons learned” for how the project has continued in Cameroon. And here are a few ways the Project has shown it is ripe for international expansion:.

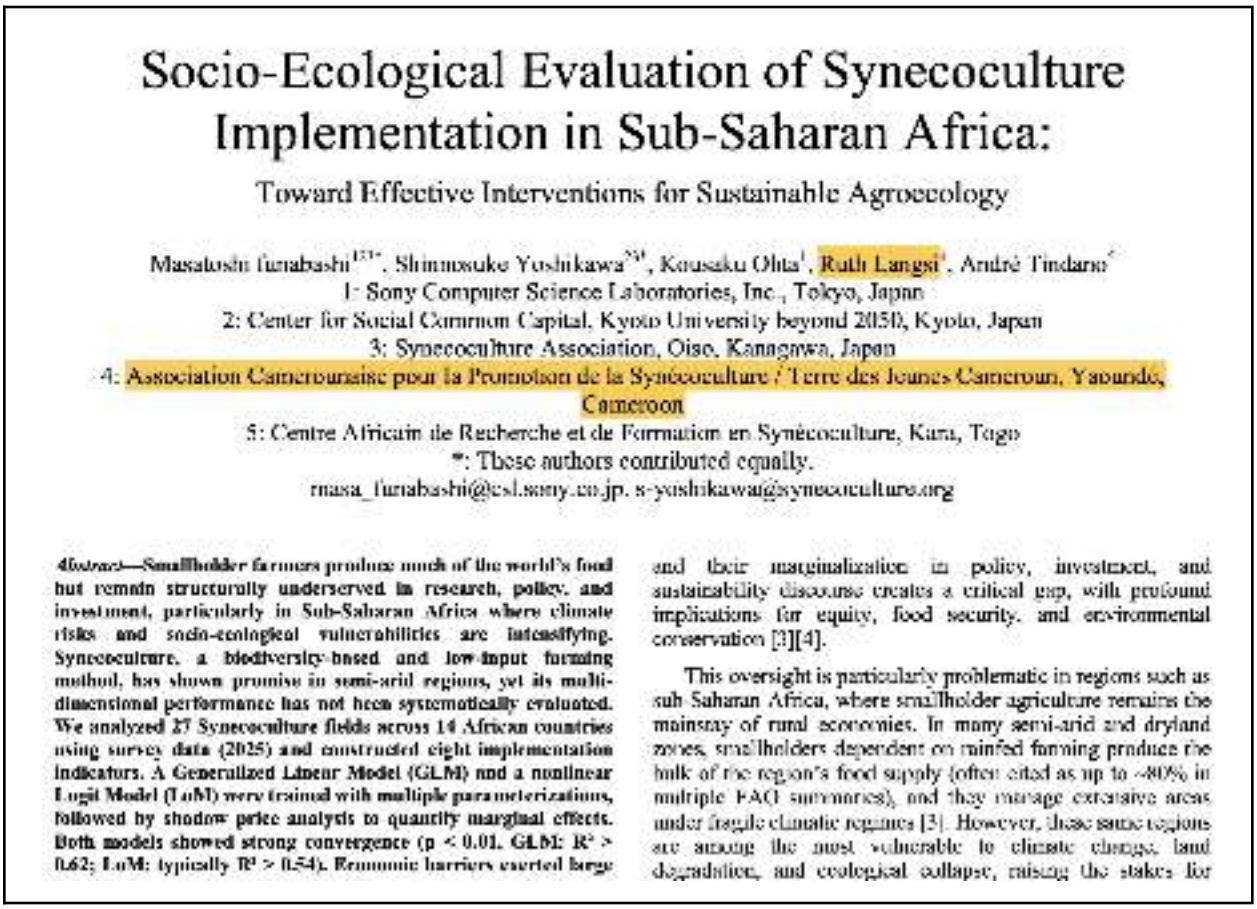
TICAD9 Japan

On August 22, 2025, Project lead Ruth Langsi Yeloma was invited to participate, in person, in the TICAD 9 international development conference in Yokohama, Japan, to participate in the "Toward a nature positive society panel" where she presented the Project. Ms. Langsi Yeloma can be seen in the center of this picture.

Congo Brazzavile and Chad

Two interns with agroecology backgrounds from these countries have spent a month in Cameroon (see section "International internship"), and have now returned to their countries with the knowledge to apply principles of synecoculture in their own communities.

Morocco



Socio-Ecological Evaluation of Synecoculture Implementation in Sub-Saharan Africa:

Toward Effective Interventions for Sustainable Agroecology

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Abstract—Smallholder farmers produce much of the world's food but remain structurally underserved in research, policy, and investment, particularly in Sub-Saharan Africa where climate risks and socio-ecological vulnerabilities are intensifying. Synecoculture, a biodiversity-based and low-input farming method, has shown promise in semi-arid regions, yet its multi-dimensional performance has not been systematically evaluated. We analyzed 27 Synecoculture fields across 14 African countries using survey data (2025) and constructed eight implementation indicators. A Generalized Linear Model (GLM) and a nonlinear Logit Model (LoM) were trained with multiple parameterizations, followed by shadow price analysis to quantify marginal effects. Both models showed strong convergence ($p < 0.01$, GLM: $R^2 >$ 0.62; LoM: typically $R^2 >$ 0.54). Economic barriers exerted large

and their marginalization in policy, investment, and sustainability discourse creates a critical gap, with profound implications for equity, food security, and environmental conservation [3][4].

This oversight is particularly problematic in regions such as sub-Saharan Africa, where smallholder agriculture remains the mainstay of rural economies. In many semi-arid and dryland zones, smallholders dependent on rainfed farming produce the bulk of the region's food supply (often cited as up to ~80% in multiple FAO summaries), and they manage extensive areas under fragile climatic regimes [3]. However, these same regions are among the most vulnerable to climate change, land degradation, and ecological collapse, raising the stakes for

In order to further the understanding of synecoculture in the academic fields, Ms. Langsi Yeloma, along with researchers from Japan, have used the experience from the Project to write the research paper “Socio-Ecological Evaluation of Synecoculture Implementation in Sub-Saharan Africa: Toward Effective Interventions for Sustainable Agroecology”, slated to be presented in 2026 in Morocco.

Togo

Terre des jeunes Togo has acquired a farm in the south of this West African country and has commenced synecoculture operations.

Pictures from the Terre des jeunes farm in Togo

What are the next steps?

With appropriate funding, the Project team is well-positioned to:

- Increase adoption of synecoculture on larger plot sizes to make it commercially viable in different provinces of Cameroon.
- Apply synecoculture to several African countries and beyond (including Haiti for example) through the Terre des jeunes network.
- Collect data and metrics in a more detailed scientific way, relying, for example, on actual yield data rather than farmers's perceptions.

The Project team is working with local partners and farmers to conserve acquired knowledge; consolidate partnerships, notably in Japan (where synecoculture was first defined); and define future phases of the synecoculture project in Cameroon.

Conclusion

The “When Nature Leads” synecoculture pilot in Garoua and Figuil demonstrates the potential of biodiversity-based, pesticide-free farming to enhance climate resilience, food security, and community empowerment in northern Cameroon. By establishing twelve parcels with parallel synecoculture and conventional plots, the project generated valuable comparative data on productivity, water efficiency, and soil health, while engaging over 500 participants—predominantly women and youth—in hands-on training and cooperative management. Results show that synecoculture improves biodiversity, soil fertility, and water retention, while empowering participants with technical skills and greater decision-making agency. Key lessons underscore the importance of secure land access, targeted capacity-building, sustainable water management, and systematic monitoring for successful adoption and scaling. Overall, the pilot provides a replicable model for nature-based, climate-resilient agriculture that supports both ecological restoration and inclusive, community-led development in drought-prone regions.

About this document

This document is based on written reports from the project team in Cameroon, led by Ruth Langsi Yeloma. The following also contributed to this project and document through their work and data: Nadège Trocellier, CTCN/UNEP Climate Technology Specialist and Project Account Manager; Miranda Tasker, Documentary Filmmaker for CTCN; Timothée Kagombe, UNFCCC Focal Point in Cameroon; Julbert Tonye, TDJ Cameroon Executive Secretary and Field Officer, responsible for collecting project indicators; Eva Nya Tonsang, CASE Manager; Dr. Jeanne Hortense Jovany Nyogog, Anthropologist and Project Consultant; and Paul Clémentine Elandi Nkengue, Project Accountant and Internal Auditor, responsible for data entry. This document was written and compiled by Lisa Anne Tartaglia and Albert Albala for Terre des Jeunes Transnational in Montreal. Artificial intelligence models were used to structure certain parts of the document, with subsequent validation.

Annex 1: list of project documents

Document ID	Date	Document title
1 (i)	Dec. 1st, 2024	Workplan
1 (ii)	Dec. 1st, 2024	Follow-up and evaluation plan
1 (iii)	Dec. 1st, 2024	Expected impacts
1 (iv)	Dec. 1st, 2024	European Union indicators
1 (v)	Oct. 31, 2025	Gender assessment
2.1.1	Dec. 1st, 2024	List of CTCN-approved members of the steering committee
2.1.2	Dec. 1st, 2024	Steering committee decision-making process and meeting calendar
3.1.1	Dec. 1st, 2024	Needs survey
4.1.1	Jan. 15th, 2025	Needs survey analysis and action plan
4.1.2	Jan. 15th, 2025	Selection of beneficiary schools and community plots
5.1.1	July 11th, 2025	List of school and community groups trained in synecoculture
6.1.3	Oct. 31, 2025	Synecoculture guide for schoolchildren
6.1.4	July 11th, 2025	Open metrics available at https://www.terredesjeunes.org/synecoculture/metriques/
6.2.1	July 11th, 2025	Selection of international interns
6.2.2	July 11th, 2025	International internship report