ALTERNATIVES FOR THE DISTRIBUTION **of by-products of cotton** AND COMBINED CROPS IN **TANZANIA**

Farmers participating in the Beyond Cotton project in Magu district, Mwanza, at the end of the cooking workshop in November 2022. Photo: WFP.

BEYOND COTTON PROJECT - BRASÍLIA, MARCH 2024

Beyond Cotton

ALTERNATIVES FOR THE DISTRIBUTION

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AND COMBINED CROPS IN

TANZANIA

Beyond Cotton

Presentation

The Beyond Cotton Project in Tanzania is a component of the regional project "Alternatives for the distribution of by-products of cotton and associated crops in Africa", which aims to promote the marketing of cotton by-products and products from mixed crops (maize, beans, cowpeas, biofortified beans, orange sweet potatoes, chickpeas, etc.) from small producers to public and private institutions in three African countries: Benin, Mozambique and Tanzania. The Beyond Cotton Project was an international cooperation initiative developed in partnership between the Government of Tanzania, through the Ministry of Agriculture (MoA), the Tanzania Agricultural Research Institute (TARI) and the Tanzania Cotton Board (TCB); together with the Brazilian Government, through the Brazilian Cooperation Agency (ABC) of the Ministry of Foreign Affairs, the Federal University of Campina Grande (UFCG) and the

World Food Programme (WFP) Centre of Excellence against Hunger in Brazil and the World Food Programme in Tanzania, in the format of South-South Triangular Cooperation. The project is funded by the Brazilian Cotton Institute (IBA). The initiative focused on developing solutions to contribute food security in the partner countries, as well as identifying the socio-economic and nutritional conditions of cotton producers and consumers in the project's extent.

Among the objectives of the initiative, the project sought to increase the income of smallholder farmers and improve their food and nutrition security. To achieve these objectives, the project followed four pillars:

- **improving cotton and intercropped food crops in multiple cultivation systems, in collaboration with other projects;**
- **strengthening the added value of cotton, its derivatives and associated foods;**
- **promote the marketing of cotton and its by-products, as well as intercropped food crops;**
- **contribute to the food and nutrition security of farmers and consumers in the region of the project.**

During its 18 months of implementation (from July 2022 to December 2023) in Tanzania, the Beyond Cotton Project carried out numerous activities and actions to strengthen the capacities and production systems of smallholder producers in the Mwanza region (Figure 1), in the districts of Magu, Misungwi and Kwimba. The actions focused on improving agri-food cropping systems, whether associated to cotton or not, to promote food and nutritional security for the populations involved, as well as fostering Brazilian social technologies and adapting them to local conditions to improve the sustainability indicators of production systems, access to water and income generation.

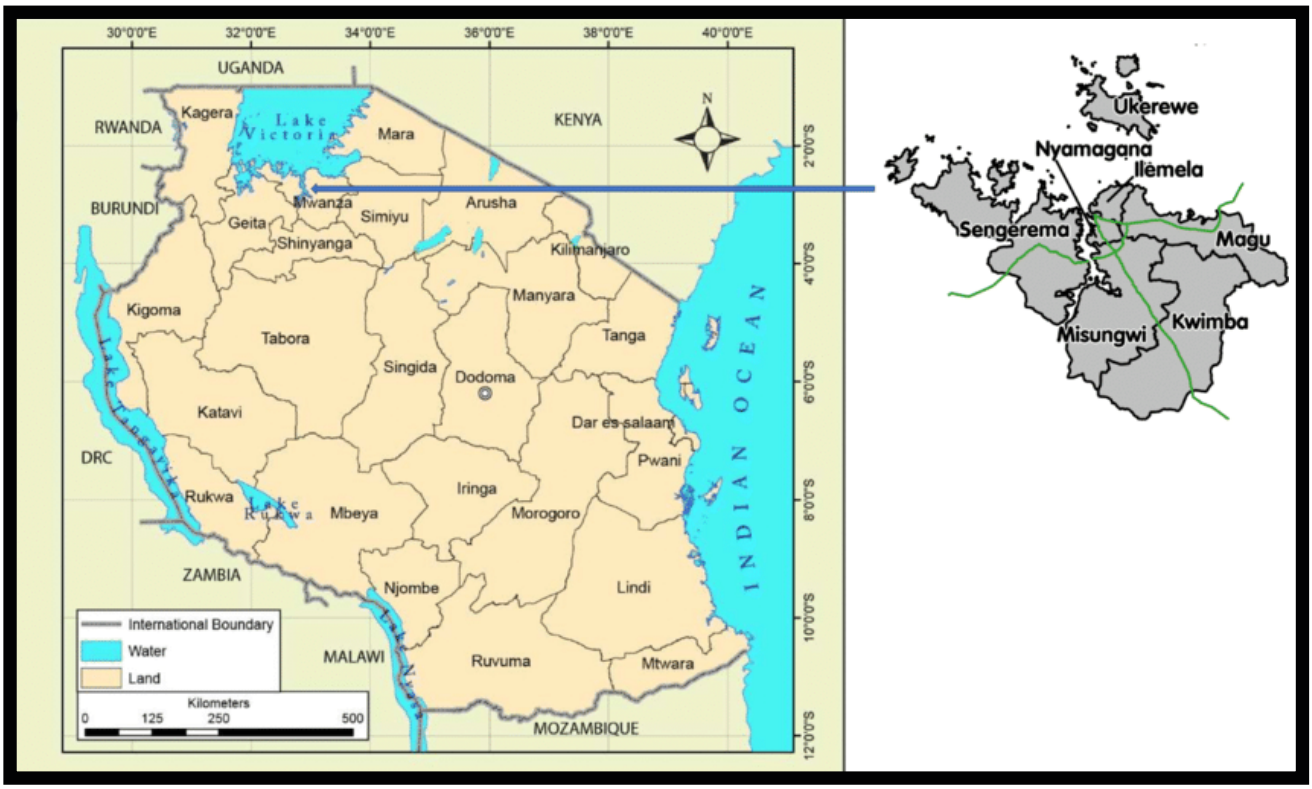


Figure 1. Mwanza region and the districts where the project operates.
Source: Mshana et al. Journal of Ethnobiology and Ethnomedicine. 2021.

The aim of this document is to present the main actions carried out in the field and the results achieved so far. To this end, a total of 70 quantitative and qualitative questionnaires were conducted by TARI field technicians in the three participating districts and the responses were analysed and compiled here.

Main actions and results of the Beyond Cotton Project

Beyond Cotton

A farmer participating in the project in Kwimba district, Mwanza, feeds herself and her son with the lunch produced during the cooking workshop in September 2023. Photo: WFP.

The Beyond Cotton Project has directly and indirectly benefited 11,000 cotton farmers in the Mwanza region, in the districts of Magu, Misungwi and Kwimba. The actions carried out by the project during the 18 months of implementation have resulted in the strengthening of three main components: agriculture, nutrition, and income. These dimensions are interlinked and aim to promote food and nutritional security by developing and strengthening the productive capacities of involved farmers, always considering their needs, culture, and available resources.

Technical training and knowledge dissemination

More than **21** activities were carried out to horizontally share technical knowledge, using participatory techniques, for more than **10.547** people, on topics such as:

- **plant nutrition techniques;**
- **recipes and methodologies for producing organic fertilizer inputs;**
- **natural insecticides and fungicides;**
- **preparations for planting;**
- **use of artisanal rain gauges;**
- **crop rotation;**
- **crop association;**
- **water management for irrigation;**

UFCG professor Luderlândio Andrade demonstrates to farmers how the rain gauge works and how to evaluate the data reading during a technical mission in November 2022. Photo: WFP

The training sessions also provided access to methodologies for control, diagnosis, and identification of pests and diseases, production and incentives for mixing food crops and cotton to optimize production.

Results

an average reduction of in farmers' expenses; **20%**

average increase in profitability; **93%**

a **60%** reduction in the risk of flowers abortion due to water stress;

> Since the project has been here, I've been happy to receive the training we've been getting. For example, the different way of growing sweet potatoes, which we call the Brazilian model. And I also didn't know about the type of stove that was built in the school kitchen and the amount of food that can be produced there will serve many people and that's a great benefit. In my opinion, the project is very good!
>
> **Emmanuel Manyashi**
> Misungwi District

Promoting access to water and food production

Among the challenges faced by farmers in the project are access to water and seeds, two major limitations to productive development. The initiative promoted training in the use of low-cost Brazilian technologies, such as cisterns, economic gardens, and rain gauges.

Farmers and professor Luderlândio Andrade build a cistern together at a school in the Magu district. Photo: WFP.

Results

construction of **12** plate cisterns of 16,000 liter in elementary schools;

more than **192,000** liters of drinking water captured and stored for human consumption and irrigation of school gardens;

reduction by **4 hours** of daily walking by schoolchildren to fetch water for consumption;

gain of **4 hours** /day of class time;

improvement in the quality of water consumed by children, reducing the risk of diseases;

construction of **9** economic gardens in schools in the involved districts and **43** replicated gardens in homes;

29% of the gardens were to produce vegetables for sale, **53%** for the production of vegetables for own consumption and **18%** for the production of seeds for own use or sale;

85% reduction in the amount of irrigation needed to produce greens and vegetables.

I've been involved in this project since the beginning, I'm a bricklayer and a farmer, and I can say that I've benefited a lot. First of all, I've learned a lot, especially that this is a type of tank that can be built by someone who has a normal economy, which means that it's not very expensive and you don't have to be rich to have access to a cistern like this. In these areas, we know that the problem is access to water, and this form of construction looks like it will be our solution to water problems at home and I'm ready to make more of them in this project

Zacharia Peter Masasila
Mwangingwi village

Children irrigate school gardens with rainwater stored in cisterns in the districts of Magu, Kwimba and Misungwi in February 2024. Photo: WFP

Professor Luderlândio Andrade, from UFCG, demonstrates how to set up the economic construction site in Misungwi district in November 2022. Photo: WFP

Learn more about Brazilian technologies:

Cisterns

Using plates to collect rainwater for human consumption and irrigation of annual crops and horticulture, cisterns guarantee water availability throughout the year, generating autonomy for farmers.

Economical gardens

They retain water in the soil, preventing losses through evapotranspiration, resulting in a reduction in the amount of irrigation needed to produce vegetables. It also enables the development of a nursery for seed production, generating autonomy for production.

Rain gauge

Using PET bottles, these handmade models help farmers measure the amount of rainfall, helping them to choose the right times to plant.

Underground dams

Brazilian technology developed for biomes affected by drought, taking advantage of the conditions of the terrain. With a waterproof blanket, the dam retains rainwater that drains into the ground, allowing planting throughout the year.

Better working conditions: Promotion of low-cost technologies and autonomy in agri-food production

A farmer participating in the project in the Misungwi district demonstrates the use of the power tiller to prepare the soil in November 2022. Photo: WFP.

he project identified that the conditions and forms of work used by small-scale cotton farmers in Tanzania are mostly manual, using hoes to weed their fields. On average, 4 acres of land take 14 days to prepare, considering clearing the area, turning the soil, and planting seeds. The intensity of the work and the time spent preparing the land, planting, and weeding, both in food crop fields and in cotton fields, leads to poor use of the rainy season and consequent low productivity of the crops planted.

To take advantage of the rain, reduce working time and improve the living conditions of local farmers, the project purchased 250 manual seed drills and 3 motor cultivators to reduce the time spent working in the field. This equipment has had a positive impact on the quality of life of local farmers, as it has reduced the physical effort involved in manual labour to carry out weeding and planting and improved the quality of life and health of these farmers, which has resulted in more free time to carry out other work and leisure activities.

Results

28,97% of farmers reported uniform planting;

27,59% of farmers reported speed and agility, with a reduction from **14 working days** to **2 working hours** on an average area of 4 acres;

8,97% of involved reported an increase in productivity;

34,17% pointed to a reduction in production costs, optimization of **60%** of the use of seeds when planting and ease of cultivation.

I'm happy with the project, because AMCOS is benefiting a lot from the project. Firstly, we have access to the technology for planting, such as the seed drills and the motor cultivator, and secondly, we have access to all the knowledge that is being shared with us.

Enock Mwendesha
Misungwi District

A farmer participating in the project assembles the tiller in November 2022. Photo: WFP.

A young farmer from Magu district demonstrates his seeds stored and identified for use in the next harvest after the workshop to build a community seed house in September 2023. Photo: WFP.

Find out more about the seeder:

Local farmers also reported great difficulty in accessing and obtaining quality seeds, due to their high cost. The project then held 3 training sessions on:

- **the process of selecting plants and seeds in the field;**
- **proper drying and treatment of seeds for storage;**
- **appropriate ways of storing seeds.**

These activities enabled farmers to carry out proper post-harvest conservation of grains for consumption and proper storage of native seeds, using the Community Seed House methodology.

Results

43,48% of involved farmers reported a reduction in seed loss and guaranteed availability of seeds for new crops;

34,78% reported an increase in seed quality;

21,74% pointed to the conservation of grains for food

reduced seed purchase costs;

greater autonomy in the production system;

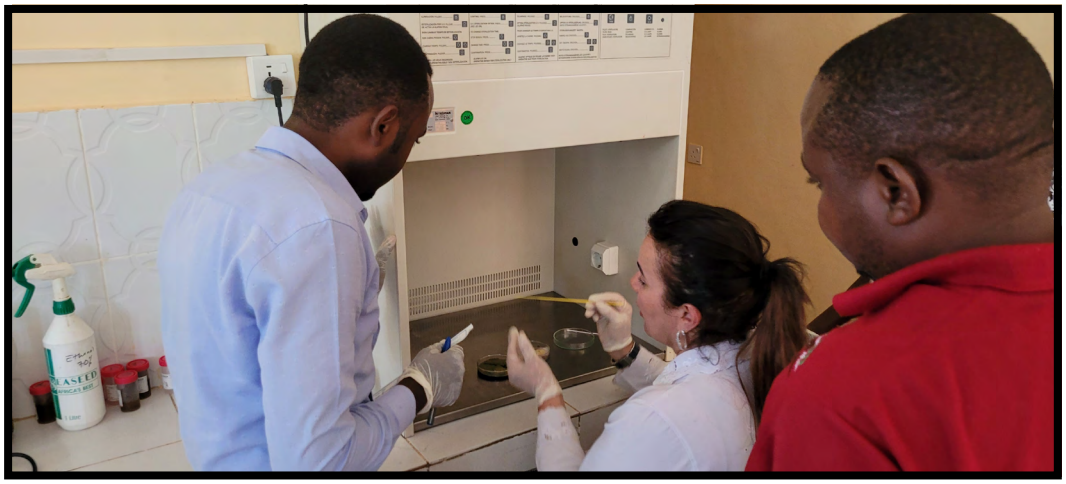
biodiversity and genetic conservation of their production systems.

> I've been storing beans in these bottles, but only for food. So the ones I've selected and kept here are just for us to eat, we use another bottle with other beans for planting. These beans here have been stored in these bottles since last year, they were harvested last season and we're taking them out little by little to cook and we've noticed that storing them like this has been very good and the beans have been better protected from insects and humidity
>
> **Regina Thomas**
> Farmer - Misungwi District

To improve the conditions of cotton production systems, the project supported TARI's germplasm improvement program by obtaining 577 genotypes in other areas within and outside the country. This made it possible to select and obtain 13 genotypesto cross and obtain varieties with good fiber properties, pest tolerance, disease resistance, high production of seed cotton yields and drought resistance.

The project also implemented a 15-hectare irrigation area at TARI's facilities to produce improved cotton seeds. To validate low-cost techniques for combating fusarium wilt disease (fusariosis) in cotton, four different fusariosis treatment experiments were carried out, as well as training TARI laboratory technicians in vitro reproduction of Trichoderma and the extraction and application of Trichoderma solution for biological control of fusariosis in cotton seeds. The result has been a reduction in costs for TARI and for farmers, who will receive seeds that have already been treated and are healthy.

The project also carried out experiments to identify different types of pests in order to define control practices, resulting in the selection of effective and low-cost prevention methods.



Professor Alfredina Santos, from UFCG, demonstrates how to inoculate fungi in petri dishes to TARI laboratory technicians in September 2023. Photo: WFP.

> I read a lot about how to mass produce Trichoderma and we thought we could extend the experience and bring the technology to the farmers. Beyond Cotton has helped us a lot in this process to control this disease and so that our farmers can produce cotton without Fusarium disease.
>
> **Dr Alfonce Leonard Mutiba**
> Biotechnology Laboratory supervisor at TARI

Also, in terms of developing technical laboratory skills, Professor Alfredina Santos provided training in controlling the water quality of for human consumption, to monitor the condition of the water stored in the school cisterns, guaranteeing the consumption of clean and healthy water.

Cotton has also been grown in association with orange-fleshed sweet potatoes, corn, beans, green gram and sunflower in intercropping and strip cropping systems and with different spacing, resulting in production systems that make better use of the planted area, improve soil quality, reduce weeding and increase the availability and variety of food crop production.

Results

25% of involved farmers reported the improvement of soil quality;

30% reported the control of pest and diseases;

31% listed increase in productivity;

6% easier cultivation

8% reported a reduction in production costs.

Tanzanian government extension workers and farmers also underwent training in the construction of handlooms. The open-patent social technology was presented by its creator, Colombian craftsman Carlos Brigard, to the project involved. Made out of four central pieces, the loom is built using only wood, nails and screws and can be electric or manual, depending on the conditions of each farmer. The production of this equipment has resulted in added value for the cotton fiber, as well as in access to new markets through the sale of clothes or spun cotton fiber. This means a 20-fold increase in the value of the sale compared to the sale of the lint.

Young farmers from the Misungwi district assemble a handmade spinning machine in July 2023. Photo: WFP.

Among the activities carried out by the project and adopted by the farmers, the following proportion of impact on income was presented by the beneficiaries:

77% of the involved reported a significant increase in their income after the project

22% said it increased moderately and

1% said their income remained stable

Young farmers assemble the handloom machine in Misungwi in July 2023. Photo: WFP.

Other results

Activities with the greatest impact on income

24% introduction to good practices

22% training in cultivation and intercropping techniques

20% seed selection and storage

19% access to machinery and technology

15% use of natural insecticides

Food and Nutrition Security

Teacher Vanille Pessoa holds a cooking workshop on making full use of food in September 2023. Photo: WFP.

The nutrition activities, based on Food and Nutrition Education for the groups involved, sought to work on autonomy, access to information and self-care. Talking to the community and understanding their traditions and eating habits was fundamental to developing activities that me beneficiaries' real needs.

Professor Vanille Pessoa performs semiology on a child during a nutrition activity in September 2023. Photo: WFP.

More than 420 male and female farmers took part in Food and Nutrition Education activities focused on improving the community's nutritional conditions:

- **cooking workshops focused on making full use of food;**
- **reducing waste;**
- **better combination of foods for nutrient availability;**
- **strengthening community support and social control to identify signs of child and adult malnutrition;**
- **techniques for identifying nutritional deficiencies;**
- **information on foods that can help combat signs and symptoms of diseases**

Involved farmers prepare vegetables during a cooking workshop on a technical mission in September 2023. Photo: WFP

The actions to promote access to information on water care showed that the water thar communities obtained from artesian wells for human consumption was potable. However, the bucket used to collect and store the water was not sanitized or was used for different functions, increasing the risk of contamination and, consequently, the incidence of disease.

Sharing information reinforcing the need to boil or sunbathe the water before consumption and to use a bucket exclusively for collection resulted in a drastic reduction in the consumption of contaminated water and the incidence of diseases such as diarrhea.

The nutrition team worked on building clean-burning stoves capable of concentrating the heat.

A farmer prepares carrot cake on a clean-burning stove during a culinary workshop on the integral use of food in September 2023. Photo: WFP.

Results

73,43% reduction in CO_2 emissions for every kilo of wood burned;

reduced inhalation of fumes with contaminating gases, especially by children and women;

2 hour reduction in cooking time;

70% reduction in the amount of firewood used;

increase in food diversity;

88,7% affirmed that techniques such as making full use of food helped improve their diet;

90% of involved farmers said their diet had improved in the last 12 months and **10%** said their diet had remained stable.

regarding to food production, **76%** of farmers pointed out that it had increased significantly; for **21%** there had been a moderate increase and it had remained stable for **3%**.

> Cake is a food only for special moments, because you have to have money to go to the city and money to buy it, but I learned how to make cake using the stove and now I can make the cake myself at home.
>
> **Yude Katunzi**
> Nguge Village

Contributions to the Tanzania government's *Building a better tomorrow: youth initiative for agribusiness* (bbt-yia) program

Launched in 2022, the government program Building a Better Tomorrow-Youth Initiative For Agribusiness (BBT-YIA) has 5 strategic objectives:

1. Inspire young people to get involved in agribusiness through effective communication to change their negative behaviour and attitude towards agribusiness;
2. Empower young people through training, mentoring and coaching;
3. Engage young people in profitable and sustainable agribusiness management;
4. Empower youth-led businesses by improving the business environment; and
5. Effectively coordinating initiatives to support youth agribusiness for synergy and efficiency.

Achieving the objectives of the BBT-YIA will contribute to the transformation of the agricultural sector (crops, livestock and fisheries) towards greater productivity and commercialization and, consequently, an increased income of smallholder farmers in order to improve livelihoods and guarantee food and nutritional security. More objectively, the project sought to help overcome the following challenges identified by the BBT-YIA:

Young students and farmers participate together in the project's training activity in Misungwi, SEPTEMBER 2023. Photo: WFP.

Low participation in youth groups/associations

The limited participation of young people in organizing and making decisions in associations is common in agricultural associations and cooperatives.
The Beyond Cotton project sought to strengthen and encourage the participation of young people in activities carried out by associations benefiting from the project, including giving them responsibility for conducting production experiments and sharing information in their communities. A total of 7,370 young people under the age of 35 took part in workshops and technical capacity-building activities in the field, which took place in partnership with UFCG, via local TARI extension technicians. Of this total, 1,768 were women and 5,602 were men.

Limited access to agricultural inputs and extension services

According to BBT-YIA, around 70% of young people enter agribusiness and the job market with few skills for good production development. In line with the Tanzanian government's actions to promote access to information for young people in rural areas, the project promoted low-cost technologies, such as manual seed drills and motor cultivators, which promote high yields, uniform production and better use of the rainy season.

A young farmer demonstrates the use of a power tiller during training in the Kwimba district. Photo: WFP.

It also promoted the use of methods, inputs and cultivation techniques to improve production conditions, which are still not widely used by young farmers in Tanzania, due to difficult access in their regions or even the high cost of acquisition. In this context, through the project's cooperation activities, young farmers were able to access low-cost plant nutrition techniques, recipes and methodologies for producing and applying organic inputs for fertilizing the soil and plants with raw materials and inputs that already exist in the area itself, such as aerobic and anaerobic biochars for foliar and soil fertilization, organic composting, the use of cow urine for nitrogen fertilization, among others, without having to spend money on external inputs to improve productivity.

Workshop on alternative pest control and proper seed storage in Misungwi district with the participation of secondary school youth in September 2023. Photo: WFP.

The project also included the use of methodologies for t control, diagnosis and identification of pests and diseases, the in-house manufacture and use of natural insecticides and fungicides, such as garlic and pepper bioinsecticides, tobacco, wood ash, and neem extract, reducing farmers' costs and increasing the phytosanitary control of crops. Appropriate ways of handling and preserving seeds were also discussed, guaranteeing quality seeds for new crops and reducing production losses due to low seed vitality.

Cotton and sunflower experiment area supervised by TARI in a farmer's house. Photo: TARI

Limited access and land ownership

Access to land among young people in agriculture is a challenge in different countries around the world, considering population growth and delayed transfer of land ownership to young people due to increased life expectancy. In Tanzania, most young people work on family land or seasonally leased lands, making it difficult to invest in irrigation systems and restricting their planting systems based on rainy seasons, which due to climate change, are severely affected. Therefore, the project sought to promote and implement the intercropping of food crops and cotton in order to:

- **optimization of the production area;**
- **cost reduction;**
- **phytosanitary control;**
- **improving soil quality;**
- **increased productivity per area.**

A farmer from Magu district prepares lunch during a cooking workshop, November 2022. Photo: WFP.

OPPORTUNITIES FOR ACTIONS

The Beyond Cotton project in Tanzania has shown that simple, low-cost actions can generate major impacts. Based on its experience and considering that the integration of different practices and government bodies is fundamental if we are to achieve the Sustainable Development Goals globally, we recommend:

- **Integrate sustainable, agro-ecological and low-cost practices by developing a National Technical Assistance and Rural Extension Plan for the country, taking into account the specificities of each region. It should also focus on expanding and strengthening small-scale agriculture and its organizations, considering the practices adopted in the Beyond Cotton project;**
- **Guarantee free public rural extension and technical assistance with a multidisciplinary and interdisciplinary approach, encouraging the adoption of new participatory methodological approaches and a technological paradigm based on the principles of Agroecology;**
- **Expand the sustainable practices promoted by the project through demonstration centers in different regions to showcase practical benefits, providing local farmers with direct learning opportunities.**
- **Develop and implement a National Program to Support Rainwater Harvesting and other Social Technologies that promote access to water for low-income people, especially in regions where scarcity is a challenge. This includes the replication of rainwater harvesting technologies such as cisterns, the promotion of effective irrigation practices such as economic gardens and the development of community seed houses to protect the genetic diversity of local seeds with the aim of improving farmers' resilience in the face of changing climatic conditions.**

- Develop and implement financing policies and access to low-cost, high-performance technological innovations, such as manual seeders and motor cultivators, in order to increase efficiency, reduce costs and improve productivity, contributing to the strategic objectives of the Building a Better Tomorrow-Youth Initiative For Agribusiness (BBT-YIA) program.

- Develop and promote policies that encourage value-added production, such as the manufacture of handcrafted looms and the strengthening of local organizations. This incentive not only adds value to the cotton fiber, but also expands markets for farmers, helping to increase income and diversify the local economy.

- Considering the important role of education in the development of children, young people and their families, it is recommended that food and nutrition education (FNE) activities be encouraged in an intersectoral manner, so that guidelines on adequate and healthy eating are present in the Tanzanian community by different government segments.

- In the area of food waste, train small farmers, the school community involved in producing school meals and rural extension workers with a view to making better use of food and reducing greenhouse gas impacts.

- For the consumption of fiber, vitamins and minerals, it is recommended to encourage the consumption of fruits and vegetables (FLV) and to foster the production of these foods locally, so that they become part of the communities' eating habits.

WORLD FOOD PROGRAMME - WFP

The WFP is the largest humanitarian organization tackling the challenges of global hunger and nutrition. WFP's mandate includes responding to humanitarian crises and empowering development program that benefit the poorest and most marginalized people. The Sustainable Development Goals (SDGs) call for going beyond saving lives and changing lives by focusing first on the people most in need, not just in the least developed countries, but all over the world. WFP supports a people-centered, needs-driven approach that is guided by humanitarian principles. In this project, WFP Tanzania was directly involved in the overall implementation and operationalization of the project, providing all the necessary support to the partners with regard to the planned activities, as well as the accountability of the project.

THE WFP CENTRE OF EXCELLENCE AGAINST HUNGER IN BRAZIL

The WFP Centre of Excellence in Brazil is the result of a partnership that has existed since 2011 between the WFP and the Brazilian Government. The Centre is a global hub for dialogue on shaping public policies, sharing Brazilian social technologies, learning, capacity building and South-South technical assistance to promote actions against hunger. Remotely and in person, we continuously strengthen government capacities to change people's lives and eradicate hunger.

FEDERAL UNIVERSITY OF CAMPINA GRANDE (UFCG)

UFCG provided technical support to the project, including conducting training activities. UFCG sought to encourage the participation of smallholderfarmers in local production chains, improving production rates and lowering costs, as well as promoting the valorization of local products, farmers' knowledge and traditions in Tanzania in intercopped food production systems, including those aimed at school meals and the valorization of products.

BRAZILIAN COOPERATION AGENCY (ABC) OF THE MINISTRY OF FOREIGN AFFAIRS OF BRAZIL

ABC coordinates South-South cooperation actions, facilitating knowledge exchange, skills and experiences developed by Brazilian institutions and organizations, which present Brazil's recognized experience in cotton farming and in the marketing of food from smallholder farming for public policies, their equipment and related initiatives.

BRAZILIAN COTTON INSTITUTE (IBA)

The IBA was founded in June 2010 to manage resources from the World Trade Organization (WTO) cotton dispute with the aim of promoting the development and strengthening of Brazilian cotton farming. It is the founder of the Beyond Cotton Project. In pursuit of its purpose, the IBA seeks to foster the training of farmers, promote the sharing of successful experiences, manage resources, and disseminate information to strengthen cotton production around the world.

MINISTRY OF AGRICULTURE

The Ministry of Agriculture in Tanzania's mission is to provide quality agricultural and cooperative services, provide an enabling environment for stakeholders, empower local government authorities and stimulate the private sector to contribute effectively to sustainable agricultural production, productivity and cooperative development. In this project, the Tanzanian Ministry of Agriculture cooperated technically in the activities carried out, not only in the field of agriculture, but also in the field of nutrition, supporting the Tanzania Agricultural Research Institute (TARI) and the Tanzania Cotton Board (TCB).

TANZANIA AGRICULTURAL RESEARCH INSTITUTE

TARI is the research institute responsible for conducting, regulating, promoting and coordinating all agricultural research activities in Tanzania. Ukiriguru is one of TARI's 17 centers and is responsible for cotton research in the country. The institute also has research units on soils, cereals, legumes, post-harvest activities and natural resource management. TARI carries out socio-economic, market and policy research and analysis in order to advise the agricultural sectors through policy formulation and review. In this project, TARI contributed significantly to the implementation and execution of the activities.

TANZANIA COTTON BOARD

The TCB oversees and ensures fairness between stakeholders in the Tanzanian cotton sector, promotes cotton production and facilitates the entry of new players into the market. The TCB works to create a future in which people and communities in cotton-growing areas can achieve better livelihoods, especially with regard to food and nutrition security. Its aim is to improve the standard of living in the western and eastern regions of the country through sustainable increases in cotton production.

Farmers during a participatory rural diagnosis workshop identify the food menu and their production systems, September 2022. Photo: WFP.

WFP World Food Programme
WFP World Food Programme Centre of Excellence against Hunger
IBA Brazilian Cotton Institute
TARI
TCB
UFCG Universidade Federal de Campina Grande
ABC Brazilian Cooperation Agency
Ministry of Foreign Affairs
Brazilian Government BRASIL Uniting and Rebuilding