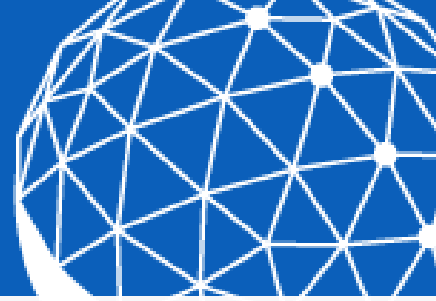


# Factsheet Youth Adaptation Forum

## CLIMATE-RESILIENT AGRICULTURE



**Food insecurity is escalating rapidly due to the impacts of climate change.** In 2022, 2.4 billion people worldwide experienced moderate or severe food insecurity. Nearly 20% of Africa's population faces hunger - a higher percentage than in any other region. Notably, about 60% of the global youth population lives in rural areas and depends on agriculture for their livelihoods.

This demographic is uniquely positioned to spearhead innovation and adaptation in the agricultural sector. The next generation of farmers will play a critical role in developing climate-resilient solutions that protect the environment and foster a prosperous future for rural communities.



Up to **60%** of the global population resides in rural areas

According to a FAO & GCA survey conducted on young people

**91%** are very concerned about the impacts of climate change on agriculture






**ONLY 2%** of global climate finance goes towards funding adaptation efforts of smallholder farmers in Africa and Asia

Losses on African farms are almost **TWICE THE GLOBAL AVERAGE** yet sub-saharan Africa only accounts for **4%** of global greenhouse gas emissions

Since **1961** there has been a **20%** worldwide reduction in farm productivity due to climate change

Food security decreases by **5 to 20%** for each flood or drought event

### MAIN CHALLENGES FACED BY YOUNG PEOPLE IN CLIMATE-RESILIENT AGRICULTURE

-  Limited opportunities and insufficient support for local initiatives
-  Difficulty accessing diverse resources such as land, finance and technology
-  Lack of technical expertise, mentorship, and access to knowledge and training
-  Insufficient information and knowledge exchange platforms for youth involvement
-  Policy and institutional barriers such as political polarization and institutional limitations

### WHAT CAN YOUNG PEOPLE DO TO ENGAGE WITH AGRICULTURE ADAPTATION SOLUTIONS?

-  Educating themselves about climate change, adaptation strategies and smart agriculture through courses, seminars and webinars
-  Raising awareness through workshops, events, and community outreach
-  Collaborate with farmers
-  Join movements, NGOs, and multi-stakeholder efforts
-  Create their own initiatives or businesses to advocate for agricultural adaptation solutions
-  Leverage technology and digital platforms for learning and sharing knowledge

## GREEN HARMONY: 4F INTEGRATED FARMING SYSTEM

Govia Ridzha Rifda, Indonesia

Indonesia is facing global climate challenges such as extreme temperatures, inconsistent rainfall, and declining water quality. To tackle these issues, Green Harmony worked on integrating sustainable agriculture with the versatile use of azolla. Once considered a pest, azolla has been transformed into a valuable resource within their 4F Integrated Farming System: Fertilizer, Filtration, Feed, and Food. In addition to being used as food for catfish, azolla is a key ingredient for their liquid organic fertilizer. It enhances agricultural productivity while filtering pollutants from aquaculture wastewater.

Thanks to its adaptability and high nutrient content, azolla shows promise for sustainable food production. This holistic system provides alternative food sources for rural communities and reduces production costs. Through their 4F Integrated Farming System, Green Harmony demonstrates how sustainable practices can positively impact both local communities and the global environment.



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## FARMING FOR A NEW CLIMATE REALITY, SOUPAH FARM-EN MARKET LIMITED, Ifeoluwa Olatayo, Nigeria

Approximately 24% of Nigeria's GDP comes from its agricultural sector. However, the country is experiencing extreme weather events such as rising temperatures and heavy rainfall that impact agriculture. As a solution, Soupah Farm-en-Market Limited, a climate-smart agritech company, uses hydroponic technology. This method involves growing plants in a controlled environment without soil. This technology allows precise control over water and light. The risks of flooding and droughts are therefore managed. Hydroponic technology also uses 99% less water compared to traditional farming. At Soupah Farm-en Market Limited, they focus on growing leafy vegetables like kale, arugula, and lettuce, but also crops such as tomatoes and sweet peppers.

Soupah Farm-en-Market Limited's goal is to improve food security and quality for people through sustainable practices. They offer a range of solutions adaptable to both urban and rural environment. Their "Fund Connect" solution addresses the financing gap for rural smallholder farmers by providing access to essential tools and inputs like solar pumps, zero-energy spreaders, improved seeds, and insurance.



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## KEY RECOMMENDATIONS



Mentorship is essential for helping young farmers navigate the complexities of sustainable agricultural practices



Start with small-scale innovations and gradually expand



**CAPACITY-BUILDING AND LOW-COST GREENHOUSES AS A SPRINGBOARD TO INCREASED CROP PRODUCTION, MUMITA HOLDINGS**

**Gislaine Matiedje Nkenmayi, Cameroon**

Cameroon, with its five diverse agroecological zones, is facing changes in its rainfall patterns. Unpredictable and heavy rainfall lead to problems such as flower abortion, lack of pollination and significant reduction in overall food production. As a solution, Mumita Holding decided to invest in low-cost greenhouses.

Mumita Holdings is an agriculture start-up focused on creating solutions to help African farms and agricultural businesses improve productivity and ensure sustainable food production. The company's practices focus on empowering youth and women from local communities through hands-on training sessions on building and maintaining greenhouses and irrigation systems. The produce from these initiatives is commercialized both locally and internationally under the Mumita food brand which support farmer's livelihoods and allow to export Cameroonian culture.



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**GREEN JOBS IN AGROFORESTRY AND BEEKEEPING IN CHIMANIMANI**

**Primrose Sithole, Zimbabwe**

In 2019, the region of Chimanimani was heavily impacted by Cyclone Idai. As an aftermath, the region faced significant challenges such as loss of animals and plants, increased pest infestations, and severe land degradation. Chimanimani is also vulnerable to climate change impacts such as floods and droughts. Because irrigation agriculture is becoming more and more unreliable, farmers are forced to diversify into other forms of crop production, such as apiculture. Beekeeping is not a new activity in the country. However, to make it sustainable, farmers moved from using log hives, which promotes deforestation, to modern-day hives like the Kenyan top bar hive made from sustainable materials. Beekeeping allows to reduce deforestation as it is not legal to cut in forest that act as bee habitats.

To make apiculture a sustainable practice in the region, the Food and Agriculture Organization (FAO) is supporting beekeepers with capacity-building on beekeeping such as hive making, honey harvesting and processing, and business management. FAO initiated this project in six districts, in Chimanimani, the project includes 11 youth, with seven females actively participating. Within 47 hives, 14 are already colonized, and they have harvested 10 kg of raw honey, expecting more in the coming months. They have successfully planted 15,000 eucalyptus trees.



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**MORE INFORMATION**

The Global Center on Adaptation (GCA) is an international organization that promotes adaptation to the impacts of climate change. The Youth Leadership and Education Program aims to put young people at the forefront of advancing the adaptation agenda.

**About the fact sheets**

This fact sheet is part of a series that presents information collated from the Thematic Youth Adaptation Forums held between March 2024 and August 2024. The information seeks to build the knowledge of young people on thematic areas of adaptation, foster a global knowledge transfer on good practices of adaptation solutions and encourage innovation and accelerate adaptation action amongst young people.

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