Farmer managing a variety of crops at the Katikichiri site, Chad

WFP
World Food Programme

SAVING LIVES
CHANGING LIVES

Regenerating Ecosystems and Restoring Livelihoods

for Food Security and Resilience

CHALLENGES AND SOLUTIONS

Ecological degradation and extreme weather events, fueled by climate change, are a threat to food security and livelihoods. Food Assistance for Assets (FFA) Programmes are one of WFP's **key initiatives that can contribute to improving the** long-term **food security** and resilience of vulnerable communities in fragile contexts.

FFA focuses on **restoring degraded land, biodiversity, soil fertility and water cycles and on strengthening local infrastructure and livelihoods.** Through regenerative design of ecosystems, WFP works hand in hand with communities to implement interventions that retain water and nutrients in the land, favoring agricultural production and buffering them from extreme weather events such as drought or floods. Restoring the productive potential of land results in more abundant, diverse and nutritious food.

FFA programmes are at the core of gender transformative approaches. Participatory processes prioritize the active role of women and marginalized groups in the visioning, decision-making and implementation of the programmes, fostering gender dialogue. Assets and new livelihoods opportunities tailored around women's needs play a crucial role in women's empowerment within the community.

FFA activities are also at the center of WFP's Integrated Resilience approach and the main pillar of WFP's strategy on climate change adaptation. They combine support that addresses the immediate food needs of individuals (cash, vouchers, food distributions) with activities that help prevent and adapt to shocks, improve assets productivity and create new sources of income.

September 2024

WHAT DO ECOSYSTEMS HAVE TO DO WITH FOOD SECURITY?

Food requires water, soil and nutrients to grow. All of these are produced through natural systems and cycles. **When land degradation occurs,** it leads to the **destruction** of **biodiversity**, a **decrease in soil nutrients** and **loss of plant life**, triggering further erosion by rainwater. Trees and plants die off, releasing carbon into the atmosphere. **Degraded land hinders the efficient replenishment of natural groundwater reservoirs**, compromising the water security of communities. The absence of tree cover contributes to an **increase in ground temperature**, and the lack of water content in the soil means that it cannot cool itself through evapotranspiration, which is, essentially, nature's air conditioning system. When ecosystems collapse, dragging down crops and livelihoods, social unrest or even conflict are more likely to happen.

The great news is that **communities can work with nature to repair environmental harm.** By working on the landscape to harvest flowing water and its nutrients, FFA activities can kickstart a process to hydrate and nourish the productive potential of degraded soil and reduce the impacts of floods, droughts, and ecosystem degradation. Restoring ecosystem functions leads to renewed access to water and soil moisture which contributes to food production, and buffers land, people and economy from shocks and stressors.

LIVELIHOOD ACTIVITIES

On top of the **restoration of degraded landscapes** to control loss of soils, water, and biodiversity, FFA **focuses on livelihoods** by **restoring agricultural** and pastoral **potential** through **regenerative approaches, building or repairing community infrastructure** to improve **access to natural resources, markets and services, protecting against natural shocks,** and **transferring skills** through trainings for the creation, management, and maintenance of community and household assets.

In practical terms, **FFA activities promote food security** by building protection against floods, harvesting rainfall, planting trees, creating irrigation canals to be less dependent on rains for agriculture, increasing the soils' capacity of absorbing water to face drought periods, and building or rehabilitating small infrastructure in the aftermath of disasters. **FFA activities also contribute to restore food systems through the development of market community infrastructure.** Building or repairing rural roads, bridges and community warehouses supports the reduction of post-harvest losses and facilitates transport and market access.

HOW WE DO IT

WFP understands the **importance of customizing our approach to each context.** The following **principles** are key for ecosystem restoration activities:

- **Understanding the local context, landscape, and livelihoods to select the right assets,** and ensuring technical standards are met so that assets can be durable.
- **Putting communities at the center through participatory processes and transferring skills** gives a voice to the most vulnerable in decision making and **empowers** people in the management of their own land and assets, particularly **women**.
- **Working in partnership** with governments, UN agencies and local NGOs **to be more sustainable and reinforce each other's impact.**
- **Strengthening government and institutions'** capacities to achieve SDG 2 #ZeroHunger.
- Using livelihoods and landscape restoration **as an entry point for integrated resilience** programming at scale.
- **Analysing evidence** to improve programming and understand impacts through the Assets Impact Monitoring from Space (AIMS).

THE ASSET IMPACT MONITORING FROM SPACE (AIMS)

AIMS uses satellite imagery to keep track of the impacts on landscape and vegetation of FFA programmes.

In the period 2018-2023:

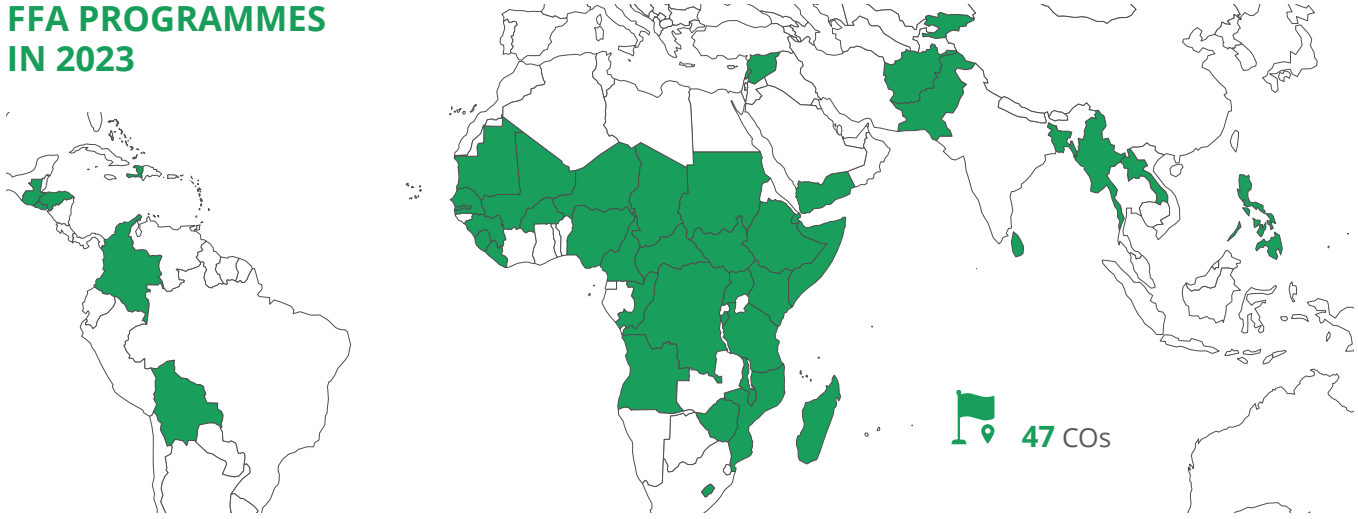
32 countries **benefited from the service**	**3,493** assets monitored and **18,500** satellite images analized	At least **74%** of the assets showed **improvements in vegetation and soil conditions**

POSITIVE IMPACTS

- **Empower** local communities
- **Improve access** to food and nutrition
- Restore **ecosystem function and services**
- **Build** resilience to shocks
- Improve prospects for **peace**
- Promote **gender transformation and women's empowerment**
- **Strengthen** institutions' **capacities**
- Increase **dietary diversity**
- **Livelihood** diversification and increase in **income levels**

» A 2024 cost-benefit analysis conducted by the United Nations University Institute for Environment and Human Security (UNU-EHS) in Niger found that i**nvesting in the implementation and maintenance of land restoration measures for resilience and climate adaptation is 3.3 to 3.5 times more cost-efficient** than providing humanitarian aid **for food insecure population** until 2055.

FFA PROGRAMMES IN 2023



FFA ACHIEVEMENTS IN 2023

7.9 million people directly benefited from Food Assistance for Assets programmes

- **376,500** hectares of land rehabilitated
- **4,200** hectares of land reforested
- **7,200** kilometres of feeder roads and trails constructed/repaired
- **4,100** kilometers of irrigation canals constructed/rehabilitated
- **10,600** meters of flood protection build/ rehabilitated (dikes, bunds, embankments)
- **66** bridges and culverts constructed/ repaired
- **12,400** water points (ponds, shallow wells, weirs, dams) constructed/rehabilitated
- **111,800** household gardens and **4,900** hectares of community gardens established

CHAD

WFP operations in Chad clearly show how assets created for vulnerable people contribute towards more resilient food systems, job and income generation, and reduced humanitarian needs. In a context where access to water and land poses a significant challenge for food security and nutrition, **WFP resilience activities in Chad centered around water and land management.** After consultation with beneficiaries and development partners, a large and diverse set of activities were implemented to ensure the well-being of land, forest and water resources, as well as harness untapped ground and surface water through investing in large-scale infrastructures.

In 2023, WFP supported **the construction of 40 kilometers of multipurpose dikes and water spreading schemes that made it possible to cultivate 4,600 ha** of land, leading to diversified and increased crop production. In addition, **communities were assisted with rehabilitating over 13,400 ha of degraded lands**, which enabled the development of 2,300 ha of vegetable gardens and 67 community forests. These activities were complemented with **the training of 14,300 lead farmers** in various technologies and practices, including post-harvest handling, and management and utilization of created assets. Through WFP's integrated resilience program, **90% of supported households reported an improved capacity to withstand drought.** Among those impacted by heavy rains or floods, 57% improved their resilience. Additionally, **75% reported better food security and diversity**, as well as an enhanced capacity to manage household expenses. Improved production, social capital, and income led to reduced distress migration.

YEMEN

Despite the heightened vulnerability of Yemen, affected by years of devastating warfare and climate-driven water scarcity, WFP scaled up its asset creation and livelihoods activities with cascading positive effects on the resilience of vulnerable populations. FFA projects were implemented across 131 districts, an expansion from the 92 districts covered in 2022. Activities focused on recovery and rehabilitation of land and the construction of water-related community assets to support local livelihoods.

In 2023, **WFP enhanced the productive capacity of 700 hectares of agricultural land**, which produced 5,000 MT of staple food and **contributed to food security**. Adopting a **people-centered approach**, FFA activities focused on the **maintenance and restoration of 150 hectares of community gardens and orchards**, as well as 40 household and school gardens. **To address water scarcity, WFP built over 1,140 water points, 43 solar-powered water pumps and water collection centers**, thereby improving people's access to safe water. These **community-oriented efforts** were complemented by the **construction of 70 kilometers of drainage canals and flood protection embankments, 50 kilometers of irrigation canals, as well as irrigation schemes** that enhanced the production and market opportunities for local farmers.

A total of **414,600 individuals benefitted from FFA activities** with an impressive **nine out of ten households in targeted communities reporting an enhanced livelihood asset base.** These improvements provide a solid foundation for long-term stability and self-sufficiency for communities across Yemen.

Photo cover page: WFP/Asma Achahboun

Climate and Resilience Service (PPGR)

World Food Programme
Via Cesare Giulio Viola 68/70,
00148 Rome, Italy - T +39 06 65131
wfp.org

For more info, please contact the Climate and Resilience Service.

Focal points' contacts:

- **Yonathan AYALEW,** Asset Creation and Livelihoods Officer, *yonathan.ayalew@wfp.org*
- **Lorenzo BOSI,** Asset Creation, Livelihoods and Regenerative Practices Team lead, *lorenzo.bosi@wfp.org*