

# IMPACT EVALUATION OF RESILIENCE INTERVENTIONS ON FOOD SECURITY, LIVELIHOODS AND WOMEN EMPOWERMENT IN RWANDA

Despite a decade of significant agricultural growth, one in five Rwandans remains food insecure. With one of Africa's highest population densities and 40% of the population exposed to recurring natural hazards, including droughts, landslides, floods and windstorms, development progress is fragile. These shocks deepen vulnerability, drive malnutrition, and threaten efforts to end extreme poverty. Gender dynamics also play a key role in household vulnerability: compared to their male counterparts female-headed households are far more likely to fall into the lowest welfare category ("Ubudehe" status 1), highlighting the need for gender-sensitive resilience strategies.

Against this backdrop, WFP launched the Sustainable Market Alliance and Asset Creation for Resilient Communities and Gender Transformation (SMART) project to enhance food security, strengthen resilience to shocks, and empower women, through the generous support of Korea International Cooperation Agency (KOICA). Targeting the most vulnerable households, SMART provided paid opportunities to engage in Food Assistance for Assets (FFA) activities, including hillside terracing, marshland restoration, and reforestation that are designed to build productive assets while improving livelihoods. These six-month activities were complemented by mobile crèches, gender and nutrition

training, agricultural inputs, and support for savings groups and market access, with the aim of fostering long-term resilience and gender equality.

WFP's Office of Evaluation in partnership with the World Bank's Development Impact Evaluation (DIME) group conducted a rigorous impact evaluation using a Randomized Control Trial (RCT) design across 78 communities. In half of the participating communities, only women could participate in FFA, allowing for analysis of gender-specific outcomes. The SMART project reached 180,000 people across five food-insecure, climate-vulnerable districts, with the evaluation focusing on 1,170 households facing droughts, floods, and land degradation.

### KEY EVIDENCE O

This evaluation shows that targeting women with FFA led to stronger women's empowerment after the project has ended. However, these positive outcomes were preceded by short-term negative effects during implementation, including reduced decision-making power and increased psychological abuse.

Participation in FFA reduced food insecurity in participating communities compared to those that did not receive the intervention, with impacts lasting up to a year after the project ended. It also contributed to improved mental health and higher livelihood diversification.

## CASH-BASED TRANSFERS (CBT) AND GENDER AND CLIMATE AND RESILIENCE IMPACT EVALUATION WINDOWS

This impact evaluation is part of the Cash-Based Transfers and Gender and the Climate and Resilience Impact Evaluation windows, both created by the WFP's Office of Evaluation and respective programme teams, and delivered in partnership with the World Bank's Development Impact Evaluation (DIME) group.



#### **KEY FINDINGS**

What is the impact of women's participation in FFA (working outside the household and receiving cash in return) on their social and economic empowerment?

Targeting women through the FFA intervention initially increased their participation in WFP activities by 11 percentage points but temporarily reduced women's agency over consumption, in both FFA-for-women and FFA groups. It also saw a drop in men's supportive attitudes in regard to women and a rise in psychological abuse, especially in the FFA-for-women group.

However, by the end of the project, women's agency, attitudes to how they spend their time, and overall well-being in the FFA-for-women group improved significantly.

These gains were bigger than in the standard FFA group. The findings suggest that, despite the short-term backlash, the FFA-for-women model may be more effective in promoting long-term women's empowerment.

Does participation in FFA affect key food security outcomes of interest? Can FFA increase the overall resilience of households?

The FFA programme had small but lasting positive effects on households' food security, expenditures, consumption, and psychosocial well-being lasting up to a year after the programme ended. This suggests the programme helped households to become more resilient by making their food consumption more stable over time.

Improvements in food security did not come from better agricultural productivity, livestock management, or wage employment. This is likely because many assets were built on private land, which excluded participants who didn't own land to benefit directly from terracing or marshland restoration.

Instead, households spent more on food and non-food items, increased borrowing by 37%, grew business ownership from 6% to 11%, and yielded higher business profits. Participants also reported feeling less stressed and more satisfied with life, compared to those who didn't join the programme.

How does FFA affect the resilience over time and throughout the seasons?

The evaluation used phone surveys every two months for nearly two years to assess how food security changed over time and across agricultural seasons.

The results show that FFA impact on food security varies by period. It was stronger in certain months (such as February to-June 2022), though not fully explained by participation intensity alone.

The impacts also take time to appear, emerging 3-4 months after wage transfers, and peak around 4-8 months after initial participation.

However, these effects fade within a year, suggesting that while FFA boosts short-term resilience, the gains are time-bound and fade over time.

#### **KEY CONSIDERATIONS**

BOOST PARTICIPATION RATES, ESPECIALLY AMONG WOMEN.

Participation rates were average overall, and lower in the FFA-for-women group, particularly among women. Reasons why some beneficiaries did not participate in the programme included long travel to work sites, competing tasks (such as own farm work), and low daily wages.

To improve future programmes, it's important to better explain project benefits, offer higher compensation and other incentives, and implement measures to ensure that women benefit from the programmes specifically designed for them.

WFP/Isaac Onyango

Tell me other challenges you faced or other problems you met in the work, there aren't?

Participant 1:

The challenge was the little salary and doing the work.

Participant 2:

66 It was little, and we were working far. 99

Participant 3:

It's the hours. And working for many hours.

Female beneficiaries,
FFA women-only community

ADDRESS BACKLASH AGAINST WOMEN DURING IMPLEMENTATION.

Despite long-term attitude improvements among men, the programme led to short-term increases in psychological violence and reduced agency (over consumption) for women. The programme needs complementary interventions (for example, gender equality training, community dialogues, financial literacy, and gender-based violence awareness) to protect and support women during its implementation.

EXPLORE LONGER AND MORE DIVERSE LIVELIHOOD SUPPORT FOR WOMEN.

While women's agency improved, this did not translate into higher incomes when the programme ended. WFP should consider longer-term assistance, and alternative livelihood approaches to help women earn an income beyond the programme period.

TACKLE BOTH FOOD ACCESS AND DIETARY QUALITY.

FFA improved food access but not dietary diversity, especially in the women-targeted group. Lower participation and reduced cash support in this group may have contributed to this finding. Nutrition education, promoting diverse diets, and stronger engagement strategies, could improve both food access and diet quality.

LEVERAGE SYNERGIES BETWEEN FFA AND OTHER RESILIENCE PROGRAMMES.

Choose asset and projects that will enhance the long-term value of FFA and complement with other resilience initiatives.

EXPAND ACCESS TO AND BENEFITS FROM CREATED ASSETS.

Ensure more households benefit from FFA-created assets by involving communities more in planning and access strategies.



The reason why we shall not benefit from them is that they made terraces in their own farmlands. They will till the land and then proceed and harvest their crops. Now, the reason why I will not benefit is because I will not go and till the land there and manage it!

Male beneficiaries, FFA

INCLUDE COST-EFFECTIVE ALTERNATIVES WHERE NEEDED.

In contexts where asset creation is challenging or inequitable, consider integrating individual-level support such as cash transfers into resilience programming.

#### **DESIGN & METHODOLOGY**

To assess the causal impacts of the SMART project, the evaluation used a clustered randomized controlled trial

design. WFP Rwanda initially identified **59 potential FFA** 

sites across five sectors. From these, 78 villages in 24 sites were selected and randomly assigned to either one of two programme groups (FFA-for-women or FFA) or a comparison group, using a stratified randomization approach at the "hypersite" level.

Eligible households (those in Ubudehe categories 1 or 2 who had not previously received WFP assistance), were prioritized to participate in FFA activities, including hillside terracing and marshland restoration, alongside training sessions.

Participants received cash transfers equivalent to RWF 1,300 (approximately USD 1.30) per working day, averaging 12 days of work per month for six months, amounting to roughly USD 93 per household over the project period. For data collection, **15 households** were randomly selected per community, resulting in an evaluation sample of 1170 households.

#### ■ FFA-FOR-WOMEN GROUP: 396

households in this programme group received a conditional cash transfer (maximum USD 30 per month for six months) - where the primary female decision maker was invited to register to work on the asset, attend training sessions, and receive the transfer. This group benefited from the complementary activities.

- FFA GROUP: 387 households in this programme group received a conditional cash transfer (maximum of USD 30 per month for six months) – where the primary male or female decision maker was invited to work on the asset, attend training sessions, and receive the transfer. This group also benefited from the complementary activities.
- COMPARISON GROUP: 387 households did not receive assistance from WFP as they were outside the project target areas.



#### FFA for women

**26** communities (332 double-headed households)

396 households

#### **FFA**

**26** communities (332 double-headed households)

**387** households

#### Comparison

**26** communities (331 double-headed households)

**387** households

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