

EVALUATION IN ACTION: Testing the Impacts of Forecast-Based Financing/ Anticipatory Action in Nepal



Photo Credit: Victoria Ziegler

Background

Over 80% of the world's food-insecure population lives in countries prone to natural disasters that exacerbate food insecurity and malnutrition. With extreme weather events as one of the gravest risks to food security in the world today, there is increasing momentum in the humanitarian sector for anticipatory action. By shifting from a responsive approach to anticipatory action, humanitarian organizations put response plans and funding in place before the worst impacts materialize, in order to reduce negative coping strategies, such as skipping meals and eating lower quality food.

The World Food Programme (WFP) is implementing one such innovative approach with Forecast-based Financing/Anticipatory Action (FbF/AA) to mitigate the impacts of severe floods and droughts in Nepal. The goal of WFP's FbF/AA programming is to provide families, made vulnerable by natural disasters, with unconditional cash transfers based on flood forecast triggers.

Triggers are based on pre-defined criteria, such as a river's water level or the amount of rainfall during a set period. Once a threshold is passed, activation is triggered. To assess the impacts of providing cash transfers based on anticipatory action triggers, compared to a traditional post-disaster response, WFP's Office of Evaluation (OEV), together with the World Bank's DIME department, is conducting a randomized controlled trial (RCT) impact evaluation in western Nepal.

Evaluation Design & Methodology

This cluster RCT studies the impact of providing cash transfers based on predictions prior to an anticipated extreme weather event compared to providing cash transfers after the flood peak has materialized. In preparation for potential trigger activations, the WFP Nepal Country Office pre-identified and verified approximately 12,500 flood-vulnerable households in Nepal's western Karnali river basin.

Within that area, 140 villages encompassing around 2,500 households were sampled and then randomly allocated to two treatment arms, each receiving a one-time unconditional cash transfer of around \$110 USD:

- 1. Early transfers:** Eligible households in 70 villages receive anticipatory cash transfers right after trigger activation.
- 2. Later transfers:** Eligible households in 70 villages receive post-flood peak cash transfers, WFP's traditional response.

The randomization ensures that both groups have equal attributes on average. Based on this approach, the evaluation can quantify the impact over the interventions, while also ensuring that all households in the study receive humanitarian support.

Quick Facts

TITLE

Testing the Impacts of Forecast-Based Financing/ Anticipatory Action in Nepal

TYPE OF EVALUATION

Impact Evaluation

EVALUATION METHODS

Cluster Randomized Control Trial (RCT)

EVALUATION ARMS

1. Anticipatory cash transfers
2. Post flood peak cash transfers

COUNTRY

Nepal

DONORS

UN-CERF, USAID/BHA

PARTICIPANTS

2,500 households in West Nepal

IMPLEMENTING PARTNER

WFP Nepal Country Office

EVALUATION/RESEARCH PARTNERS

WFP Office of Evaluation (OEV), World Bank DIME, funded by USAID/BHA grant to WFP OEV

Evaluation Purpose and Audience

In a recent quasi-experimental study, Pople, et al. (2021) demonstrated that anticipatory cash assistance in Bangladesh lead to better livelihood outcomes when compared to a households that did not received assistance. However, there are [no RCTs or impact evaluations](#) studying whether an anticipatory approach is more effective than post-shock support. As the first RCT on this topic, the findings will inform the WFP Nepal Country Office for future programming, as well as the global community interested in FbF/AA for key outcomes, including food security, coping strategies, asset loss, and psychosocial wellbeing. Since anticipatory action is growing in importance as a tool for WFP and other humanitarian actors, more rigorous evidence in this space is urgently needed.



Photo Credit: Save the Children

Evaluation Challenges

Due to the uncertainty around whether triggers would be activated, and if so, where, the team did not collect dedicated baseline data. Instead, they relied on the available targeting and administrative data to serve as baseline data. Since no dedicated baseline is required, and there is no “pure” control group of households that does not receive any transfers, thus, the study is considered a [Lean Impact Evaluation](#). To increase statistical power, the team is relying on multiple rounds of follow-up data collection. Furthermore, a lot of advanced planning is required for this approach, as the impact evaluation tools need to be ready and the evaluation team must remain on alert to execute on pre-planned strategies in an instant.

Context and What's Next

In October 2022, activation was triggered, and WFP delivered transfers to the group in the first evaluation arm a few days later. WFP then delivered transfers to the group in the second evaluation arm after the flood peak, in November 2022. In between these transfers, the evaluation team collected the first round of quantitative panel data from both groups, with another round of data collection in January 2023. The third, and final, round is planned to take place after the harvest season in May/June 2023. Qualitative data collection will complement and enrich the quantitative survey findings. While preliminary results are already emerging, WFP will disseminate final results in late 2023.

Click on the links to learn more about WFP's [impact evaluations in humanitarian settings](#) and [impact evaluation strategy](#). Contact Jonas Heirman, Head, Impact Evaluation Unit, at jonas.heirman@wfp.org and Felipe Dunsch, Impact Evaluation Officer, at felipe.dunsch@wfp.org with any questions.

Humanitarian Assistance Evidence Cycle

This brief is brought to you by the Humanitarian Assistance Evidence Cycle (HAEC) Associate Award. HAEC works to increase the efficiency and effectiveness of emergency food security activities funded by the USAID Bureau for Humanitarian Assistance (BHA) by increasing the use of cost-effective and timely impact evaluations in humanitarian contexts.

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This brief is part of HAEC's Evaluation in Action series highlighting ongoing impact evaluations from around the world. Do you have an ongoing impact evaluation in a humanitarian context that you want to share?



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