



Strengthening climate resilience through asset transfers: Lessons from Pakistan's National Poverty Graduation Programme

Saima Nawaz, Rocco Zizzamia and Nasir Iqbal

- The National Poverty Graduation Programme (NPGP), funded by the International Fund for Agricultural Development and the Government of Pakistan, has successfully reduced poverty and improved livelihoods for ultra-poor households by providing livestock and other productive assets.
- While asset transfers benefit households during stable periods, the 2022 floods revealed that these assets, particularly livestock, increased financial vulnerability during climate shocks.
- Maintaining livestock during floods became a burden due to rising costs, lack of fodder, and increased vulnerability to disease, leading many households to financial distress.
- Although livestock served as a store of wealth and provided income during normal times, they failed to build household resilience during floods, increasing vulnerability instead of mitigating it.
- NPGP should incorporate climate-resilient assets, such as drought-resistant livestock or alternative livelihoods, to reduce vulnerability during climate shocks. Shock-responsive consumption support may help households smooth consumption and protect assets during crises.
- To build a climate-resilient poverty alleviation strategy, NPGP must integrate these policy recommendations to ensure community members escape poverty and are better protected from future climate shocks.

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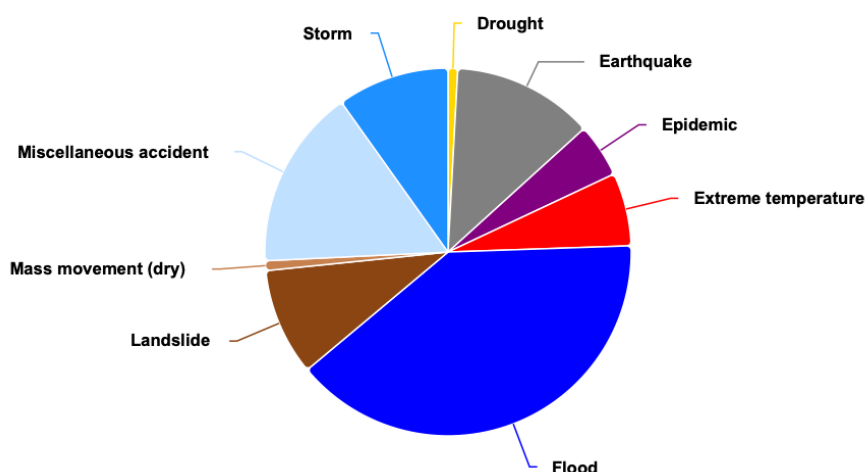
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Background

Pakistan is highly susceptible to the impacts of climate change, frequently experiencing floods, droughts, and heat waves (Adnan et al., 2024). Among these, floods remain one of the most recurrent and devastating natural disasters (Figure 1). The National Poverty Graduation Programme (NPGP), a state-led asset transfer programme, was launched to provide ultra-poor households with productive assets to improve their livelihoods and build long-term resilience (Nawaz and Iqbal, 2024). However, the programme's capacity to foster resilience must be carefully evaluated in the face of increasingly frequent climate shocks.

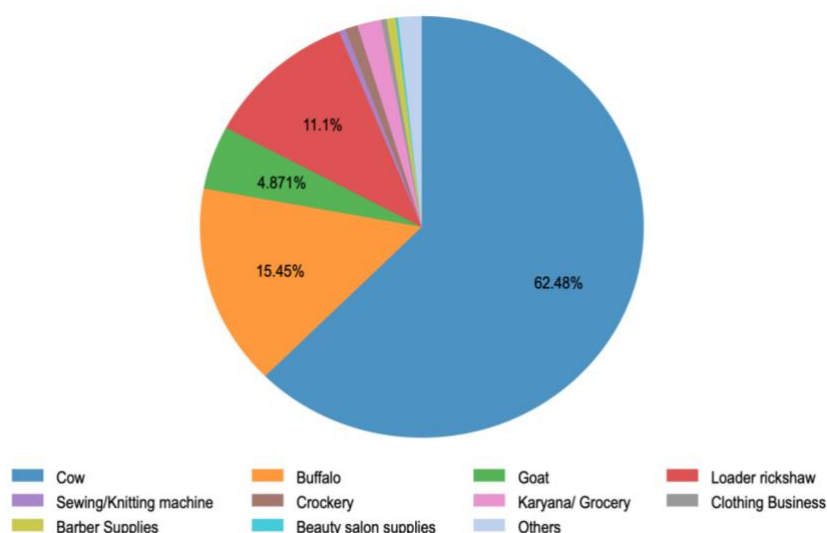
FIGURE 1: Average annual natural hazard occurrence for 1980-2020



Source: <https://climateknowledgeportal.worldbank.org/country/pakistan/vulnerability>

The National Poverty Graduation Programme (NPGP)

Launched in 2021, the NPGP is a major poverty alleviation initiative in Pakistan funded by the International Fund for Agricultural Development (IFAD) and aimed at providing ultra-poor households with productive assets such as livestock (Figure 2). In June 2024, the NPGP reached 324,186 households in 23 districts, providing productive assets to more than 148,225 households and extending interest-free loans to 175,791 households. The programme aims to enable participants to generate stable income and enhance their resilience to economic shocks. Participants typically receive livestock valued between PKR 20,000 and PKR 60,000 (approximately GBP 90 to GBP 270), primarily cows and goats, which are intended to serve as both a source of wealth and a means of improving nutritional intake through milk production.

FIGURE 2: Asset transfers type chart

Source: Authors' formulation based on NPGP Household Survey

However, while asset transfers have provided tangible benefits to households during stable periods, the devastating 2022 floods have raised serious concerns about these assets' role in climate resilience. With one-third of the country submerged, approximately 33 million people were affected, and nearly eight million were displaced during the 2022 floods. The damage was estimated at USD 14.9 billion, with losses to GDP at USD 15.2 billion. (GoP, 2023). This policy brief presents findings from research on the NPGP's efficacy during both normal periods and extreme weather events, focusing on the 2022 floods.

Methodology: Data and analysis

The findings presented in this policy brief are based on a mixed-methods approach, combining quantitative and qualitative data collected from NPGP participants.

Quantitative data

We used primary survey data from 4,131 households, namely the NPGP Household Survey, covering the treatment (2,277 households) and control groups (1,854 participants in the Benazir Income Support Programme (BISP) who did not receive NPGP intervention). Eligibility for the asset transfer programme was determined based on a proxy means test (PMT) score, with those eligible to receive the transfer scoring below a discreet eligibility threshold. Exploiting these features, we used a regression discontinuity design (RDD) to evaluate the causal impact of asset transfers on household resilience by comparing participants in the NPGP with a control group of non-participants. We evaluated programme effectiveness by focusing on socio-economic

outcomes such as household income, consumption patterns, and resilience to climate shocks.

Qualitative data

In addition to the quantitative analysis, we conducted semi-structured qualitative interviews with over 140 respondents. Respondents were selected among both NPGP asset recipients and the "control" group of non-recipients, and we stratified by exposure to flooding. These interviews helped us understand the lived experiences of households during both normal times and the 2022 floods. Thematic analysis was applied to these interviews to identify key insights related to asset management, resilience, and vulnerability during climate shocks.

Key findings

Asset transfers and household livelihoods in stable periods

Livelihood improvement through livestock

During periods of stability, NPGP livestock transfers provided households with immediate nutritional benefits and, in some cases, a modest income stream from selling surplus milk. One participant shared, "We get milk and tea for the household from the cow." Livestock ownership allowed households to address their day-to-day welfare needs, contributing to improved food security.

Challenges of livestock maintenance

Despite benefits, the costs of maintaining livestock—fodder, shelter, and veterinary care—presented significant challenges. These ongoing expenses frequently consumed any profits generated by milk production, with one respondent remarking, "We have to spend money on feeding the cow, and sometimes the milk is not enough to cover the costs." In normal times, however, livestock assets were generally perceived as beneficial, providing a reliable store of wealth and contributing to household consumption.

Asset transfers during climate shocks: The 2022 floods

Increased vulnerability during floods

The 2022 floods significantly disrupted the NPGP's benefits. Many households could not care for their livestock due to destroyed grazing areas, and some animals died due to disease or lack of shelter. One respondent explained, "The cow was not giving milk during the flood, and the costs of feeding it kept rising." Instead of providing resilience, livestock assets became a financial burden during the floods.

Livestock as a liability

Households expressed that maintaining livestock during the floods became increasingly difficult, with many struggling to provide basic care for their animals. One respondent noted, "We could not get fodder for the cow during the flood, and it became very difficult to manage." Many households resorted to selling their livestock or taking out loans to cover upkeep costs, leaving them more financially vulnerable.

Coping mechanisms and financial strain

Respondents indicated that, during the floods, they relied on coping strategies such as selling household items or taking loans from relatives to manage expenses. One respondent shared, "We took loans from relatives and sold household items to cover the immediate expenses." While these strategies provided short-term relief, they often left households in deeper financial distress in the long term.

Policy implications

The evidence from our research suggests that while the NPGP has successfully reduced poverty in stable periods, its asset transfers have inadvertently increased vulnerability during climate shocks, particularly floods. Several key policy adjustments should be considered to enhance the programme's effectiveness:

Integrating climate-resilient assets

NPGP has introduced livestock insurance in the programme to incorporate climate resiliency into asset transfers to participants. However, the NPGP should consider providing assets that are more resilient to climate shocks. For example, this could include introducing drought-resistant livestock or encouraging the adoption of alternative livelihood activities less vulnerable to environmental fluctuations.

Disaster preparedness and support mechanisms

The NPGP has conducted awareness campaigns on disaster preparedness and risk assessment as a soft programme component at union council levels. However, the programme should include disaster preparedness measures, such as providing emergency financial support during climate shocks. Access to emergency fodder should be introduced to help participants cope with rising costs during disasters.

Enhancing financial support during crises

Many households face overwhelming financial strain during extreme weather events. Offering emergency loans, grants, or other financial relief packages

specifically designed for disaster periods could help alleviate the burden on affected households and allow them to preserve their assets.

Promoting livelihood diversification

Relying solely on livestock ownership makes households vulnerable to environmental shocks. Livelihood diversification should be encouraged, allowing households to have multiple sources of income that are more resilient to climate change.

Conclusion

While the NPGP has made significant progress in lifting households out of poverty, the 2022 floods underscore the need to incorporate climate resilience into asset transfer programmes. While valuable in normal times, livestock can become a significant liability during floods, leading to increased vulnerability and financial distress.

By implementing the policy recommendations outlined above, the NPGP can be transformed into a more robust and resilient programme that reduces poverty and protects households from the growing threat of climate change. For Pakistan, a country increasingly impacted by climate shocks, integrating resilience into poverty alleviation efforts is crucial for ensuring sustainable development in the years to come.

References

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