

## RESEARCH BRIEF

How the responses taken at different levels impact the sustainability and long-term capacity of communities living in the rural semi-arid regions of India.

## WHAT WAS DONE, AND WHAT WAS NOVEL?

By applying a sustainability lens, we assessed the impacts that planned and autonomous responses can have on ecological systems, household wellbeing, and social equity. Using a typology of coping, adaptation, and maladaptation strategies, we assessed responses according to their economic, social, and environmental sustainability.

We found that planned and autonomous reactions had varying outcomes between and within different villages. These responses were found to be multi-scalar and heterogeneous due to different geographies, identity, social capital, and economic status.

We outline how both autonomous and planned responses to risks could have significant effects on sustainability at various spatial and temporal scale. These effects can particularly impact the livelihoods and wellbeing of semi-arid communities, as well as the capacities for these communities to deal with future risks.

## KEY FINDINGS

We found that people in semi-arid rural India believe climate variables and climate extremes, particularly drought, were being experienced. These climate stressors, along with other non-climatic stressors, were affecting people's livelihoods and causing them to respond. Responses were either autonomous – varying according to landholding size, gender, assets, and water availability – or they were government planned – with broad aims at building capacities to respond to general, rather than specific, risks.

Households with more assets and larger landholdings were more capacitated to diversify their livelihoods, while those with less land were forced to seek informal or poorly-paid livelihoods. At a fine scale, the consequences of these responses tend to affect different members of households differently, while at the broad scale they could significantly impact on the sustainability of semi-arid communities.

## KEY IMPLICATIONS FOR POLICY, PRACTICE AND RESEARCH

Findings from this paper demonstrate that responses to risks are not always farsighted, nor can they be considered as adaptation. Instead, they can often negatively impacts on people's future capacities to adapt to increasing climate stressors.

This means adaptation measures need to begin with considerations of both observed and perceived risks (both climatic and non-climatic). Furthermore, adaptation planning needs to take into account that these risks may change over time. Interventions should therefore be dynamic and flexible in order to address uncertain risks which may arise.

Current adaptation and development interventions, however, tend to focus on building general capacities in rural areas. But to deal with increasing climate stressors it is vital that specific capacities, such as the capacity to deal with droughts, are developed in these semi-arid areas. This should involve forward-looking interventions which include climate-smart decision-making, institutional reform, and the development of sufficient safety nets for disaster periods.



Renie Thomas

