

# ASSAR

ADAPTATION AT SCALE  
IN SEMI-ARID REGIONS  
2014–2018

MOBILITY IS AN  
INHERENT DYNAMIC  
AMONG VULNERABLE  
POPULATIONS

*AN ASSAR CROSS-REGIONAL INSIGHT*



Mobility is an important strategy to manage risk in semi-arid regions, but it doesn't always lead to improved wellbeing. Whether moving or staying put, risks can increase for those with little agency. Conversely, mobility can provide the means to move out of risky locations and improve livelihoods. In these cases, migration contributes to improved wellbeing and adaptive capacity.

### **ASSAR's focus on mobility**

Semi-arid regions are crucibles of change in which different stressors coalesce, increasing the pressure on populations who are in many cases already vulnerable. Within these environments, mobility is an essential feature in many people's lives, and represents a key risk-management strategy, enabling populations to respond to livelihood shocks and stresses. Over time, risks change and evolve as do risk management behaviours, including mobility. Unpacking the multiple, intersecting vulnerabilities that are manifest in semi-arid regions is critical to generate greater insights into the 'how and why' of risk management, and to enable more equitable and effective adaptive responses.

ASSAR investigated the role of mobility as an adaptive response to change within populations in semi-arid regions. The dynamic and intersectional nature of risks and responses is not well articulated in global environmental change literature. Using empirically-rich data, our research highlights how people's approaches to managing risks are individualised but set within other social institutions, such as households and communities. It also points to the importance of

mobility within risk-management strategies. Mobility can facilitate changes to risk portfolios in a number of ways, including accentuating or attenuating risks, eradicating risks entirely, or exposing populations to completely new risks. Conversely, sometimes mobility doesn't lead to any changes in the underlying risks people are exposed to. Changes are shaped by a person's agency, which is set within a web of broader social structures.

Over time, we see how the risks that people experience, and their responses to them, alter their wellbeing trajectories. Through a novel theoretical concept – the 'adaptation option space' – our evidence suggests that it can sometimes become increasingly difficult to shift downward wellbeing trajectories. Using the [life history methodology](#) helps to reveal these wellbeing trajectories, capturing the temporality of risks, livelihood choices, adaptation outcomes, and their interrelationships. This approach shows how current responses are influenced by past events, and enables us to infer how current behaviours may influence future, as yet unknown, events.

## KEY INSIGHTS

*EVERYDAY MOBILITY ENABLES PEOPLE IN SEMI-ARID REGIONS TO MAINTAIN THEIR LIVELIHOODS, AND MANAGE RISK*

**The use of mobility in semi-arid regions is the norm rather than the exception, supporting a variety of livelihoods reliant on natural resources (such as firewood collection or pastoralism), in addition to trading and more regularised commuting from rural areas to large urban settlements. Mobility is a key resource that people draw upon to manage highly dynamic conditions.**



Mobility plays a key role in enabling livelihoods in semi-arid regions in Africa and India. It is often a necessary foundation on which lives are built, and plays a central role in people's risk management and adaptation behaviour. Despite this importance, commonplace mobility is a neglected area of research within the field of migration and environmental change research, especially within developing countries. The type of everyday or very regular mobility that is used for livelihoods includes commuting, pastoralism, trading *miraa* (the term used in Kenya for the stimulant Khat), and firewood collection. [In India](#) there are people who commute long distances daily (e.g., from Kolar district to Bengaluru – a distance of 80-100 km one way) to enter low-paying jobs in the informal sector (e.g., painters, cooks, gardeners, construction workers). [In Kenya](#), *miraa* traders move between rural and urban environments, transporting *miraa* to market, while pastoralists need to move their herds to different areas for days or weeks at a time, and some women make a living collecting firewood.

*RISKS AND RESPONSES ARE DYNAMIC AND INTERACT WITH ONE ANOTHER TO SHAPE THE OPTIONS AVAILABLE TO PEOPLE OVER TIME*

**Mobility occurs within a dynamic context of intersecting risks and responses that change over time. These interactions shape the 'adaptation option space' – the space available to people to adapt given the risks they face, responses they undertake, and adaptive capacities they hold. Different individuals and households respond differently, and the outcomes of mobility also vary. The life history approach shows how risks and adaptation options change over time, and their implications on wellbeing. Knowing where people have come from helps to understand not only their current situation but also their ability to respond to future, as yet unknown, livelihood stresses.**

The [link between risks and responses](#) for individuals and households is dynamic and varies between socially-differentiated groups of people. It is essential to understand the unique perspectives that households have on key events, significant change, and what this means for their productive lives, wellbeing, and aspirations for their families. The use of the [life history methodology](#) helps to reveal people's personal experiences and perceptions of their wellbeing trajectory, thus capturing the temporality of risks, livelihood choices and adaptation outcomes, and their interrelationships.

Mobility can increase or reduce the risks faced by an individual or household. The experience of risks by different people and households is also strongly linked to their level of agency within a broader set of structural limitations. Over time, the risks that people experience and the responses they undertake, lead to changes in their [wellbeing](#) and specific trajectories of risk management. In some instances, it becomes increasingly difficult to shift negative trajectories, which leads to dramatic decreases in wellbeing over time with increasingly unlikely chances of recovery.

It is important to understand people's use of mobility within a web of dynamic and related processes. Individuals are active agents in the face of change but are often limited by the broader political, economic, social, environmental, and cultural structures around them. These broader issues affect the choices that people make when responding to risks, and the effectiveness of those choices. For example, we found some households were able to respond to risks in ways that maintained a stable or positive wellbeing trajectory. For other households, despite changing behaviours, their wellbeing trajectory was negative and strongly influenced by compounding livelihood shocks, suggesting the presence of social tipping points. A social tipping point is the instance at which a threshold is crossed, making recovery very difficult or impossible (a similar idea to a poverty trap). If we accept that social tipping points exist then we can shift our focus to thinking through what sort of interventions are required to bring about positive change.

People and places are different. There is clearly a need for approaches that place greater value on understanding intersectionality, social differentiation, and place when generating knowledge about vulnerability. Such knowledge is critical to support the design and implementation of more effective and equitable interventions and policy responses in resource-scarce and highly dynamic climate hotspots such as semi-arid regions.

*MIGRATION IS NOT ALWAYS  
BENEFICIAL SO ALTERNATIVES  
SHOULD BE EXPLORED TO  
AVOID RISKS TO MIGRANTS  
AND THOSE LEFT AT HOME*

**There are trade-offs associated with moving. At an intra-household level, migration and commuting can alleviate vulnerability for some family members while exacerbating the vulnerability of those left behind. At a larger scale, migration that is adaptive at a household scale can be maladaptive at a system scale if cities are unable to provide for or absorb migrants who often live in highly vulnerable conditions. On a temporal scale, migration and commuting affect livelihood trajectories and choices of those beyond the migrants alone. We found evidence of migration decisions shaping opportunities across generations.**

Migration is often portrayed as either 'a failure to adapt' (i.e., only the most vulnerable do not move out of highly vulnerable areas) or a 'successful adaptation strategy' (where those with adequate social networks and financial means are seen to take proactive decisions to move and expand their livelihoods). However, this binary does not accurately capture the mixed outcomes of migration for those who migrate and those who stay behind, or capture the various impacts on rural and urban areas as a whole. We find that migration outcomes are highly differentiated across and within households with causal patterns of vulnerability in rural areas often replicated in [urban areas](#).

In [some poor rural villages](#) migration is perceived as a beneficial response strategy because some migrants bring success stories home and support their families with inputs and equipment during the planting season. However, some of the jobs and settlements that migrants move to expose them to harsh working and living conditions (e.g., [mines in Mali](#), and informal settlements in India). This can lead to migrants catching diseases (e.g., from mining settlements) which family members need to spend money to try to treat. In the Mali case, an alternative to working in mines is [vegetable production](#). Having an alternative livelihood and being able to stay at home is beneficial because housing, some food, and a more healthy environment is available at home.

In the case of [India](#), migrants are doing better economically (our survey showed that migrant household incomes were almost double those of non-migrant [households](#)) but reported poorer wellbeing, especially satisfaction related to health and community networks. While remittances in India supplement household income and help repay existing loans they do not necessarily build adaptive capacities. This is also the case in other countries, such as Namibia, where households with more remittances didn't adopt adaptation options. In addition, structural constraints were not necessarily lost in moving (e.g., in some cases in India informal settlements were segregated based on religion or caste).

## RECOMMENDATIONS

- The importance of everyday mobility to support a range of livelihoods and [enhance wellbeing](#) in semi-arid regions needs to be acknowledged.
- There is a need for more refined and sensitive approaches that reveal heterogeneity, intersectionality and situatedness, especially in resource-scarce and highly dynamic climate hotspots such as semi-arid regions.
- More support is needed for [livelihoods](#) in both rural and urban environments. People are in need of education and skills; resources and training to increase adaptive capacity; economic opportunities; and decent and safe work and housing in urban areas.
- Understanding [how risks and responses interrelate](#) over time can increase our understanding of how best to intervene and what forms these interventions should take.
- Mobility is not the only adaptation strategy people employ. Supporting other forms of adaptation is equally important.
- Mobility can be a valuable adaptation option, but it should not be seen, *a priori*, by policy makers or those working on adaptation as a solution, since it can come with many risks and reproduce vulnerabilities.

## AUTHORS

**Mark Tebboth\*** ([M.Tebboth@uea.ac.uk](mailto:M.Tebboth@uea.ac.uk)),  
University of East Anglia

**Chandni Singh** ([csingh@ihs.ac.in](mailto:csingh@ihs.ac.in)),  
Indian Institute for Human Settlements

**Dian Spear** ([dian.spear@gmail.com](mailto:dian.spear@gmail.com)),  
University of Cape Town

**Brendon Bosworth** ([brendon.bosworth@mailbox.org](mailto:brendon.bosworth@mailbox.org)),  
University of Cape Town

**Tali Hoffman** ([tali.s.hoffman@gmail.com](mailto:tali.s.hoffman@gmail.com)),  
University of Cape Town

**Lucia Scodanibbio** ([scolucia@gmail.com](mailto:scolucia@gmail.com)),  
University of Cape Town

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