

Climate change and migrant workers in India

From vulnerability to adaptation

Policy pointers

- Vulnerability of urban migrant workers is driven by weak family ties and social networks, livelihood insecurity, insecure housing, inadequate sanitation and ineffective social protection schemes.
- The adaptation strategies of migrant workers to climatic events and natural hazards are deeply embedded within those strategies that help them to deal with their day-to-day livelihood struggles.
- Strategies of mobility, livelihood diversification, risk pooling and informal entrepreneurship help migrant workers to sustain their livelihoods amidst diverse risks and uncertainties.
- Future research needs to consider the embedded relationship between coping and adaptation strategies and the larger political economy in which these relationships are structured.

The impacts of climate change in India are predicted to increase migration from rural villages and hazard-prone regions of the country to its cities. Migrant workers in urban contexts are considered one of the most vulnerable social groups to climate change risks, specifically to livelihood uncertainties such as the loss of livelihood opportunities, resources and assets. Their often low socio-economic status accompanied with their poor adaptive capacity can amplify the health impacts of climate change.¹

Three working papers by a team of researchers in India examine the climate threats and related health impacts that migrant workers – who are marginalised and excluded from mainstream forms of development – are facing in three Indian cities: Kochi, Surat and Mumbai.

- The first paper² investigates how existing livelihood vulnerabilities and health inequities are exacerbated by climate change.
- The second³ examines vulnerability and adaptation within the cities' social sectors.
- Finally, the third paper⁴ considers various adaptation strategies of migrant-worker communities within the three cities.

The vulnerabilities of migrant workers

Migration, in certain cases as an adaptation mechanism, has been significant in shaping India's urbanisation. Climate change impacts, including increased temperature, changing rainfall patterns, sea-level rise and desertification, are quickly becoming a significant driver of migration. These impacts are also being felt in Indian cities, alongside the stress of growing populations.

Migrants in the three Indian cities are one of the groups most vulnerable to climate change. **Vulnerability** in this context consists of the characteristics of a person or a group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard or an extreme natural event or process.⁵ In this study, the root causes of vulnerability were found to be the lack of access to resources, decision-making structures and power. Four classifications of vulnerability for migrant workers were identified.

Weak family ties and social networks: the status of being single, widowed or separated and having weak social ties in the city can accelerate migrants' hardships in dealing with climatic hazards and outbreak of infectious diseases. Survey results show that single migrant workers have little or no familiarity with urban social institutions or organisations.

Livelihood insecurity and lack of access to better opportunities and assets: education levels, skills training and job security all affect migrants' vulnerability. Survey results show that owning natural assets (such as land and livestock in their native villages) enhanced migrants' capacities to adapt to shock events by diversifying livelihoods. Access to insurance, bank accounts and credit

also improves adaptive capacities, with the research noting that migrants borrow more with higher incidences of climatic events.

Unsafe and insecure housing and sanitation facilities: many respondents who participated in this study reported that shifting from home ownership in their villages to living in untenured and poor housing conditions in city slums made them feel vulnerable.

Ineffective social protection schemes and exploitative actors in the city: approximately 40 per cent of migrant workers who participated in this study said they did not have access to any kind of social protection schemes and those did were unable to draw the full benefits as they were ‘migrants’ and not ‘citizens’ of the city. The migrant population also faces discrimination and exploitation by the actors who are supposed to safeguard their rights and security.

Relating to these vulnerabilities, migrants in the study suffer from high rates of acute (31 per cent) and chronic (9 per cent) illness and vector-borne diseases (44 per cent). Children were most affected by food and water-borne diseases, exacerbated by migrants’ difficulties in accessing healthcare and other services.

Adaptive social protection as a climate change resilience-building strategy

Adaptive social protection can be used to address the threats that climate change presents to migrant workers’ health in India. **Adaptive social protection** builds the resilience of the poorest and most vulnerable people to climate change by combining elements of social protection, disaster risk reduction and climate change adaptation into programmes and projects.⁴

The status of social protection in all three cities is poor. Key informant interviews suggested that the Inter-State Migrant Workmen Act 1979, which regulates minimum wages, workplace amenities and workplace safety, is not being honoured in Mumbai, Kochi and Surat. In Surat, migrants are not offered pensions and only a third of respondents were insured. Recent trends show that trade unions are beginning to act as a voice for migrant workers in Kochi. Nevertheless, the effectiveness of these trade unions in safeguarding the rights of migrant workers is questionable.

Innovation in urban risk reduction is needed to design multiple pathways and diverse options for service delivery. In resilient urban systems, actors need to be responsive, resourceful and have the capacity to learn and innovate. Aspects such as rights and entitlements, decision making, access to information and the application of new knowledge are the institutional characteristics that facilitate resilience. There are several instances of health- and climate change-related innovation in the three cities, including:

- **The Interstate Migrant Worker’s Welfare Scheme (Kochi):** the scheme requires migrant workers to pay 30 rupees (US\$0.50) annually, which covers them for 25,000 rupees (US\$416.00) for hospital care or 50,000 rupees (US\$833.00) to families in the event of death.

Only one of the 50 study respondents was registered for the scheme, and the rest were unaware of it.

- **Information, education and communication (IEC) (Surat and Mumbai):** health practitioners in Surat and Mumbai are developing IEC projects via radio, television and newspapers about the spread of diseases due to climate change impacts and how to prevent or prepare for them.

The study also examined the role of social workers in building climate change resilience and to facilitate, design and implement adaptive social protection strategies in cities. Social workers can monitor workers’ rights violations, prevent exploitation by employers and ensure the registration of migrant workers with labour and health departments. There is also a need to strengthen the collective bargaining capacity of migrant workers, which can be done through the strict implementation and monitoring of the Inter-State Migrant (ISM) Act and Employee Compensation Act.

Grassroots adaptation strategies

An inherent characteristic of vulnerability is the population’s **adaptive capacity**, or the livelihood resources and environmental entitlements that the urban poor can access or claim to secure their livelihoods and respond to climate change. Adaptive capacity also includes the urban poor’s ability to participate in adaptation initiatives.

The adaptation considered in the research⁴ (see Table 1) explored several local adaptation strategies, discussed in order of community preference, as confirmed through primary research with migrant workers in the three Indian case cities.

Strategies such as **mobility, livelihood diversification, risk pooling and informal entrepreneurship** help the respective migrant workers to sustain their livelihoods amidst diverse risks and uncertainties.

Individual adaptation strategies of migrant workers are never autonomous and are often constrained by institutional processes such as regulatory structures, property rights and social norms. The success of adaptation also depends on the community’s adaptation goals, perceptions of risk, values, levels of social status and age⁶. Most importantly, the research asserts that migrant workers’ adaptation and coping strategies are influenced by the larger short- and long-term development processes of the city.

With an increase in unpredictability and variability of extreme weather events, the distinction between coping and adaptation declines rapidly. In many instances, it could be seen that coping strategies to a certain extent supplement long-term adaptation strategies. For instance, practices such as limiting household spending during extreme weather events and other crisis situations could be identified as an immediate coping strategy. On the other hand, these practices feed into long-term adaptation strategies of asset conservation and enhancement. Most structural adaptation strategies, such as digging out a drain or constructing an elevated structure, would have been an immediate response to rising water levels in the migrants’

Table 1. Adaptation strategies of migrant workers in Indian cities

Mobility	<ul style="list-style-type: none"> ■ Reverse migration ■ Shifting to new worksites ■ Seasonal migration
Informal entrepreneurship	<ul style="list-style-type: none"> ■ Establishing and scaling up business enterprises ■ Skill enhancement ■ Opportunity-seeking behaviour ■ Maintaining strategic relationships ■ Innovating new designs ■ Product diversification
Structural adaptation	<ul style="list-style-type: none"> ■ Local water drainage mechanism ■ Using plastic covers for roofing ■ Using water-saving filters ■ Designing structures above flooding levels ■ Shifting storage sites ■ Storing perishable goods ■ Camouflaging worksites and housing structures
Livelihood diversification	<ul style="list-style-type: none"> ■ Shifting from one occupation to another due to climate and health factors ■ Shifting from one sub-sector to another ■ Occupational shifts ■ Two or more family members working in multiple sectors
Asset conservation, storage and enhancement	<ul style="list-style-type: none"> ■ Savings ■ Circulating money ■ Remittances ■ Restricting expenditure ■ Restricting credit lending ■ Technology ■ Stocking grains and other food
Market exchange	<ul style="list-style-type: none"> ■ Barter/exchange ■ Credit-based buying and selling ■ Selling assets
Risk pooling	<ul style="list-style-type: none"> ■ Help from family members ■ Insurance ■ Shared accommodation ■ Joining trade unions ■ Borrowing money from relatives ■ Informal chit funds ■ Family members as workers ■ EMI ■ Strategic relationships ■ Self-help groups
Self-remedy	<ul style="list-style-type: none"> ■ Hygiene ■ Rest and leisure ■ Home remedies ■ Pharmacy and self-medication ■ Treatment from unqualified 'doctors'

locality. However, with such practices continuing over time and across extreme weather events, these practices can gain acceptance as long-term adaptation strategies.

Lessons from the three cities

Several broad conclusions can be drawn from the three working papers as a whole.

Migrant workers' vulnerability can be seen as a cycle. First, a lack of access to resources and power creates vulnerability. This vulnerability then widens the equity gap, fuelling the structures and processes which induce vulnerability. The cycle implies that vulnerability is a condition that shapes and reshapes itself continuously and is accompanied by the processes and structures of

unplanned rapid urbanisation, environmental change and social exclusion.

The adaptation strategies of migrant workers for climatic events and natural hazards are deeply embedded within those strategies that help them to deal with their day-to-day livelihood struggles. These strategies are often adjusted forms of adaptation strategies adhered to at their places of origin, meaning climate change adaptation in cities exists within the larger context of the rural-urban-rural milieu.

This research shows that cities and the existing governance mechanisms are neither prepared to meet existing challenges of climate change nor the health crises of the present or the future. Both the public and private healthcare systems are developing in such a way that they exclude the poor in cities. Additionally, planners involved in risk

reduction face multiple challenges as they work to incorporate climate change adaptation and risk reduction needs into existing urbanisation demands.

The significance of the agency of actors involved in adaptation is highlighted throughout the three working papers. The adaptation strategies of informal workers demonstrate the ability of migrant workers to understand and respond to climate change alongside their livelihood and health uncertainties – nonetheless, the support of the state, civil society and the market is still necessary.

Several recommendations result from the research for strengthening adaptive social protection and reducing vulnerabilities of migrant workers:

- The design of surveillance and interventions for public health programmes should be strengthened and integrated into a long-term, self-sustaining design.
- More campaigns and awareness-raising programmes are needed on the preparedness level of diverse actors to deal with extreme climate hazard events and epidemic outbreaks.
- Public health preparedness programmes should be designed in such a way that health professionals and social workers can access the homes of migrant workers or labour camps to analyse the nature of interventions that are required and develop suitable action plans.

- More dispensaries in migrant settlements are needed, and improved access to health screening facilities and diagnostic procedures for the urban poor.
- There is a significant need to study rural-urban-rural livelihood linkages in depth when studying the adaptation strategies of the migrant poor. Asset-based cum value chain-based adaptation research could cast further light on the vulnerabilities and capacities of migrant workers in both rural and urban contexts.

Looking forward, urban planning and risk-reduction initiatives should mandate the participation of migrant workers. Locally, there is a need for integrated, health-focused urban planning. More broadly, there is a need for strong interdepartmental government convergence to provide adequate, timely healthcare support for the poor in the city. Future action is also required to strengthen public service provision, such as ensuring that sanitation facilities are available for all households in informal settlements, establishing effective waste-management and drinking water systems, and providing safe and secure housing for the homeless. Experts have also suggested technology-aided services such as mobile diagnostic laboratories to enhance migrant workers' access to appropriate medical care. Lastly, future research needs to look at the embedded relationship between coping and adaptation strategies and the larger political economy in which these relationships are structured.

Notes

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