

Migration, Livelihood Trajectories and Climate Resilience

Case Study of select medium-sized Indian cities

TEAM

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Background

Current state of urban affairs indicates that more than half of the global population is concentrated in urban areas. Nearly three quarters of the global urban population is concentrated in low- and middle- income countries. By the turn of 2050, this is projected to escalate to nearly 68 per cent¹. A staggering proportion of this growth of almost 90 percent dominates the urban narrative of the developing world. At present, 11% of the world's urban population is in India. In terms of urban centres, by 2030, going by the current trends, 13 cities will have more than 4 million people.

India is therefore destined to shoulder a significant share of incremental global urbanisation in the coming decades. Alongside, it must reconcile with its historically entrenched

as well as emergent risks. Particularly, risks and vulnerabilities arising from climate change and skewed regional growth dynamics; increasingly become the driver of precarious forms of migration, and environmental degradation affecting development outcomes in cities and their peripheries.

A significant driver of the evolving urban demographic transition can be attributed to population migration from rural areas to cities in search of employment – especially among the youth². Although the specific effects of climate change will vary across regions, communities and livelihoods, loss of arable land, erratic rainfall and increasing frequency of extreme events may push groups of people towards migration as a viable adaptive strategy.

Problem Definition

A disaggregated picture of India's urban issues remains a significant gap within the research and policy interface to support India's domestic and international development commitments. This is especially true for cities that have not yet made to the list of mega or metro cities. Smaller but rapidly growing Indian cities are thus prone

to mis- or lack of alignment between the city building agenda and simultaneous inclusion of risk and vulnerability reduction measures. For example, domestic migrants arriving in Indian cities of Bangalore and Surat are exposed to intersecting forms of marginality.

¹ 68% of the world population projected to live in urban areas by 2050 (2018, May 16), United Nations: Department of Economic and Social Affairs (DESA). Retrieved from <https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html>

² Tacoli, C., 2009. Crisis or adaptation? Migration and climate change in a context of high mobility. *Environment and Urbanization*, Volume 2, pp. 513-525.
Gopalakrishnan, R. & Thorat, Y., 2015. What India can do differently in agriculture - Sarthak Krishi Yojana, s.l.: R Gopalakrishnan and Dr YSP Thorat.

Chu & Michael (2018)³ state that these migrants often face extreme forms of climate injustice as they are often invisible to official state apparatus, or worse, are actively erased from cities through inappropriate developmental policies. Another example is from a study located in Bengaluru⁴, where migrants living in informal settlements in Bengaluru (who are typically from historically marginalised groups) are more vulnerable and have poorer access to basic services and infrastructure than non-migrants. Clearly, there is something amiss between the city resilience building agenda and risk/vulnerability reduction measures. It appears that solutions that are considered are generic in nature, without taking into account the needs of specific social (migrants) groups. It is expected that the 'trickle down' impact would help improve overall well-being, which is contestable.

Recognizing that development and resilience are unlikely to be sustained unless disaster risk is explicitly addressed in all development initiatives, Government of India has been striving to integrate risk reduction and resilience in development planning of key sectors such as housing, agriculture, health, environment planning, rural and urban development. However, studies⁵ suggest that this mainstreaming is impeded due to limited technical and institutional capacities, lack of proper guidelines and siloed method of working between different departments at different levels of the government - making informed decision making a challenge⁶. Addressing this during the present critical juncture of urban transition specific to every city is therefore crucial.

The complex alliance of risk and impact often manifests through deep-seated capacity deficits and institutional lock-ins in delivery of adequate and good quality basic services like water, sanitation, power and equitable access to land

and housing for all population groups especially the economically weaker and marginal groups in the city, who are often overlooked. While these deficits are crucial, major challenge exists in ensuring uniform access of services to all social groups. Reports⁷ confirm that due to increasing population in cities and high capital cost of infrastructure projects, low levels of cost of recovery for operation and maintenance, Government is unable to subsidize beneficiaries resulting in low availability of services, especially in informal settlements. The same reports suggest that overall service delivery benchmarks are poor across most of the country. Breaking through these institutional challenges will be central to an emerging city-centric developmental agenda in India, which will need to be supported through a range of new forms of community-public-private partnerships.

Cities concentrate economic activity and people. They have, among others and as defined by the 12th Schedule of the 74th Constitutional Amendment⁸, a functional character in terms of providing services to the people. Cities, being sites of innovation and economic output, can ensure its transformative potential by ensuring good quality services thereby allowing all groups of people to participate productively and thereby, realising the transformative potential of the city and contribute to household transformation as well. This transformative potential (or the framework of 'cities as engines of growth'⁸) is increasingly being recognized and conceded amongst the concerned stakeholders, including the ULBs who are responsible for bulk of the basic service provision and as frontline workers in the face of the changing urban landscape and challenges. By the same logic, cities have the potential to drive equitable growth and effectively shift dependency from development paths that are unsustainable and that which may lead to irrefutable human and environmental costs.

³ Chu, E. & Michael, K., 2018. Recognition in urban climate justice: marginality and exclusion of migrants in Indian cities. *Environment & Urbanization*, pp. 1-18.

⁴ Michael, K., Singh, C., Deshpande, T. & Bazaz, A. B., 2017. Dimensions of vulnerability in Rural and Urban areas: A case of migrants in Karnataka. Bangalore: IIHS.

⁵ Bazaz, A. et al., 2016. Reducing Relocation Risk in Urban India: Risk Assessment Report | Framing & Illustrations, s.l.: IIHS. Jain, G. & Bazaz, A., 2016. Urban Risks and Resilience in India, Bangalore: Indian Institute for Human Settlements.

⁶ Jain, G. & Bazaz, A., 2016. Urban Risks and Resilience in India, Bangalore: Indian Institute for Human Settlements. Building Materials and Technology promotion Council (BMTPC), 2016. Disaster Risk Reduction: A Handbook for Urban Managers, New Delhi: Ministry of Housing and urban Poverty Alleviation Government of India, Building Materials & Technology Promotion Council, United Nations Development Programme.

⁷ National Institute of Urban Affairs, 2017. Emerging Evidence from Smart Cities and Amrut Database: A tool to address urban development challenges facing decision makers, s.l.: NIUA.

⁸ Constitution of India, art. 243W, amend. 74, Sch. 12 Act, 1992

⁹ Planning Commission, Government of India, 2008. Chapter 11: Urban Infrastructure, Housing, Basic Services and Poverty Alleviation. In: Eleventh Five Year Plan (2007-2012) Agriculture, Rural Development, Industry, Services and Physical Infrastructure - Volume III. New Delhi: Oxford University Press, pp. 394-423.

In that, employment and inclusive growth opportunities, multi-dimensional poverty reduction and sound spatial and infrastructure planning remains critical in the way that they mainstream reduction of vulnerability to climate risks which otherwise potentially derail cities in their vision. Therefore, it is important to conduct city-centric studies to build a rounded understanding of the opportunities and challenges they face in negotiating an increasingly complex risk terrain. While resource and capacity challenges facing urban regions is fore fronted in literature alongside place-based multi-hazard and vulnerability profiles of individual cities; fine-

grained analysis of social, economic, and governance profiles of smaller spatial and social units (such as vulnerable migrant communities in specific wards and intra-ward) are needed (refer section on Migration as Adaptation). This is crucial to assess the suitability of unique mechanisms (or not) that these intersecting spatial and social units adopt to respond to climate and other emergent risks and more importantly, to investigate if they cumulatively contribute to the overall resilience of the city. It is in this context that the present study exploring migration dynamics with emerging livelihood trajectories in the face of climatic changes is located.

Problem Definition

Increasingly, migration is being viewed as more than just a coping mechanism and rather being construed as adaptation (more so in the face of slow-onset climate change impacts). Literature suggests that apart from triggering extreme weather events, the impacts of climate change are systematically reducing agricultural productivity and depleting water resources which in turn results in the increased vulnerability of populations and resources. In such circumstances, people may either be displaced involuntarily or, in relation with this study, people are deliberately migrating as an adaptive response¹⁰.

Migration is one of the many ways in which population groups are choosing to adapt to climate change induced risks. However, capacity of individuals to adapt is unequal across and within societies – there exist groups of people that have a high degree of social, economic and location-specific vulnerability and demonstrate insufficient capacity to adapt to climate change. These groups are therefore at most risk to direct or indirect impacts of climate change and climate variability.

In addition, the option of migration may not be equally available to all social groups, largely mediated through social networks or access to

capital and thereby leaving them with no other option but to live precarious lives in rural settlements and if in cities, in addition to employment and social precarity, live in potentially hazardous locations.

Successful migration, through labour mobility, may help sustain households in places of origin though remittances¹¹. However, the household and migrant processes have important consequences for the sending and receiving community. Migration is a household strategy to expand income sources through diversification of livelihoods and alleviate financial constraints; but literature on R-U migration indicates mixed well-being outcomes. With respect to post-migration successful upward social and economic mobility, outcomes are dependent on the type of migration (short, seasonal and long-term), duration and presence & dynamics of social networks at source and destination.

In light of the above-mentioned arguments, migration is, at best, a coping mechanism in response to short-term concerns – hardly in anticipation of climate change. It is largely construed as an individual or households' autonomous decision which is majorly reactive to certain events and is often excluded from policy interventions.

¹⁰ McLeman, R., 2011. Climate change, migration and critical international security considerations. Geneva: International Organization for Migration (IOM).

¹¹ Tacoli, C. 2011 Not only climate change: mobility, vulnerability and socioeconomic transformations in environmentally fragile areas in Bolivia, Senegal and Tanzania. Working Paper. International Institute for Environment and Development, London. <http://pubs.iied.org/pdfs/10590IIED.pdf>
Barnett, J. and O'Neill, S.J. (2012) 'Islands, resettlement and adaptation'. *Nature Climate Change*, vol. 2: 8–10

There is a need for flexible, sustainable ecosystem of social security nets for migrants to facilitate better and informed decision making and ensure positive migration outcomes.

Interventions to facilitate migration may also be necessary for vulnerable populations who do not have the means to migrate.

Reframing Resilience: Migration and Climate Resilience in Cities

Resilience frameworks are increasingly being used as a conceptual lens to inform climate change, disaster management, and development policies¹² because it provides a useful framework to analyse adaptation processes and identify appropriate policy responses.

More recently, urban resilience frameworks have moved towards a 'social turn'¹³, wherein the strategies or approaches that are imagined should focus on "people, and the constraints and opportunities they face in sustaining livelihoods, as the central actors within adaptation policy and practice". It is argued that a livelihood focus gives primacy to human agency and its capabilities as a starting point of the solution space for shocks and stresses. It is in this context that a livelihoods frame was conceptualized as an entry point to the present study, with a focus on 'constraints and opportunities' to improve livelihood prospects and thereby improve human well-being.

In the context of migrants in Indian cities, a significant part of the solution space for building resilience and reducing vulnerability should ideally focus on three main aspects, an aspect (partly) vindicated by the present study:

- **Modifying exposure** – Identification of certain pockets where migrant communities reside and work, aiming to change the conditions of these spaces by ensuring effective basic service delivery.
- **Reducing Sensitivity** – Develop support systems to cope with key sensitivities, that are exhibited by these communities (access to sustained livelihoods, social protection, affordable health care, subsidized food).
- **Improve adaptive capacity** – Service migrant communities with basic services so as to ensure that lack of basic services does not impede their participation in upward social & economic mobility dynamics and also, improve their coping capacities to environmental, social and economic shocks and stresses.

Approach and Methodology

The Study

Specifically, the study attempts to explore the dimensions of multiple constraints that impede the ability of migrant communities to, freely, engage in accumulation strategies that would then enable them to stay out of vulnerabilities, enhance their resilience and coping capacities. The study argues for a solution space wherein

strategies and programs address constraints faced by migrants in sustaining livelihoods and arrived at certain strategies through co-production of solutions with key stakeholders, that has relevance for the study sites, in particular but are largely applicable for all medium-sized cities in India

¹² Bahadur, A. & Tanner, T., 2014. Transformational resilience thinking: putting people people, power and politics at the heart of urban climate resilience. *Environment and Urbanization*, 26(4), pp. 1-15.
Meerow, S. & Newell, J., 2016. Urban resilience for whom, what, when, where and why? *Urban Geography*, 12 June, pp. 1-21.
Chelleri, L., Waters, J. J., Olazabal, M. & Minucci, G., 2015. Resilience trade-offs: addressing multiple scales and temporal aspects of urban resilience. *Environment and Urbanization*, 27(1), pp. 181-198.

¹³ Tanner, Thomas & Lewis, David & Wrathall, David & Bronen, Robin & Craddock-Henry, Nicholas & Huq, Saleemul & Lawless, Chris & Nawrotzki, Raphael & Prasad, Vivek & Rahman, Ashiqur & Alaniz, Ryan & King, Katherine & McNamara, Karen & Nadiruzzaman, Md & Henly-Shepard, Sarah & Thomalla, Frank. (2014). Livelihood resilience in the face of climate change. *Nature Climate Change*. vol 1. 23-26. 10.1038/NCLIMATE2431.

Research Questions: Understanding urban climate resilience, focusing on migration as a key livelihood dynamic and with a specific focus on:

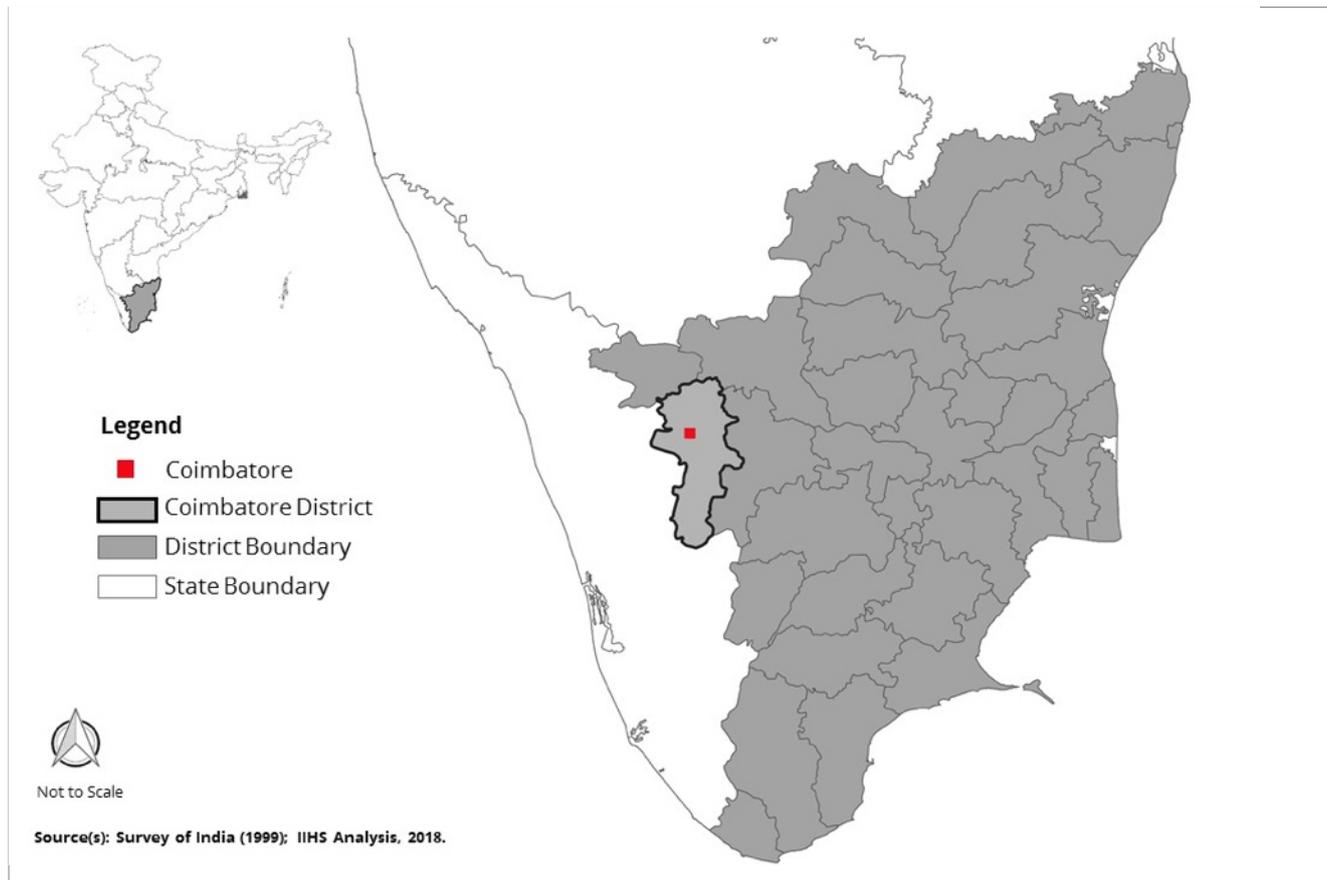
- How is migration experienced by migrants in cities?

- What strategies could help reconcile the climate resilience agenda with migration dynamics in cities?.

Study Areas

A. Coimbatore

Figure 1: Coimbatore location map



Methods

Scoping Visit	Visits to Coimbatore were arranged in the first few months to understand the ground situation, to help inform research design
Secondary Literature Review	Extensive secondary literature review was undertaken to understand the development dynamics, vulnerability status of different urban systems, incumbent climate action and migration trends in and out of Coimbatore
Key Informant Interviews (KIIs)	Discussions with government officials from Coimbatore City Municipal Corporation (CCMC), various NGOs, ICLEI city office and other civil society organisations
Primary Household(HH) Survey	HH survey of migrants was administered with the objective of understanding specific aspects of migration experiences and links with climate resilience.

B. Siliguri

Figure 2: Siliguri location map



Methods

Scoping Visit	To identify priorities and expectation of the key stakeholders within the city governance structure so as to further shape our research focus and methods.
Agenda setting	To reframe the study agenda, towards identifying ways to strengthen the effectiveness of existing pro-poor schemes by assessing the status and experience of uptake amongst the migrant community in selected wards.
Field Visits	Group meetings, semi-structured interviews to understand experiences and key livelihood vulnerabilities of migrants. This was done across select wards.

Strategies to manage migration and livelihood dynamics, thereby building climate resilience

Primarily, the recommendations for medium-sized cities focus on exploring the opportunity space; improving access to livelihoods for the migrants and address their precarity

characterized by the informal economy. Access to basic services and sustained livelihoods is key to alleviating critical sensitivities and thereby, building adaptive and coping capacities.

Based on the study and deliberations, the following focus areas and recommendations

have emerged to address the challenge of migration in medium sized cities in India.

1. Supporting adaptation at local level

Access to basic services Results from the study suggested that in addition to low income and low paying jobs, a relatively large portion of the migrant monthly earnings are spent on basic necessities (food, health etc.) and basic services (local travel, rent, water etc.) as they are presently depending on private provisions for these. With low income and little means of economic progress, their coping capacities are limited when access to these services are constrained, disturbed or inadequate. In the event of exposure to shocks/stresses (including those induced by climate change), due to their limited coping capacities, their overall wellbeing deteriorates and are often unable to recover from the shock. There is a need to identify specific migrant settlements and implement well designed solutions that cater to improving basic infrastructure and associated service needs, particularly those that are supportive of improvement in in-situ living conditions, where possible.

Access to credit Amidst insubstantial growth in wages and a fluctuating business terrain, it was found that generation of capital surplus was largely constrained. Access to capital for diversifying income sources has an impact on sustained asset accumulation strategies for households. While credit access is considered an important barrier to expanding the livelihood base, local governments hardly have any leverage in this space. However, it was found that if some form of support is provided to credit applicants in terms of writing good business proposals, in evaluating business risks and capacity building for writing applications, which includes complete and comprehensive documentation, it may improve the prospects of increased access.

2. Skill development and livelihood enhancing options

Skilling and capacity building A systematic procedure that supports skill development (needs assessment, upskilling, employer connect) of identified migrants with special emphasis on educating and empowering women is advocated for successful local adaptation and upward social and economic mobility of vulnerable migrant communities. Skill development strategies should be aligned with the corresponding 'peculiar' urbanization taking place in the city. It is largely expected that much of the incremental wealth generated, through enhanced livelihood opportunities, is expected to channel back into climate – resilient development strategies at the household level.

Self-employment With respect to livelihoods, there is a need to encourage formalization of employment and enhanced self-employment to ensure stable employment with constant wages/income, which will in turn have implications on upward economic mobility of households. A supporting ecosystem is needed to enable households to generate wealth, move out of poverty and invest to build resilience. Home-based self-employment options for women are emerging to be popular livelihood diversification responses. In addition, training support to women (planning, product development & diversification, pricing) and support in identifying new markets would also prove to be highly productive.

3. Health Care

Encourage direct access to public health care

Results from the study show that not only is there a gap in accessing health service by migrant communities within the city, but also a lack of its awareness. Public access to health care must improve, with direct access to medical support at primary health centres through regular medical camps, awareness building exercises (with local CSOs and NGOs). This is, particularly, in response to the emerging disease burden due to climatic changes (like heat stress, water-borne diseases).

Migrant health tracking

There is an emerging need for setting up a systematic monitoring and recording system that allows for tracking of migrant health records, common diseases and recurring diseases. This can be co-opted synergistically with various employers in the city, including through support by various NGOs/CSOs. Efforts to maintain fine grained patient datasets in primary health care centres and other medical institutions to form a better idea on how to address medical issues, including to make an assessment of newly emerging disease strains is recommended. These records should be accessible to medical practitioners, on need basis but protected for privacy.

Emergency preparedness and awareness building

An early warning system for risks at city level (ex: heat, water scarcity, flood etc.) is recommended to be prepared. Emergency preparedness mechanisms in the form of continued surveillance of temperature data and forecasts from IMD's meteorological centre can be developed in order to predict and prepare for a heat alert. This can be aligned with targeted training and capacity building programs for awareness and actions to be taken amongst medical staff at local hospitals, PHCs in specific wards that have been identified as risk-prone and wards with presence of large migrant populations (mostly in close proximity to concentrated production centres).

4. Rental housing

Access to adequate and affordable Housing options

Policies that provide affordable, good quality and well -located housing that cater to vulnerable groups – specifically rental provisions for migrant groups, can have strong implications towards reducing exposures and building (social and economic) resilience within communities.

- 'Rent to Own' schemes which allows migrant households to receive access to houses on rent from government for a certain number of years can be explored. Migrant households can subsequently own the property by paying the cost for it through EMIs.
- Recognizing the need for adequate affordable housing, the National Urban Rental Housing Policy also promotes 'Needs Based Rental Housing' (short/mid/long term basis) for specific target groups such as migrant labour who have the ability to pay only up to a certain amount of monthly rent.
- These schemes are inclined to allow migratory populations to get more access to a variety of properties. In case of migrants living in rented accommodation provided by employers, it is recommended for the local government to work out a mechanism that allows for regular oversight – in terms of assuring provision of adequate and quality housing and the associated services therein.