



Chetan Choithani

MIGRATION, URBANIZATION AND FOOD SECURITY IN THE GLOBAL SOUTH: EVIDENCE FROM URBAN INDIA



NATIONAL INSTITUTE OF ADVANCED STUDIES
Bengaluru, India

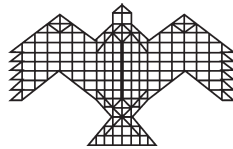
MIGRATION, URBANIZATION AND FOOD SECURITY IN THE GLOBAL SOUTH: EVIDENCE FROM URBAN INDIA

RESEARCH REPORT BY:

Chetan Choithani

SUPPORTED BY:

Australian Consulate, Chennai



NATIONAL INSTITUTE OF ADVANCED STUDIES
Bengaluru, India

© National Institute of Advanced Studies, 2025

Published by

National Institute of Advanced Studies

Indian Institute of Science Campus

Bengaluru - 560 012

Tel: 2218 5000, Fax: 2218 5028

E-mail: publications@nias.res.in

NIAS Report: NIAS/SSc/IHD/U/RR/02/2025

ISBN: 9789383566723

Cover Photo: Paul Thomas

Typeset & Printed by
Aditi Enterprises
aditiprints@yahoo.com

Acknowledgements

This project is an extension of my earlier work that looked at the food security implications of labour migration for rural households in India. I have reported this work in a book entitled *Migration, Food Security and Development: Insights from Rural India* (Cambridge University Press, 2022). In the course of fieldwork with rural communities and their urban migrant members, a key insight that emerged from this previous work was that while remittances from urban migrant members improved the food security of rural households at the origin, migrant members in urban destinations often compromised on their own food security in order to save and remit more money to their families in villages. This led me to conceptualise this project on urban food security with a focus on migrant workers. I am grateful to Australian Consulate in Chennai for providing the financial support to this project through Australian Alumni Grant Scheme (AAGS2023007). The research involved surveys with nearly 600 migrant workers living in informal settlements, and my sincere gratitude to all the migrant respondents who took time out of their busy schedules to participate in this study and share their stories with us. Thanks are due also to many friends and colleagues for lending their helping hands for this work: Divya Varma of Work Fair and Free Foundation and Muniraju T of Grameena Koolikarmikara Sangathane (GRAKOOS) helped with identification of migrant workers' settlements for fieldwork; Shashank S R translated the questionnaire in Kannada and also provided his aid with fieldwork logistics; Narendra Singh Shekhawat prepared the survey questionnaire template in Open Data Kit (ODK) tool; Paul Thomas and Arslan Wali Khan led the survey work with migrant workers in Bengaluru, and in many ways, were also the co-researchers; and Abraham Leon, Roshan Nair, Malavika Krishna, Shruthi K, Nikhil Prasad Kushwaha and Ujjwal Deep helped with the surveys with migrant workers. I also wish to thank Ananya Paul for her help with the maps used in this report. Needless to say, none of them are responsible for any errors and omissions in this report.

Chetan Choithani
Bengaluru
15 February 2025

Publications

Parts of this report have been published, and the details of publications are as follows:

Choithani, C., Jaleel, A. & Rajan, S. I. (2024). Rural-urban transition and food security in India. *Global Food Security*, 42, 100780. <https://doi.org/10.1016/j.gfs.2024.100780>

Choithani, C., & Khan, A. W. (2024, 29 August). Southward ho! Demographic change, the North-South divide and internal migration in India. *The India Forum: A Journal-Magazine on Contemporary Issues*. <https://www.theindiaforum.in/economy/southward-ho-demographic-change-north-south-divide-and-internal-migration-india>

Conference presentations

A paper based on this study entitled “*The Hidden Backbone: How Migration and the Informal Sector Sustain Bengaluru’s Urban Economy*,” has been accepted for presentation at the *Migrants in the Making of Asia* conference scheduled to be held during 23-25 April 2025 at the Asian Institute of Technology in Bangkok, Thailand. This paper has been prepared by the two other co-researchers on the project, Arslan Wali Khan and Paul Thomas – both currently PhD students who led the fieldwork in Bengaluru. Arslan will travel to Bangkok to present the paper.

Abstract

This report presents some preliminary findings of the research project on the linkages between migration, urbanisation and food security in India. The overall aim of this research is to understand how migration and urbanisation in India affect food and nutrition security (FNS), particularly of the poor and vulnerable populations. Urban-centric nature of India's recent economic growth is driving millions of rural dwellers to seek livelihoods in cities. This unparalleled urban expansion in India has major implications for food systems: rapid urbanisation without decent jobs can make Indian cities more vulnerable to malnutrition, affecting in particular the migrant communities engaged in urban informal jobs. However, evidence on the food security situation of migrant workers is scarce. Using primary survey with nearly 600 migrant workers living in the informal settlements in the fast-growing city of Bengaluru in southern India, this project seeks to fill this knowledge gap. The preliminary findings reported here show overall high levels of food insecurity among migrant workers in Bengaluru, linked with their precarious informal urban jobs. Women faced greater food insecurity than men despite their engagement in paid work and economic contributions to their families' incomes. Food insecurity was also higher among migrants from within-Karnataka than inter-state migrants from backward northern Indian states which is indicative of huge inequalities within the prosperous Karnataka state. The report points to two issues of wider significance. First, growing significance of urban-based jobs and increasing migration means that public policy on urbanization in India must inescapably include food security on the agenda, and safety nets must be made more expansive to cover all migrants at destinations irrespective of origin. Second, the right to food research and policy agenda in India which has hitherto focused on rural areas must also be expanded to cities and towns where food and nutritional deficits are increasingly concentrated.

Keywords:

Food Security, Gender, India, Informality, Migration and Urbanization

Migration, Urbanization and Food Security in the Global South: Evidence from Urban India

1. Introduction

More than half of world's human population now lives in urban areas, and the share of urbanites in the global population is projected to continually increase rapidly in the future leading the recent World Urbanization Prospects report to declare: "The future of the world's population is urban" (United Nations, 2019, p. 1). As a growing proportion of world's population lives in cities and towns, the issue of food and nutrition security is increasingly acquiring an urban character. The locus of food security research and policy agendas has correspondingly expanded from rural areas to include cities and towns in the past few years. The specialised United Nations institution of Food and Agriculture Organization (FAO) which leads international efforts to improve global food and nutrition security has recently issued an *urban food agenda* framework to focus on urbanization-food security relationship (FAO, 2019). Similarly, the 2022 edition of *World Cities Report* of the United Nations Human Settlements Programme (UN-Habitat) that puts forth a vision of creating sustainable cities and resilient urban communities points to the importance of food security for sustainable urban futures (UN-Habitat, 2022). This increasing attention to the issue of urban food security notwithstanding, a close reading of academic and policy discourse on the subject shows a lack of adequate understanding of urbanization-food security nexus in the developing world (Crush, 2016). The primary reasons for this disregard lie in the prevailing frames of enquiry. First, the dominant discourse on food security tends to take a *productivist* view and, therefore, focuses invariably more on strengthening food production. Urban agriculture has emerged as a dominant theme in this discourse and is increasingly viewed as a go-to solution to improve food and nutrition security in the cities (Pradhan et al., 2023). The discourse on urban agriculture and urban food security more generally is typically informed by perspective from the Global North (Davies et al., 2021, pp. 1-2). In urban studies, the uncritical celebration of cities that offer distinct urban advantage in terms of better incomes, infrastructure, food, nutrition and health outcomes which is also largely informed by Northern experience (Glaeser, 2012) seems to further obfuscate the urban food security challenges of the Global South. The nature of global urban transition currently underway, however, necessitates a rethink of the urbanization-food security relationship.

In many parts of the Global South, where much of the current and future growth is concentrated, accelerating urbanization is fundamentally reshaping the food systems and their ability to ensure food secure futures for growing urban populations. Urban expansion in the developing world is not accompanied by gainful livelihood opportunities for a large majority of urban dwellers, as has been observed in the historical experience of today's advanced countries (Henderson, 2010; Nijman 2019). Consequently, there has been an increase in urban poverty and undernourishment in many parts of

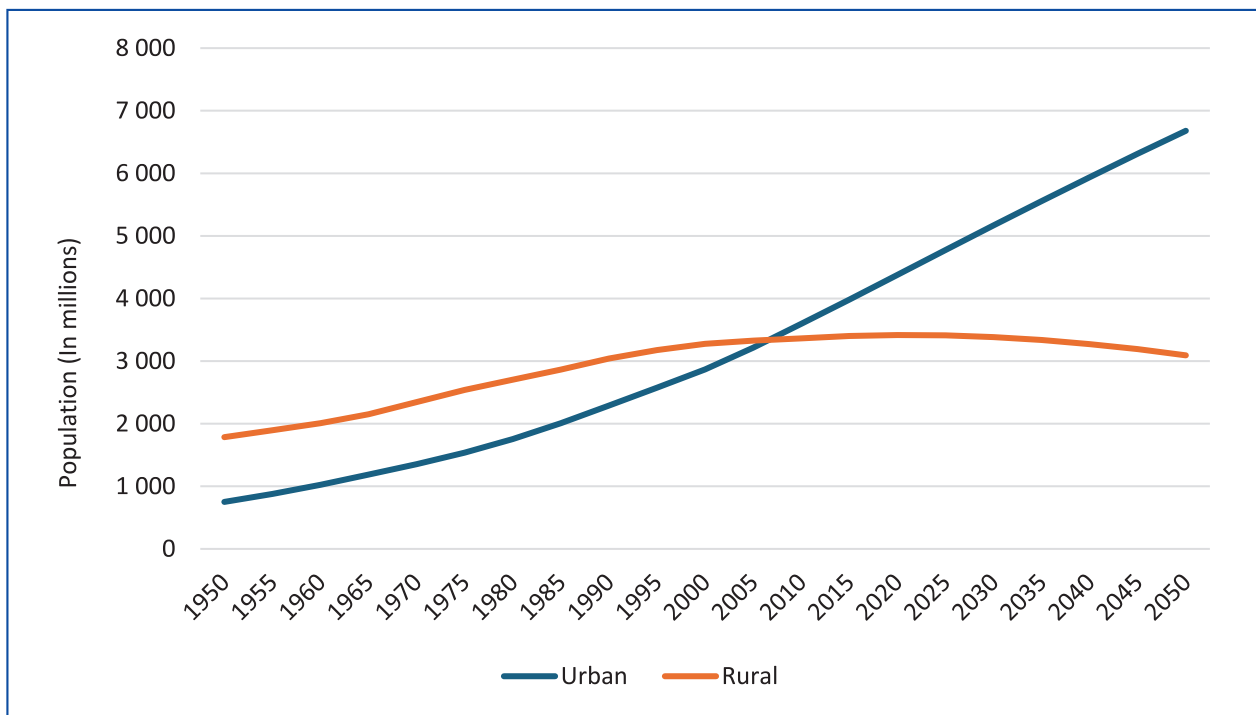
the developing world. Concurrently, dietary and lifestyle changes associated with urban ways of living are also leading to rise in overweight and obesity. In other words, urbanization in developing countries is leading to multiple burdens of malnutrition whereby overweight and obesity are rising, along with persistently high levels of food insecurity and hunger (IFPRI, 2017).

These outcomes are prominently on display in India. Economic liberalization reforms since the early 1990s have been accompanied with structural economic change whereby the importance of rural-farm sector has markedly declined, while urban-based nonfarm sectors have assumed greater significance in the framework of national economy. This has prompted millions of former farm workers to migrate to cities for work. While urban jobs enable migrant workers to make up for the farm decline, most rural-urban migrants engage in precarious informal jobs which makes them highly vulnerable to food and nutritional insecurity. However, the evidence on the impact of rural-urban transition on the food and nutritional wellbeing of migrant communities is scarce, and the food security challenges facing the migrant populations in cities remain inadequately understood. Using primary field research with nearly 600 migrant workers in the fast-growing city of Bengaluru in southern India, this research attempts such an understanding.

The structure of this report is as follows. The next section places India's urban transition in the wider global context. Section 3 analyses the emerging trend of urbanization of food insecurity challenge in India. Section 4 discusses the case study context of Bengaluru as well as data and methods used for primary research. Section 5 presents preliminary findings from primary surveys with migrant workers in Bengaluru. The last section concludes.

2. India in the global urban transition

Urbanization is considered as one of the defining demographic “mega-trends” of the twenty-first century (United Nations, 2019, p.1). Indeed, we now live in what is referred to as an *urban age* because, for the first time in human history, over half of the world's population now resides in cities and towns. In 2018, there were 4.2 billion urban dwellers compared to 3.4 billion people who lived in the countryside. And future population projections show that this global urban transition will accelerate in the coming years, and humanity is ultimately headed towards an urban future (Figure 1). Between 2018 and 2050, the number of urban dwellers will increase by 2.5 billion people (from 4.2 billion to 6.7 billion), accounting for almost all the increase in global population during this period. And while the economically advanced nations in the Global North will see increase in their urbanization levels, much of the future projected urban growth will occur in the countries of the Global South. It is the towns and cities of the developing world which will house the bulk of urban humanity. In particular, the continents of Africa and Asia that are currently home to 90 percent of global rural population will witness rapid urbanization and absorb 90 percent of all increase in urban population between now and 2050 (all data, United Nations, 2018). These numbers have led to growing interest by academics and policymakers in the questions of global urban conditions, particularly focusing on the future of city dwellers in the developing world.

Figure 1: Trends in global population distribution, 1950-2050

Source: United Nations (2018)

Conventional wisdom suggests that urbanization and development share a positive association, with each reinforcing the other (e.g., Henderson, 2010; Glaeser, 2012; Scott, 2017). The key causal pathway underpinning this relationship is that economic growth leads to sectoral and spatial shifts of workers from lower-productivity, farm-based work in rural areas to higher-productivity economic activities in urban-based manufacturing and service sectors (Kuznets, 1973). These sectors benefit from agglomeration dynamics that include specialised firms of similar nature locating near one another in cities to allow economic production at reduced costs and generate scale economies (Glaeser 2010, p. 1). This also leads to increase in population densities as economic opportunities attract people to migrate to towns and cities. Thus, employment shifts out of farming and into industrial and service jobs tend to involve rural-urban migration and urban growth. This has been observed in the historical experience of West Europe, North America, Japan, and China more recently, where economic progress was accompanied with migration to towns and cities (Bairoch, 1988; Nijman, 2019). As the 2018 World Urbanization Prospects report summarised this two-way urbanization-development relationship:

Historically, the urban transition has been linked closely to economic development... economic development fuels urbanization. People are drawn to cities that offer varied opportunities for education and employment, particularly in the industry and services sectors. Urbanization, in turn, has generally been a positive force for economic growth, poverty reduction and human development.

(United Nations 2019, 3)

However, the kind and nature of urbanization in the cities of global South is precluding realistic opportunities for urban populations to improve their life chances (Crush 2016; United Nations, 2016). This is because of apparent decoupling of urbanization and income growth in many developing countries, deviating from the established pattern. In many developing nations, rapid urbanization has continued unabated even in the absence of significant urban-based economic growth (Fay and Opal, 2000; Glaeser 2014; Gollin et al., 2016).

Urbanization without industrialization also characterised Indian development experience in the first few decades following country's independence in 1947. India's mega-cities including Chennai, Delhi, Kolkata and Mumbai grew through in-migration from rural areas despite slow overall economic growth and inadequate employment opportunities in secondary and tertiary sectors, leading to concerns of urban decay (Mukherji, 2006). More recent trends in urbanization and economic growth, however, show an inverse relationship. Following the economic liberalization since the early 1990s, Indian economy has witnessed rapid economic growth; this economic growth is also largely urban-centric with cities and towns contributing to about two-thirds of national income (Planning Commission, 2011, p. 378). But this has not resulted in concomitant rise in urbanization levels. While the absolute number of urban dwellers increased by 91 million in just last decade, *only* 31 percent of India's population lived in urban areas in 2011. Crucially, moreover, contrary to expectations, the period coinciding with rapid economic growth has witnessed decline in growth rates of urban populations (Table 1). The fall in urban growth rate has been steepest in some of India's large cities with dynamic economies such as Delhi and Mumbai which have seen their growth rates plummet by more than half; at the extreme, core regions of the cities such as Kolkata have lost populations in recent times (Bhagat 2012, 33-34).

Table 1: Urbanization in India, 1951-2011

	Urban Population (in million)	Percent Urban	Annual exponential growth rate of urban population
1951	62.44	17.29	
1961	78.94	17.98	2.34
1971	109.11	19.91	3.24
1981	159.46	23.34	3.79
1991	217.18	25.72	3.09
2001	286.12	27.86	2.75
2011	377.10	31.16	2.76

Source: Bhagat (2012, p. 28)

This decline in urban growth does not reconcile with two major trends associated with structural transformation of Indian economy: that of massive shift of employment out of agriculture and significant rise in rural-urban labour migration (Choithani, Van Duijne & Nijman, 2021). While agriculture sector still remains the largest employment provider in the country, it has been under significant duress to support livelihoods (Pani, 2022). In the past three decades (1990-2021), the share

of agriculture sector in the national income has declined from 33 percent to 16.8 percent (Mehrotra et al., 2013; World Bank, 2022). Moreover, progressive reductions in already small landholdings in the country due to demographic pressures have added to the challenge of farm-dependent livelihoods. Data from successive agriculture censuses show that average landholding in India reduced from 2.28 hectare in 1970-71 to 1.08 hectare in 2015-16 (Ministry of Agriculture, 2019). These pressures on agriculture are shrinking the farm employment opportunities for millions of households in the country. Between 2004 and 2016, 40 million farm jobs were lost (Van Duijne & Nijman, 2019). And if we consider the fact that livelihood construction in India occurs in the broader context of family, the effects of these shifts out of farming potentially extend to nearly 200 million people, assuming an average family size of 5 persons (Choithani, Van Duijne & Nijman, 2021). On the other hand, the structural economic change in India has also resulted in cities and towns becoming more important drivers of economic activity and national income. This has also propelled significant increases in rural-urban labour migration. There are an estimated 100 million migrant workers constituting about 20 percent of India's labour force (Deshingkar & Akter, 2009; Choithani 2017; Government of India, 2017; Nayyar & Kim, 2018).

One key explanation for the slowing of urbanization despite high economic growth is the exclusionary nature of country's recent economic growth. While India's economic growth post-1990 has been urban-centric dominated by large agglomerations, it is driven mainly by capital- and skills-intensive sectors, such as information technology and finance (Kotwal, Ramaswami & Wadhwa, 2011; Nijman, 2015). This has created formal, decent employment options for a small section of urban educated workers with skills to participate in this new economy, while the unskilled and low-skilled populations – which constitute a large majority – moving to cities to make up for livelihood deficits in rural areas are left out from the riches of India's economic boom (Choithani, 2021). Job growth in urban manufacturing industries that tend to absorb low-skilled populations transitioning their dependency away from farming has been modest and shrinking (Nijman 2015, 2019), setting in motion the process of what Rodrik (2016, p. 2) refers to as “premature deindustrialization”. Some less skill-intensive urban sectors, such as construction, have witnessed employment growth in the recent past (Kotwal, Ramaswami and Wadhwa, 2011; Government of India, 2024), however, most jobs are informal. Indeed, the share of formal, salaried jobs in overall urban employment in India is very low and urban workforce is becoming increasingly informal, with almost all new jobs being created in low-wage, high-precarity informal sector; and over 40% of urban jobs involve self-employment of various sorts such as street vending (Breman, 2010; Chen and Ravindran, 2014; Mehrotra, 2019). While these informal urban jobs often provide an important alternative to millions of people moving out of agriculture, they curtail the prospects for migrants to carve out more permanent urban lives. Added to this are prohibitively rising costs of urban living which further contribute to exclusionary urbanization (Kundu 2003, 2014). The resultant effect of these processes is that while a growing number of people in India are moving to cities for work, labour migration is predominantly circular: migrants earn in cities while remaining embedded in their natal places. This circular migration has kept the overall urbanization low in India. It is important to note that growing stress on farm-dependent livelihoods is changing the pattern of circular migration in India. Unlike earlier, when rural dwellers moved out for nonfarm work for a few months a year in lean agriculture season to supplement farm incomes, labour migration is increasingly

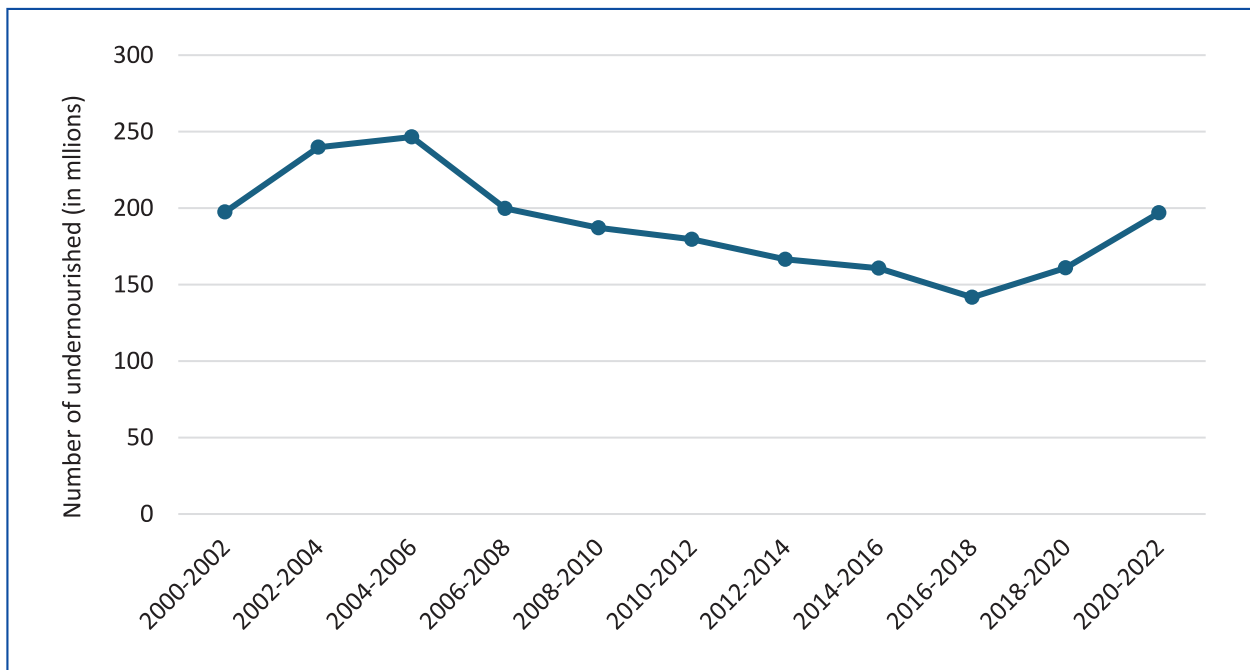
detached from farming and is becoming “permanent circular” in that migrants now spend a large part of the year away from home villages (Choithani, Van Duijne & Nijman, 2021, 5). The growing significance of rural-urban migration is reconfiguring the problem of food and nutritional security in India - from a predominantly rural issue to a growing urban concern. The next section discusses this issue.

3. Urbanization of food insecurity in India?

Unrelentingly high level of food insecurity and undernourishment remains a major academic puzzle and a significant policy concern in India. The Green Revolution reforms in the 1960s and 1970s helped the country to escape its food-scarce past and boost its food production capabilities. Indeed, not only has India achieved self-sufficiency in foodgrains, but it is also now a leading exporter of food staples such as rice. But increased food production has not led to concomitant improvements in food and nutritional wellbeing for a large majority of country's populace (Choithani, 2022). As per the cross-country statistics provided by the United Nations, during 2021-23 nearly 195 million people in India were estimated to suffer from undernourishment – a number higher than any other country in the world. To put this number in perspective, this accounted for over a quarter of world's burden of undernourishment and there were more undernourished people in India than 32 countries in the Eastern, Middle and Southern Africa combined (FAO et al., 2024). Moreover, analysis of long-term trends shows that there has barely been any change in the absolute number of undernourished people in the country in the past two decades (Figure 2). In relative terms, too, the food and nutritional situation in India is more dismal than many poorer countries in the Sub-Saharan Africa. In 2024, India ranked 105 in the Global Hunger Index (GHI) that covered 127 countries, and this position placed the country below its economically less dynamic South Asian neighbours of Bangladesh, Nepal and Sri Lanka as well as many politically unstable countries in Africa such as Republic of Congo and Ethiopia (Wiemers et al., 2024).¹

1 GHI is computed using three parameters of calorie deficiency, undernutrition among children under five years of age, and under-five mortality rate.

Figure 2: Number of undernourished people in India, 2000-02 to 2020-22 (three-year average, in millions)



Source: Food and Agriculture Organization (2024)

The persistence of food insecurity manifests into poor nutritional and health outcomes, with grave economic and social implications. Indeed, with a large bulk of India's population suffering from macronutrients and micronutrients deficiency, the country is considered to be in the state of nutritional emergency (Drèze, 2004; Care India, 2012) affecting, in particular, women and children. The anthropometric statistics from the most recent round of India's National Family Health Survey (NFHS-5) 2019-21 show that nearly 60% of Indian women in the childbearing ages of 15-49 years suffer from anemia, and one-fifth of women in the same age group have lower than normal body mass index. Poor maternal nutritional also curbs the growth potential of the Indian children which also means that the problem of undernourishment starts at birth. Indeed, 36% of children aged under five years are stunted (short for their age) and 32% are underweight (thin for their age) in India (IIPS & ICF, 2022). Worryingly, the childhood undernutrition prevalence has shown very slow improvements since the early 1990s – a period coinciding with rapid economic growth in India. India's experience deviates from what has been observed in many developing countries where economic growth has been more strongly correlated with reductions in childhood undernutrition prevalence. This disconnect between economic growth and undernutrition has led the country to be labelled as an enigma in the global food security discourse (Haddad et al., 2003; Gillespie and Kadiyala, 2012; Pritchard et al., 2014). Although there are many dimensions to India's food security riddle, one key reason why economic growth has not resulted in commensurate levels of food and nutritional wellbeing is because of the exclusionary nature of country's post-1990s economic growth that has benefitted a small section of educated urban dwellers, while a large majority of rural poor are left out. India's recent economic growth has been highly urban-centric, concentrated in a few large cities, while a large majority of

country's population lives in rural areas where hunger and food insecurity are disproportionately concentrated (Choithani 2021, 2022).

However, growing rural-urban migration is reconfiguring food security challenge facing contemporary India. Food insecurity is no longer a predominantly rural concern, and large-scale rural-urban migration in the absence of decent employment options in urban areas is relocating the food and nutritional deficits from villages to cities. Limited available evidence points to the changing nature of food insecurity. Trends in undernutrition by residence show that while rural areas still have higher burden of undernourishment compared to cities and towns, these differences are fast narrowing. Table 2 presents data on undernutrition prevalence for children below five years of age on three indicators of stunting, wasting and underweight from the two recent rounds of India's NFHS by residence status. The data shows that while a greater proportion of rural children still suffer from undernutrition than their urban counterparts, rural areas have witnessed more rapid decline in undernutrition than urban areas, leading to tapering of rural-urban differences.

Table 2: Percentage of undernourished children aged under five years by residence in India**

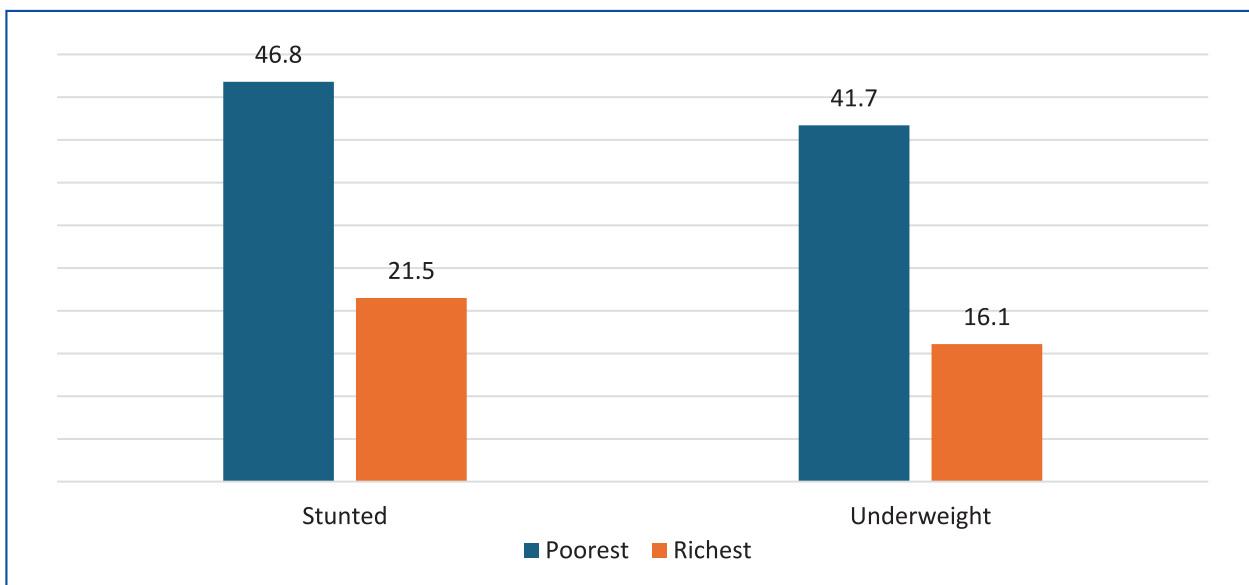
	2019-21		2015-16	
	Urban	Rural	Urban	Rural
Stunted	30.1	37.3	31.0	41.2
Underweight	27.3	33.8	29.1	38.3
Wasted	18.5	19.5	20.0	21.4

Source: HPS and ICF (2022, p. 394)

** Undernutrition expressed as minus two standard deviations from the median of international reference population.

Within urban areas, the prevalence of childhood undernutrition varies substantially by wealth: in compared to wealthy households, more than twice as many urban children from poor families are stunted (21.5 percent vs 46.8 percent) and underweight (16.1 percent vs 41.7 percent) (Figure 3). Urban residents' access to safe, sufficient and nutritious food depends on their ability to earn decent incomes, and the precarity-laden informal urban jobs that a large majority of urban poor are engaged in curtail that ability. Poor populations in urban areas often find it difficult to afford expensive healthy foods, such as fresh fruits and milk, and rely on low-cost cereal-based diets.

Figure 3: Undernutrition prevalence among children aged 0-59 months by economic class in urban India (percent of children)



Source: Own work based on NFHS-5 conducted in 2019-21 by IIPS and ICF (2021).

Migrant populations being pushed out of farming to navigate uncertain urban environments are particularly prone to hunger and food insecurity. Limited evidence on migration-food security linkages shows that while migrants' remittances improve the food security of households at origin (Choithani 2017, 2022), the pressures to save and remit money home often means that migrants may resort to consumption rationing thereby compromising their own food and nutritional needs. Moreover, while agricultural land provides an important source of food security in rural areas, the urban dwellers primarily depend on market purchases to source food. For the poor migrant workers engaged in informal jobs, reliance on market can subject them to food price shocks in times of food inflation which has characterised global agri-food system in recent times. But there is very little direct evidence on the impact of India's urban transition on the food security of migrant populations. Using primary evidence from migrant communities in the fast-growing city of Bengaluru in southern India, this research aims to generate insights on these issues.

4. Study context, data and methods

This study focused on low-skilled migrant workers living in the informal settlements in Bengaluru urban district in Karnataka in south India. India's post-1990s economic growth is disproportionately concentrated in southern India. A policy environment that promoted early public investment in human development, particularly education, provided the region a competitive edge vis-à-vis other parts of India. The availability of an educated workforce meant that when India opened its economy, private capital flocked to southern states (along with some other regions in the country's west with long entrepreneurial history such as Gujarat and Maharashtra). Indeed, in many ways, southern Indian states fueled the India's export services-led economic take-off, of which information technology sector is a leading example. And while India's recent economic growth has favoured capital and skill-intensive industries such as IT and finance and has benefitted a small section of educated and skilled workers,

there has also been employment growth in labour intensive sectors, such as construction, which now provides jobs to over 70 million low-skilled workers in India (Government of India 2024b, 274). Economic growth in the south has prompted significant construction activity, and region's competitive edge means that southern states are also favourable destinations for growing global investment in manufacturing leading to greater concentration of income and employment growth in the south while the northern states languish. This means that southern Indian cities increasingly attract a growing number of labour migrants in India as they provide more regular employment, better incomes and stronger labour protections (Choithani, van Duijne, and Nijman 2021). A recent study that looked at return migration during the two waves of Covid-19 using mobile visitor location registers and roaming data showed that a significant chunk of migrants who left Mumbai, Kolkata and industrial cities in Gujarat during the pandemic did not return due to their harsh experience, and they seemed to be moving to Karnataka, Tamil Nadu and Kerala. Tamil Nadu and Kerala each receive over 2.5 million migrants from eastern Indian states. And while Karnataka is widely known for in-migration of skilled IT workers, it also is now home to a growing share of less-skilled workers (Nizam, Sivakumar, and Rajan, 2022). Within the southern states, it is the large urban centers that attract the bulk of migrants.

Bengaluru is one such city that has emerged as a preferred work destination for low-skilled migrant workers. Bengaluru has witnessed rapid growth since early 1990s. Available data from population census (last of which was conducted in 2011) show that between 1991 and 2011, the total population and density in the city nearly doubled. The average annual population growth in Bengaluru was 3.51 percent during 1991-2001 which increased to 4.7 percent in the subsequent decade of 2001-2011. This rapid demographic growth occurred without any change in the area, indicating growing pressure on the land resources (Table 3). In comparison, the annual population growth of the three large metropolitan cities of Mumbai, Delhi and Kolkata declined by more than half in the same intercensal periods of 1991-2001 and 2001-2011: from 2.7 to 1.1 percent in Mumbai, from 4.3 to 2.3 per cent in Delhi, and from 1.9 to 0.6 percent in Kolkata (Bhagat 2012, p. 34).²

Table 3: Demographic change in Bengaluru, 1991-2011

	Census year			Intercensal change (percent)	
	1991	2001	2011	1991-2001	2001-2011
Number of households	965100	1460697	2393845	51.4	63.9
Total population	4839162	6537124	9621551	35.1	47.2
Area (in sq km)	2190	2190	2196	0.0	0.3
Density (per sq km)	2210	2985	4381	35.1	46.8

Source: Census of India, various years.

Bengaluru's demographic growth owes largely to the large-scale permanent migration of the increasing number of educated Indians employed in the relatively stable, white-collar jobs in formal sectors such as IT. At the same time, city's economic rise that has fuelled the permanent migration of educated

² Note that the annual population growth rate calculation for Bengaluru by the author is done using linear growth rate using the data reported in Table 3, and that for Mumbai, Delhi and Kolkata by Bhagat uses exponential method.

workers has also led to the growth of a parallel informal economy consisting of low-skilled migrant workers. These workers are engaged in a wide variety of informal jobs – construction workers, cab drivers, cooks, domestic helps, cleaners, security guards, to name a few. In many ways, these informal workers fuel the formal sector. But their own living and working conditions leave much to be desired: most of these workers earn low wages, live in informal settlements, and often lack the basic necessities such as food.

The present study focused on these migrant workers living in the informal settlements in Bengaluru. The main objective of this study was to assess the food and nutritional security of low-skilled migrant workers. To this end, we conducted primary surveys with a sample of 589 migrant workers living in Bengaluru urban district (Photos 1 and 2). The surveys were carried out in the northern half of Bengaluru urban which has witnessed rapid expansion in recent years. Migrant settlements were identified with the help of civil society organisations that include Work Fair and Free Foundation (WFFF) and Grameena Kooli Karmikara Sangathan (GRAKOOS) which work in the area of migrant labour issues. In terms of broad geographical zones within Bengaluru urban, surveys were conducted in Yelahanka (326 migrants), West (122 migrants) Dasarahalli (98 migrants), RR Nagara (22 migrants), Mahadevpura (15 migrants), East (2 migrants); 5 migrants living in Bengaluru rural were also surveyed as part of the study as they lived right adjacent to Yelahanka and Mahadevpura zones and it was difficult to demarcate boundaries between Bengaluru urban and rural (Figure 4).

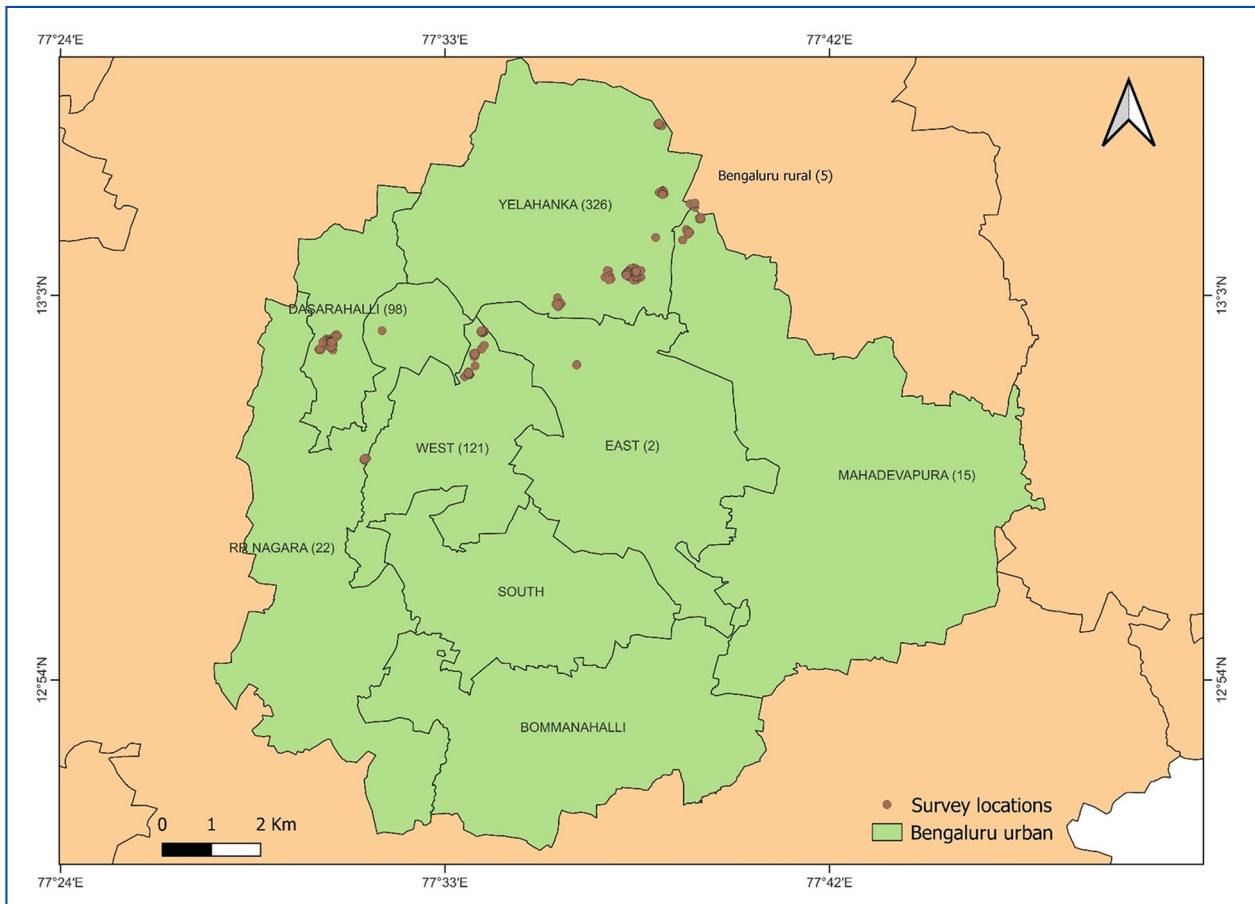


Photo 1: Primary survey with a male migrant respondent in an informal settlement behind Esteem Mall in north Bengaluru. This settlement primarily houses Bengali migrants from Murshidabad and Nadia districts of West Bengal. The men predominantly work as ragpickers, while the women are employed as domestic helpers.



Photo 2: Primary survey with a young migrant family where both husband and wife are employed, while caring for their small child. Their primary goal is to save as much as possible to send back home as remittances.

Figure 4: Primary survey sites in Bengaluru. The dots represent the number of migrant respondents surveyed in each zone.



Source: Own work based on GIS coordinates obtained through primary surveys.

The surveys were conducted using a structured questionnaire which collected information on migrant workers' socio-demographic attributes, employment, income and expenditure, access to social security, origin place, remittances, and food security and food diversity. The surveys were conducted with the help of tablets using Open Data Kit (ODK) software which allowed for real time data transfer and prevented data loss. The survey avoided collecting personal information, except respondent names which were anonymized in the final analysis of survey findings to which we now turn.

5. Key findings

While the survey collected information on a large number of issues, the following section analyses key preliminary findings which have relevance to understand the food security situation of migrant workers such as their income and employment, living and working conditions, and their access to safety nets. But before that, some information on the background characteristics of migrant respondents is provided.

5.1 Background Characteristics

Male migrants comprised nearly 80 percent of the survey respondents, while a little above one-fifth of the migrants were women. This is consistent with the male-dominated pattern of work migration in large parts of India (Tumbe, 2012, 2018). Most migrants (85 percent) were young adults aged below 45 years, with over 60% of them being less than 35 years old. Again, this is in conformity with established literature on selectivity of migration that involves able-bodied adults (Connell et al., 1976; Lipton, 1980). Most of the migrants were married, and it seems that the responsibility to provide for the family provided a prompt for migration at the first place (also see Choithani, 2022). In terms of education, nearly one-third of the respondents had not received any education, about 65% of the sample workers had education ranging from primary to higher secondary, and a very small percentage had education level of graduation and above. This low-level of overall education among the migrants also explained that almost all of them were engaged in informal jobs of various kinds (see the discussion later). As for the social backgrounds of respondents, close to three-fourths of the sample respondents were Hindus, about a quarter of them were Muslims and the remaining few were Christian (6 respondents), Buddhist (2 respondents) and Sikh (1 respondent). The break-up of sample by caste shows that half of the respondents came from disadvantaged backgrounds of Scheduled Caste/Scheduled Tribe (31.7 percent) and Other Backward Class (18 percent), while about 40 percent reported to be from general caste.³ The sample was roughly equally divided between within-Karnataka migrants (45 percent) and outside-Karnataka (55 percent). But many migrants from other states also reported speaking Kannada suggesting some level of assimilation among inter-state migrants (all data reported in Table 4).

3 Many respondents belonging to OBC groups tended to report their caste as general caste so this distribution of respondents by broad caste groups may not be accurate. The survey also collected information on the name of caste/tribe and this information is being tallied with the official classification of caste in these groups in states where the migrants come from.

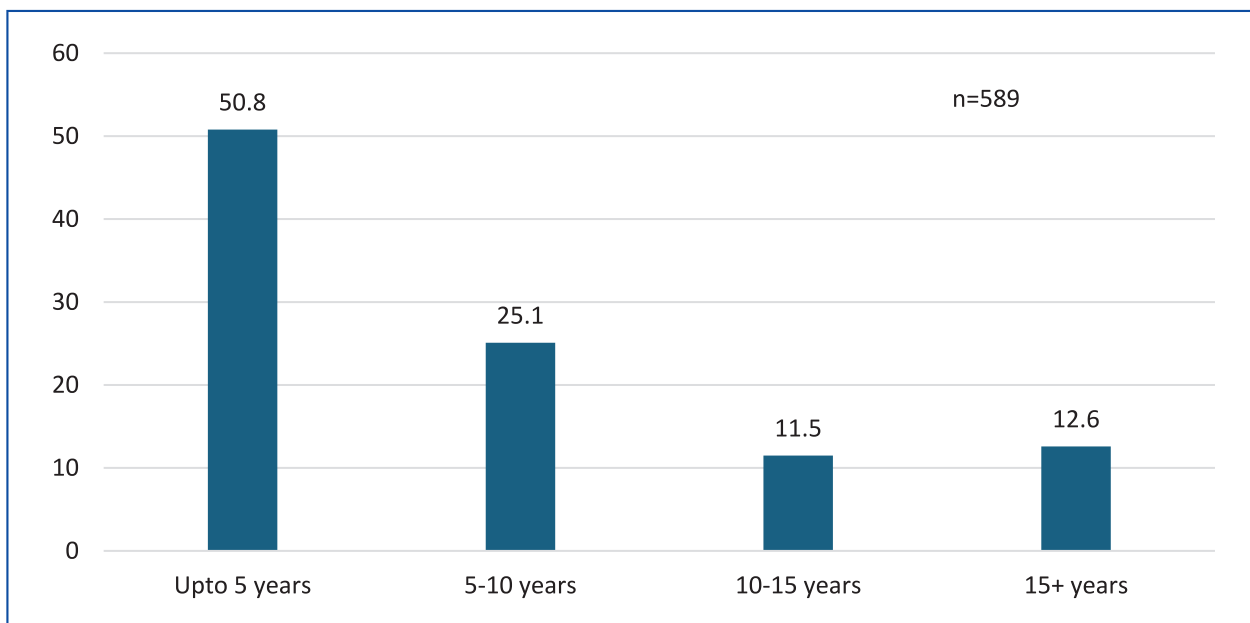
Table 4: Background characteristics of survey migrant respondents

	Number	Percentage
Sex		
Male	458	77.8
Female	131	22.2
Age		
Less than 25 years	141	23.9
25 to 34 years	233	39.6
35 to 44 years	127	21.6
45 years & above	88	14.9
Education		
No education	178	30.2
Primary (upto 5th standard)	64	10.9
Middle (6th to 8th standard)	94	16.0
Secondary/higher secondary (9th to 12th standard)	223	37.9
Graduate and above	30	5.1
Marital Status		
Currently married	435	73.9
Never married	148	25.1
Separated/Divorced/Widowed	6	1.0
Religion		
Hindu	435	73.9
Muslim	145	24.6
Others	9	1.5
Caste**		
General	225	38.2
Scheduled Caste/Scheduled Tribe	187	31.7
Other Backward Class	106	18.0
Don't know/Refused to answer	71	12.0
Origin state		
Karnataka	264	44.8
Outside Karnataka	326	55.2
Speak Kannada		
Yes	318	54.0
No	217	46.0
Total Number of Migrants (n)	589	100.00

Source: Primary Survey in Bengaluru, 2024.

That inter-state migrants have acquired local language skills also seems to be a function of the time spent in the city. Half of the migrants surveyed reported that they had been in Bengaluru for 5 or more years, with about one-quarter (24.1 percent) spending 10+ years (Figure 5).

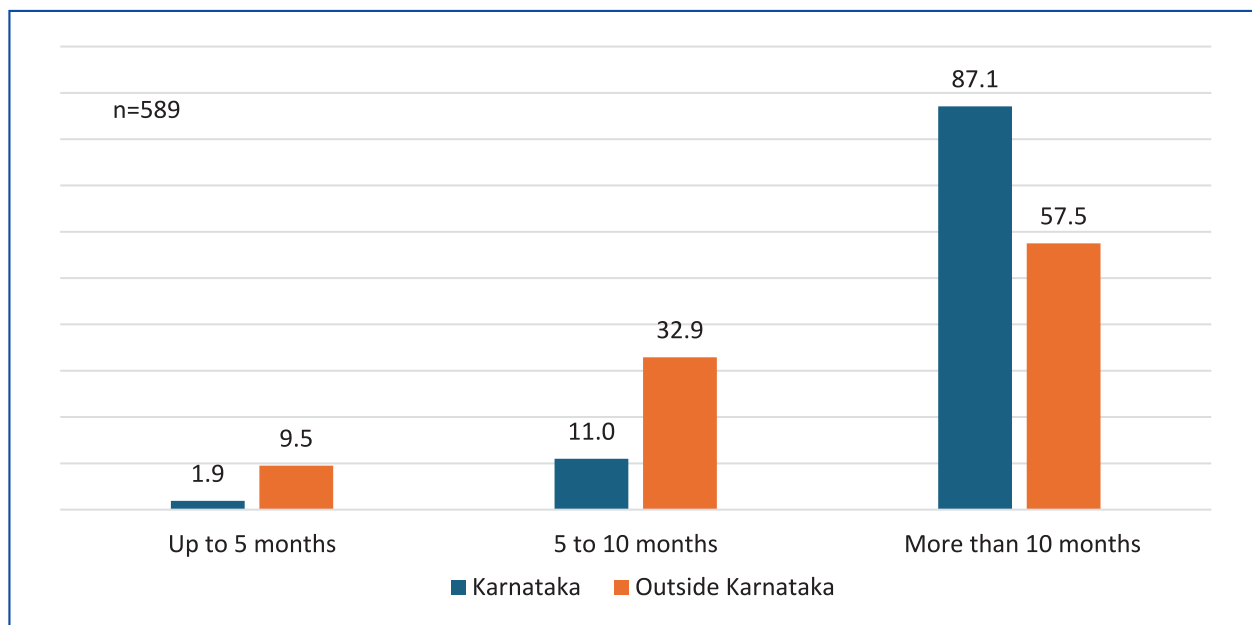
Figure 5: Total duration of stay in Bengaluru (percentage of migrants)



Source: Primary Survey in Bengaluru, 2024.

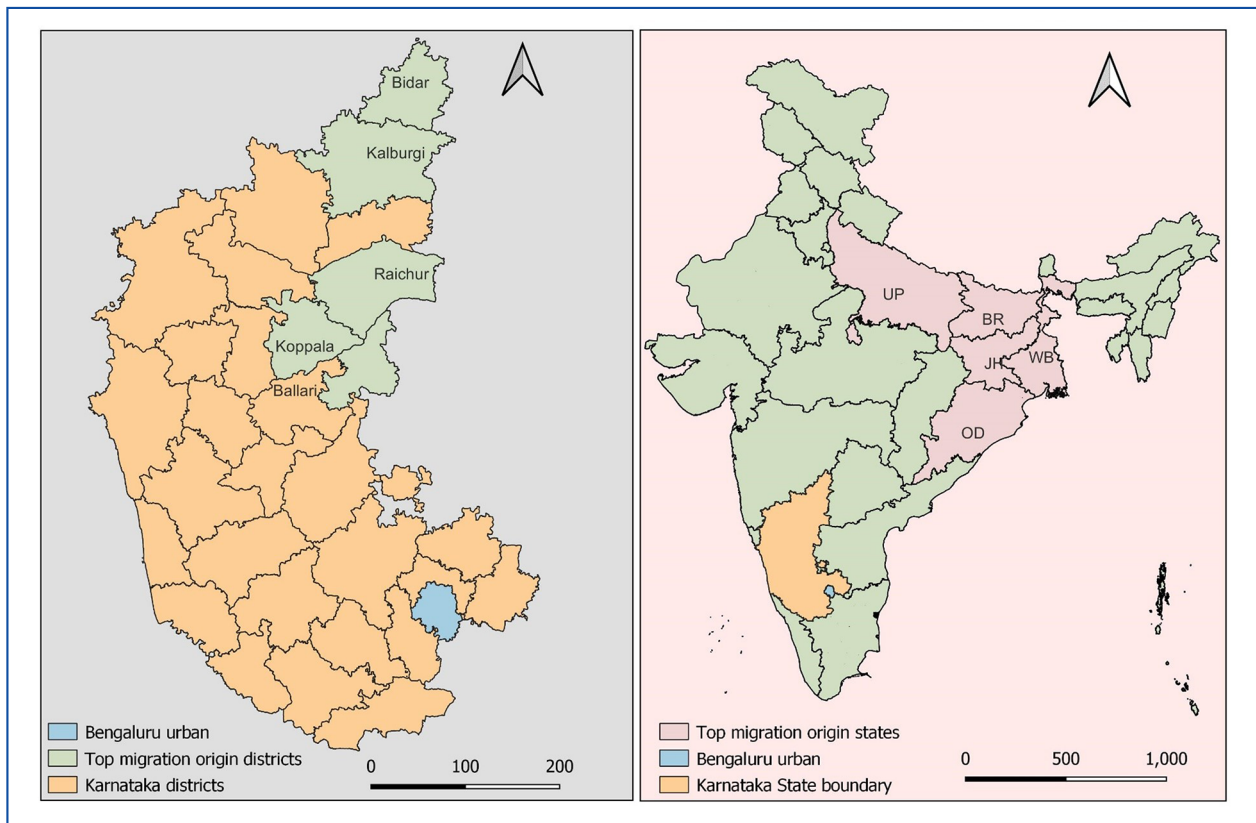
A large majority of the migrants (417 out of 589 migrants) spent more than 10 months in Bengaluru for work, suggesting the regularity of work available as well as importance of migration for workers. Pressures on rural agriculture sector is leading to a growing number of workers spending extended durations away from village. However, there were differences in the duration stayed in the past year by migration origin: a greater share of within-state migrants stayed 10 months in Bengaluru for work than inter-state migrants (Figure 6). This is perhaps explained by the proximity. The migrants from within-Karnataka had to travel short distances and incurred less expenses to visit their natal homes, compared to those inter-state migrants. This also meant that inter-state migrants' home visits were fewer but they spent more time when they went home. This is corroborated by survey data. A total of 475 respondents that included 245 within-state and 230 inter-state migrants reported visiting their origin places in the past year. And while 87 percent of within-state migrants made two or more visits home, 67 percent of inter-state migrants visited their origin place only once.

Figure 6: Duration of stay in Bengaluru in the past year by origin state (percentage of migrants)



Source: Primary Survey in Bengaluru, 2024.

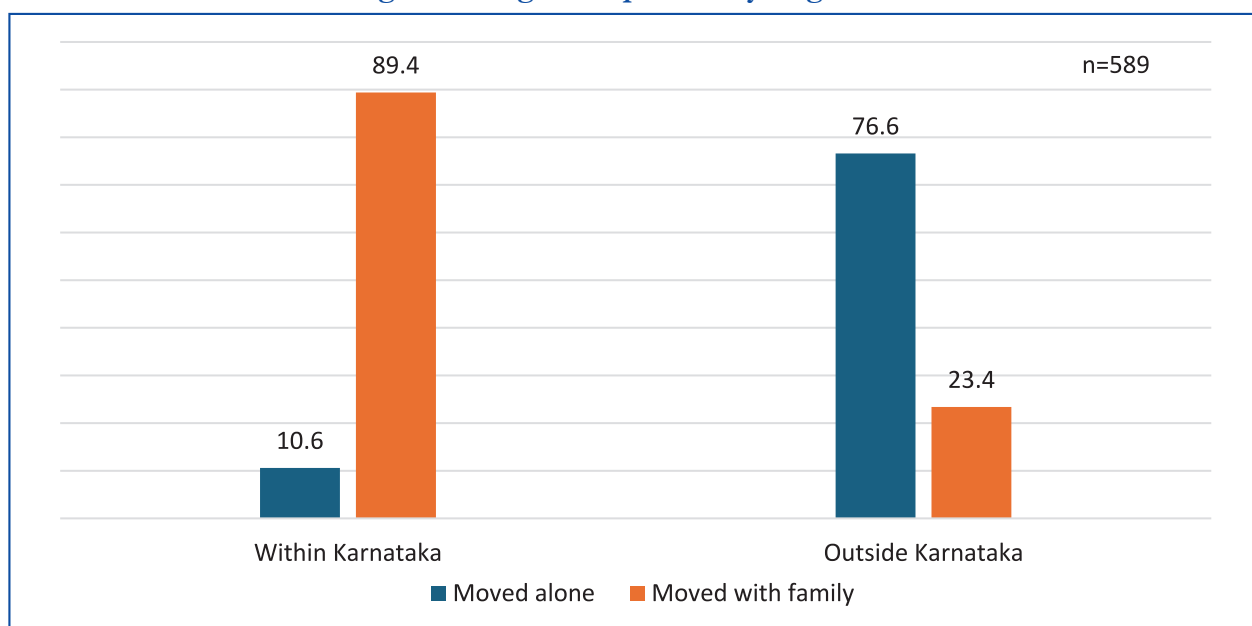
A large number of within-state and inter-state migrants came from poor and backward regions. Figure 7 presents survey data on the top migrant origin places within and outside Karnataka. Insofar as the inter-state migration is concerned, 242 of the 325 migrants (75 percent) came from just five Indian states of Bihar (72 migrants), West Bengal (70 migrants), Uttar Pradesh (51 migrants), Odisha (30 migrants) and Jharkhand (19 migrants). These states in the north and east are known as the high outmigration hotspots because of the weak local economies and poor governance, with some of these states such as Bihar having remittance-based labour migration persisting for over a century (Tumbe, 2012). Similarly, a bulk of migrant workers from within Karnataka (nearly 80 percent) came from five northern districts within the state. These included Raichur (83 migrants), Yadgir (46 migrants), Bellary (34 migrants), Kalaburagi (21 migrants) and Koppala (20 migrants). These districts are located in what is officially referred to as Kalyan-Karnataka region, also popularly known as Hyderabad-Karnataka region, which has remained backward for a long time and receives special government grants for development. From within these backward regions, nearly three-quarter of the survey sample (440 migrants) reported their origin place as ‘village’, another 20 percent (114 migrants) as ‘urban towns’, and a very small share of them (35 migrants) as other ‘cities’.

Figure 7: Top migrant origin places within and outside Karnataka

Source: Own work based on Primary Surveys in Bengaluru, 2024.

BR=Bihar; JH=Jharkhand; OD=Odisha; UP=Uttar Pradesh; WB=West Bengal

The pattern of migration also varied by origin state. Most within-state migrants moved to Bengaluru with their families, while the opposite was the case for outside-Karnataka migrants who moved alone. The latter largely involved male migrants from northern and eastern states. There were only 23 women respondents in our interstate migrant sample compared to 108 women from within-Karnataka. This migration pattern is explained by the differentials in the gender norms: while women enjoy greater autonomy and mobility in the south, socio-cultural norms in states in the north and east, such as Bihar, restrict women's participation in distant labour markets (Choithani, 2020; Dyson & Moore, 1983). However, most women migrants from within-state and outside state were married and reported living with their spouses in Bengaluru suggesting they moved with their husbands. Also, it is often the case that male migrants arrive to the city first, and when they are able to find their bearings they bring their families along.

Figure 8: Migration pattern by origin state

Source: Primary Survey in Bengaluru, 2024.

5.2 Work, employment and living conditions

As noted earlier, most sample migrants had overall low levels of education, and they worked in informal jobs as construction workers, painters, drivers, security personnel, garment workers, ragpickers, domestic help, cleaners, electricians, carpenters and so on. Table 5 reports the distribution of surveyed migrant workers by occupation, average monthly income and remittances. Construction industry absorbed by far the most migrant workers employing over one-quarter of the total study sample (167 migrants). This was followed by workers in security services manning commercial offices and residential apartments (79 migrants), garment and other factory-based manufacturing workers (51 migrants), domestic workers mainly involving women working as helps in middle-class households (51 migrants), painters – those who painted houses and buildings (37 migrants), hotel/restaurant workers (35 migrants). These six broad occupation categories employed over 70 percent of the sample (420 migrants).

Table 5: Occupation, income and remittances reported by migrant workers, all workers

Occupation	Number of workers	Average monthly income	Number of those who remitted money home in the past month	Average income remitted past month	Share of monthly income remitted
Own business	9	17222	6	12300	71
Salaried worker in a private firm	24	18604	15	7767	42
Construction worker	167	15918	110	9009	57
Driver	23	20065	14	10214	51
Painter	37	17838	31	12629	71
Factory/garment worker	51	15902	31	9113	57
Domestic help	51	10586	32	5063	48
Security personnel	79	19133	68	10669	56
Worker at a store (e.g. salesmen)	12	21667	5	10600	49
Ragpicker	18	12083	10	8500	70
Worker in a restaurant/hotel	35	15229	19	8342	55
Other services (e.g. carpenter, electrician, welder)	26	14212	14	8571	60
Cleaning services	20	13090	14	9786	75
All others (street vendor, gig worker, pest control etc.)	37	17770	23	11261	63
Total	589	16202	392	9894	61

Source: Primary Survey in Bengaluru, 2024.

While these jobs employed both within-Karnataka and outside-Karnataka migrants, there seemed to be some region-specific work streams. Almost all the painters (34 out of 37 workers) and security personnel (76 out of 79 workers) were from outside Karnataka: the bulk of the painters came from Uttar Pradesh (26 workers) and Bihar (5 workers), and a large chunk of security personnel were from the eastern states of Assam (28 workers) Odisha (22 workers) and Bihar (21 workers). Similarly, a greater share of ‘salaried worker in a private firm’ (17 workers) and ‘domestic help’ (39 workers) included within-Karnataka migrants.

Average incomes of outside migrants were higher than within-Karnataka migrants across most occupational categories. This may be a function of the fact that many outside migrants did overtime work as most migrants come with the intention to earn and save more to send money to their families. The data on remittances also suggests this is the case: a greater share of migrants from outside Karnataka (84 percent) remitted money home compared to within-Karnataka migrants (45 percent), and the former also remitted a higher share of their monthly income than the latter (Tables 6 and 7). That migration from within-Karnataka involved family migration also explained the lesser need to send money home. But these income differentials may also be indicative of the fact that within-Karnataka migrants were generally poorer than inter-state migrants.

Table 6: Occupation, income and remittances reported by migrant workers from within Karnataka

Occupation	Number of workers	Average monthly income	Number of those who remitted money home in the past month	Average income remitted past month	Share of monthly income remitted
Own business	5	14000	2	6000	43
Salaried worker in a private firm	17	15912	9	6944	44
Construction worker	89	14522	40	4675	32
Driver	20	19875	12	10667	54
Painter	3	16667	2	11000	66
Factory/garment worker	19	15105	10	5500	36
Domestic help	39	10638	22	4977	47
Security personnel	3	13167	1	1000	8
Worker at a store (e.g. salesmen)	7	22286	2	7500	34
Ragpicker	8	8250	3	5333	65
Worker in a restaurant/hotel	17	14353	4	11250	78
Other services (e.g. carpenter, electrician, welder)	12	12000	3	4667	39
Cleaning services	8	11688	4	15750	135
All others (street vendor, gig worker, pest control etc.)	17	14676	6	13333	91
Total	264	14299	120	6750	47

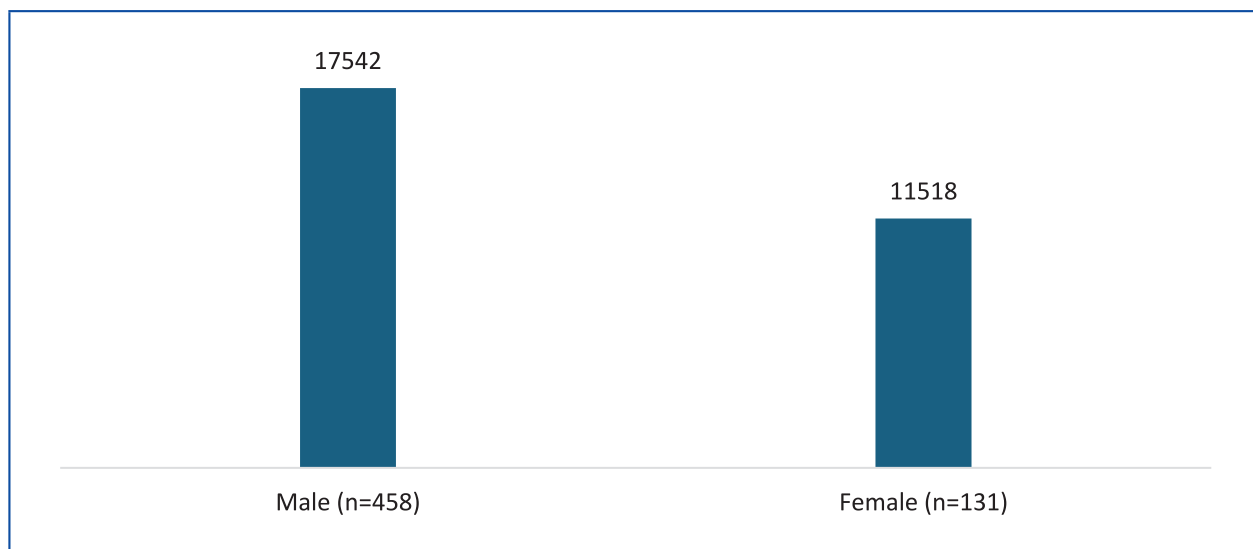
Source: Primary Survey in Bengaluru, 2024.

However, irrespective of the occupations and state of origin, all these jobs were non-permanent and informal where incomes were low and precarity high. Many migrants worked in informal jobs within the formal sector. For example, our survey site included a migrant workers' settlement near the Special Economic Zone of Manyata Tech Park which houses corporate offices of global IT firms where many migrant respondents reported working as security guards. Average monthly income was Rs. 16200 – ranging from as low as Rs. 10600 for domestic workers to a maximum of Rs. 21700 for those who worked at stores or shops including those at shopping malls. This also meant that women migrant workers earned the least as almost all domestic workers were women (48 workers). This gender disparity is also reflected in data on income earned by men and women migrant workers: average monthly income of male workers was 1.5 times than that of female migrant workers (Figure 9).

Table 7: Occupation, income and remittances reported by migrant workers from outside Karnataka

Occupation	Number of workers	Average monthly income	Number of those who remitted money home in the past month	Average income remitted past month	Share of monthly income remitted
Own business	4	21250	4	15450	73
Salaried worker in a private firm	7	25143	6	9000	36
Construction worker	78	17509	70	11486	66
Driver	3	21333	2	7500	35
Painter	34	17941	29	12741	71
Factory/garment worker	32	16375	21	10833	66
Domestic help	12	10417	10	5250	50
Security personnel	76	19368	67	10813	56
Worker at a store (e.g. salesmen)	5	20800	3	12667	61
Ragpicker	10	15150	7	9857	65
Worker in a restaurant/hotel	18	16056	15	7567	47
Other services (e.g. carpenter, electrician, welder)	14	16107	11	9636	60
Cleaning services	12	14025	10	7400	53
All others (street vendor, gig worker, pest control etc.)	20	20400	17	10529	52
Total	325	17748	272	10619	60

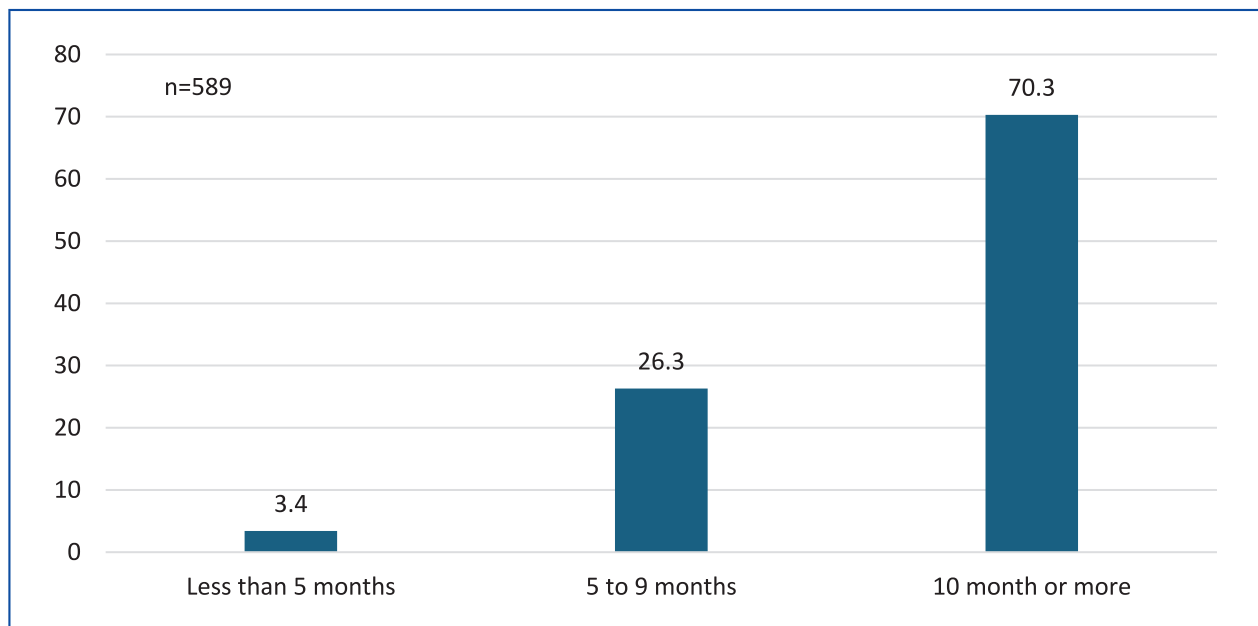
Source: Primary Survey in Bengaluru, 2024.

Figure 9: Income earned in the past month by the gender of migrant workers (in Rs.)

Source: Primary Survey in Bengaluru, 2024.

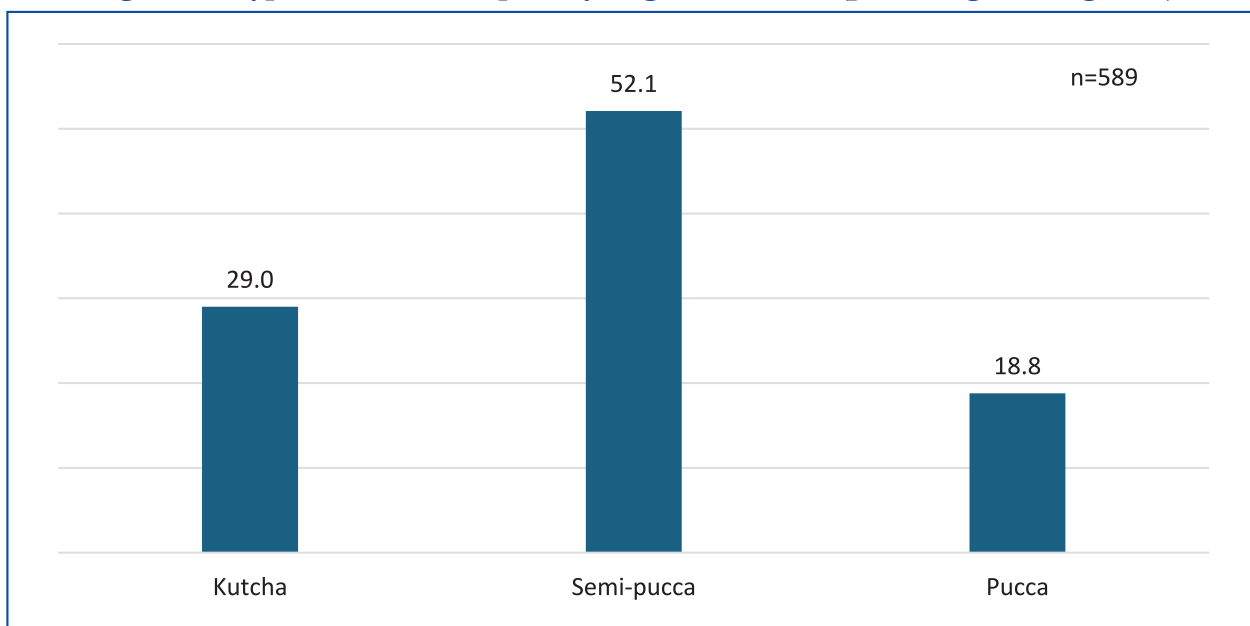
Importantly, while over 70 percent of migrants (414 migrants) reported they worked for 10 months or more in the past year suggesting that work was available in the city which is the reason why Bengaluru attracts a growing share of migrants, our fieldwork revealed that many migrants also faced difficulties finding work throughout the year. Indeed, the fact that 30 percent of migrants worked less than 10 months is indicative of the challenge of securing work all-year round (Figure 10).

Figure 10: Number of months migrants reported working in the past year (percentage of migrants)



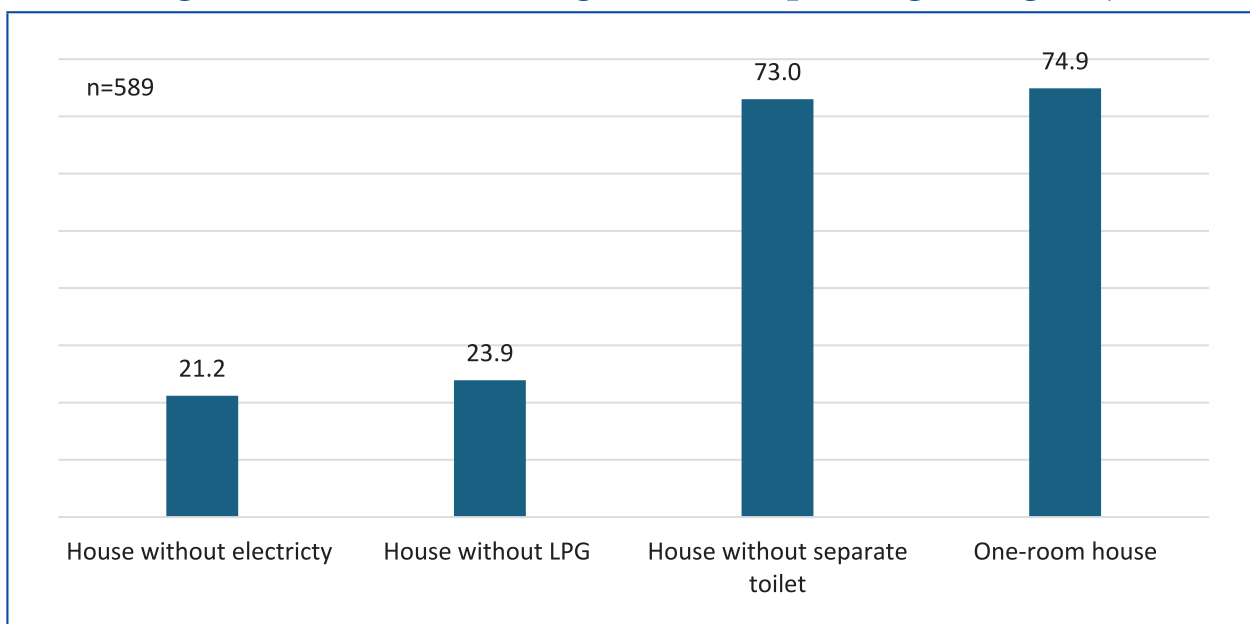
Source: Primary Survey in Bengaluru, 2024.

The overall low incomes and work uncertainty also meant that most migrants had deplorable living conditions. A large majority of the migrants (over 80 percent) lived in *Kutcha* or *semi-pucca* houses which included non-permanent structures of various types without proper roof such as those made with blue tarpaulin or asbestos roof (Figure 11).

Figure 11: Type of house occupied by migrant workers (percentage of migrants)

Source: Primary Survey in Bengaluru, 2024.

But even the *pucca* houses that migrant inhabited lacked very basic amenities such as individual toilets. Indeed, over 55 percent (329 migrants) had shared toilets, and another 17 percent (101 migrants) reported defecating in the open. Many migrants did not have electricity connections and used conventional fuels such as wood or coal for cooking. Furthermore, most migrants' dwellings were one-room structures, and they even shared this room with two to five co-workers and lived in really cramped situations. This one-room also doubled up as a kitchen (Figure 12 and Photos 3 to 6)

Figure 12: Characteristics of migrants' houses (percentage of migrants)

Source: Primary Survey in Bengaluru, 2024.



Photo 3: The photograph captures the interior of a temporary migrant settlement of construction workers provided by the employer. Each worker is allocated a small cubicle within a shared bunk bed, serving as their personal space for sleeping, cooking, and other daily activities, highlighting the constrained living conditions of migrant laborers.



Photo 4: These container rooms are actual metaphors for the temporality of migrant labour. Large construction firms make use of such transportable housing facilities to easily shift workers between work sites and provide accommodation close to the site.

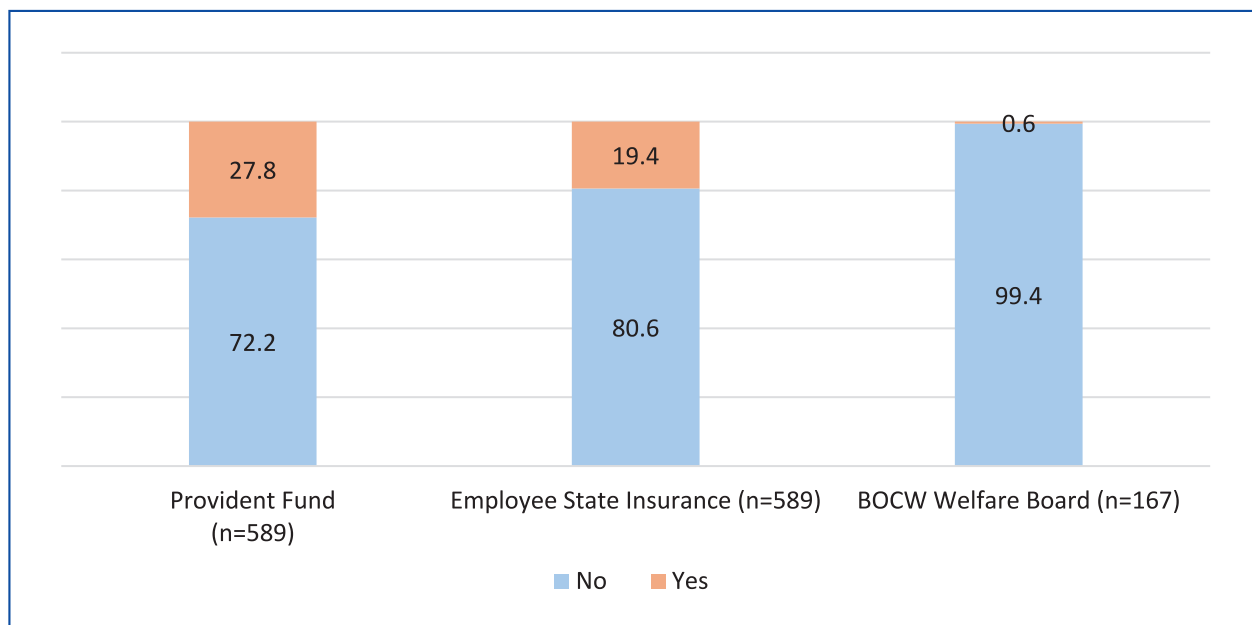


Photo 5: The kitchen, living room and bedroom are all the same in a single-room migrant house. Three to four people share a single room, and the same space takes different attributes based on the situation. When it is time to cook, the mattresses are folded towards the corner, and the utensils and portable stoves take centre stage. In some houses, members take turns for cooking, while in other households it is a collaborative work.



Photo 6: A slightly better dormitory accommodation run by an NGO for migrant workers who are new to the city and are not able to find initial housing facilities. The dormitory provides shelter for these migrants for three months until they find a housing option for themselves. The dorm also provides short-term accommodation for homeless male urban dwellers.

Importantly, most migrant workers were not covered by safety nets schemes such as Provident Fund, Employee State Insurance Scheme where employers are mandated to contribute fixed amount for their employees (who also contributes a certain share) for the workers to deal with vagaries of work and life such as job loss, sickness, accidents at work etc. which made these migrants more vulnerable. Our conversations with migrants revealed that while many respondents were unaware of these schemes and ways to register under them, their employers also did not make any efforts to educate them about these schemes. Indeed, more often than not, employers refused these benefits to the workers point-blank because they wanted to cut costs. Our survey data on construction workers who are eligible to be registered with Building and Construction Workers (BOCW) Welfare Board for benefits revealed that only one of the 167 workers were registered (Figure 13).

Figure 13: Percentage of migrant workers who reported being registered under following schemes

Source: Primary Survey in Bengaluru, 2024.

BOCW– Building and Construction Workers. This applied only to construction workers.

5.3 Food (in)security among migrant workers

Low overall incomes from precarious informal jobs coupled with lack of social security manifested in poor food security outcomes. Food security is a multidimensional issue including aspects of availability, access, utilization. Our focus, however, was specifically on the ‘access’ dimension of food security. This is because while the world produces enough food to meet the food and nutritional needs of everyone on the planet, not everyone has access to food due to inequalities of various kinds (Choithani, 2022).

In the survey, we asked a range of questions to assess the food security situation of migrant workers. In particular, we were interested to understand migrants’ experience with food security/insecurity. This required assessing not just what and how well migrant workers ate, but also their feelings and perceptions about the food they ate or did not. One of the modules we used was the Household Food Insecurity Experience Scale (HFIAS) to assess the prevalence of food insecurity developed by USAID. HFIAS provides an important tool to capture three key dimensions including i) feelings of uncertainty and anxiety over food, ii) perceptions that food is of insufficient quantity and quality, and iii) reported reductions in food intake (Coates et al., 2007). While our study target was individual migrants, they were connected with their wider households; in fact, many migrants, particularly those from within Karnataka lived with their families. But even those who did not live with their families, they migrated to save money home to their families to enable them to eat well, among other things. HFIAS provided a better tool to understand migrants’ food (in)security experience in relations to their families.

The survey found high overall food insecurity among migrant workers: nearly 40 percent reported experiencing some form of food insecurity in the past month. The largest proportion of migrants reported uncertainty about and anxiety over their ability to have enough food, which is not surprising given the precarious jobs they were engaged in. But many migrants also reported eating foods they did not always prefer as well as reducing the variety of food due to lack of resources. At the extreme, 15 percent of migrants told us they went to sleep at night *hungry* and nearly 10 percent went a whole day and night without eating anything because there was not enough food (Table 8).

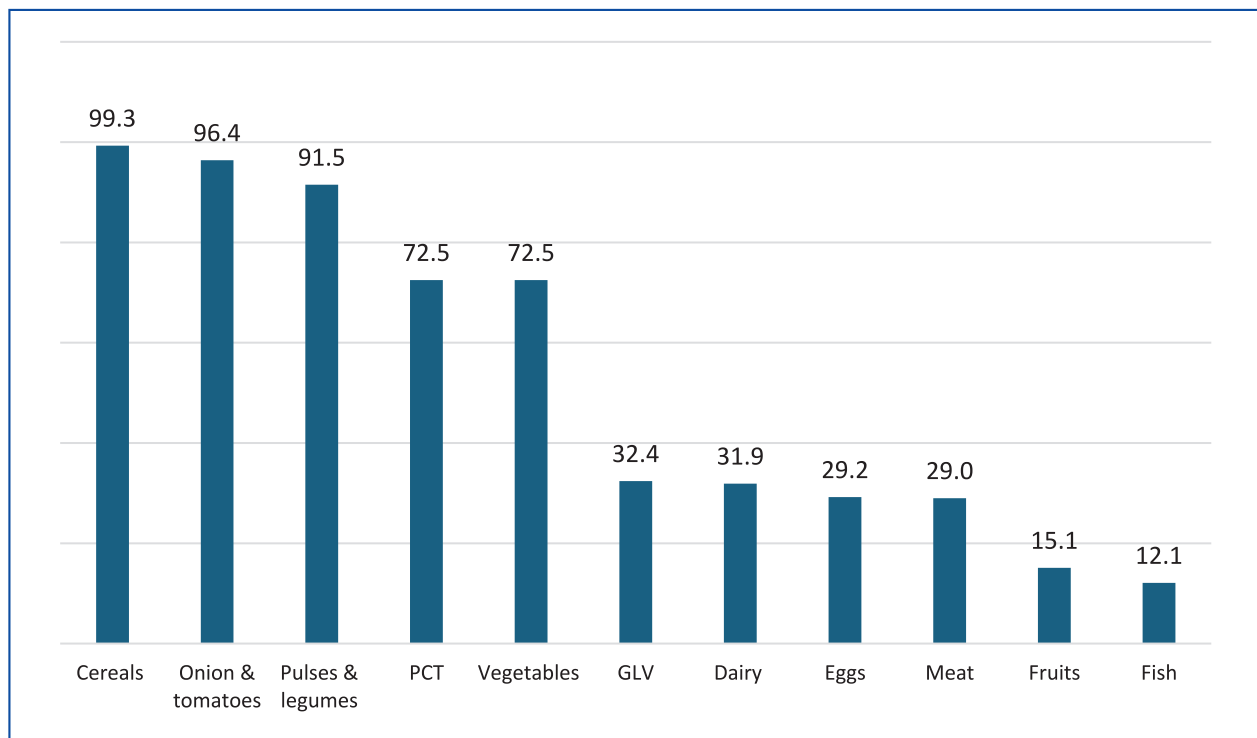
Table 8: Food insecurity experience of migrant workers

	Number	Percentage
Did you worry that your household would not have enough food?	233	39.6
Were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources (money)?	223	37.9
Did you or any household member have to eat a limited variety of foods due to a lack of resources (money)?	198	33.6
Did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources (money) to obtain other types of food?	164	27.8
Did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	168	28.5
Did you or any household member have to eat fewer meals in a day because there was not enough food?	171	29.0
Was there ever no food to eat of any kind in your household because of lack of resources (money) to get food?	115	19.5
Did you or any household member go to sleep at night hungry because there was not enough food?	91	15.4
Did you or any household member go a whole day and night without eating anything because there was not enough food?	53	9.0
Total number of migrants (n)	589	100.0

Source: Primary Survey in Bengaluru, 2024.

This was also reflected in the diets consumed. Survey data on the composition of diets showed that they lacked the requisite diversity and were nutritional deficient. They routinely consisted of cereals, pulses, potato curry made with onion and tomatoes, and vegetables. Consumption of high nutrition items such as green leafy vegetables, dairy, eggs and meat was low, and fresh fruits and fish even lower (Figure 14). Again, this was because of high costs of healthy food which most migrants were unable to afford. For instance, one of the migrants who worked as a security personnel told us:

I work as a security guard in an IT company. The officers there make Rs. 1-1.5 lakh a month and my salary is Rs. 15,000 monthly. But the prices of food items are same for us. Tomatoes costs me and my bosses Rs. 40/kg. People should pay for food based on their income, no?

Figure 14: Food consumed in the past 24 hours (n=589)

Source: Primary Survey in Bengaluru, 2024.

PCT: Potato, Carrot or any tubers; GLV = Green leafy vegetables

Despite the resource constraints, migrants did find ways to express their food culture. For example, during our fieldwork we met youth from the Northeast India where non-vegetarianism is widely prevalent. We learned that while they were not always able to eat quality meat or chicken due to lack of resources, they did buy portions, such as chicken legs or liver, that costed less (Photo 7).



Photo 7: Chakma tribe youth cooking chicken feet over a fire made from wood collected nearby.

But the extent of food insecurity varied widely across different groups. Our survey showed that women migrants faced more food insecurity than men. Table 9 reports percentage of migrants on HFAIS by their gender. On all 9 parameters of HFIAS, a greater proportion of women reported difficult experience with food compared to men. It is also important to note that all these women migrants engaged in paid work and earned incomes for their families. Even though gender-based discrimination in wages meant that women earned less than men, women's income was not just an important supplementary source of household incomes but, in some cases, they were also the main breadwinner and contributed more to the household income. But women's participation in income-earning activities did not translate into better food security which points to gender-based disadvantage women face.

It is worth noting that higher food insecurity prevalence among women also possibly emanated from 'time poverty' (Nichols, 2016). Women's engagement in paid work did not relieve them of their domestic responsibilities, which meant they often skipped meals, or ate less regularly.

Table 9: Food insecurity experience of migrant workers by gender (percentage of migrants)

	Male	Female
Did you worry that your household would not have enough food?	32.3	64.9
Were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources (money)?	33.4	53.4
Did you or any household member have to eat a limited variety of foods due to a lack of resources (money)?	30.1	45.8
Did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources (money) to obtain other types of food?	25.3	36.6
Did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	25.5	38.9
Did you or any household member have to eat fewer meals in a day because there was not enough food?	24.7	44.3
Was there ever no food to eat of any kind in your household because of lack of resources (money) to get food?	16.6	29.8
Did you or any household member go to sleep at night hungry because there was not enough food?	13.8	21.4
Did you or any household member go a whole day and night without eating anything because there was not enough food?	8.1	12.2
Total number of migrants (n)	458	131

Source: Primary Survey in Bengaluru, 2024.

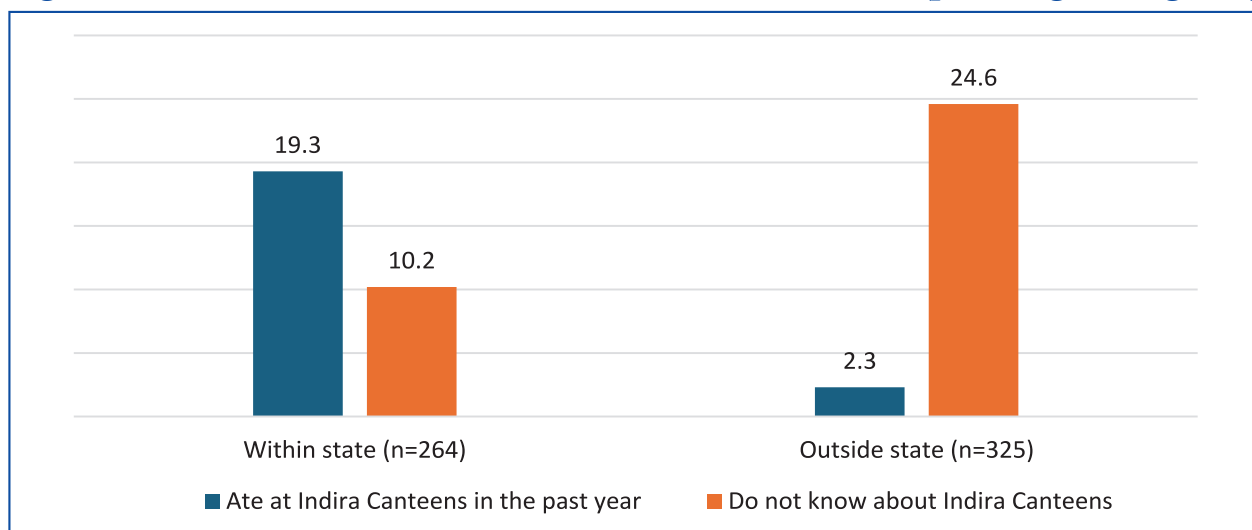
In terms of migrants' origin, food insecurity was higher among within-Karnataka migrants than those from outside Karnataka, and some of the differences were really stark: nearly 60 percent of within-Karnataka migrants reported 'worrying about not having enough food' compared to only one-quarter of outside Karnataka migrants. Similarly, nearly twice as many Karnataka migrants reported 'going to sleep at night hungry' and even 'go a whole day and night without eating anything' because there was not enough food than that of non-Karnataka migrants (Table 10). This was rather counterintuitive as Karnataka migrants would be expected to have local advantage because of their domicile status, ability to speak the language, and also potentially existing networks of friends and relatives. But that was not the case.

**Table 10: Food insecurity experience of migrant workers by their origin state
(percentage of migrants)**

	Karnataka	Non-Karnataka
Did you worry that your household would not have enough food?	57.6	24.9
Were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources (money)?	41.3	35.1
Did you or any household member have to eat a limited variety of foods due to a lack of resources (money)?	37.5	30.5
Did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources (money) to obtain other types of food?	27.3	28.3
Did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?	31.8	25.8
Did you or any household member have to eat fewer meals in a day because there was not enough food?	35.2	24.0
Was there ever no food to eat of any kind in your household because of lack of resources (money) to get food?	26.1	14.2
Did you or any household member go to sleep at night hungry because there was not enough food?	20.1	11.7
Did you or any household member go a whole day and night without eating anything because there was not enough food?	11.7	6.8
Total number of migrants (n)	264	325

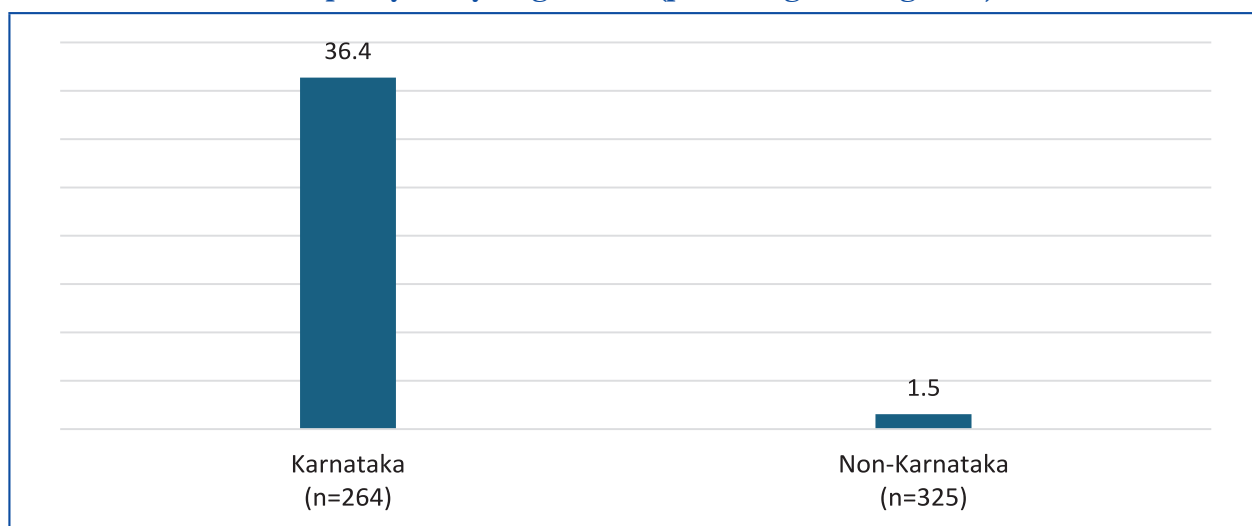
Source: Primary Survey in Bengaluru, 2024.

One advantage within-Karnataka migrants had was greater information about and access to state-run food-bases safety nets. A larger number of migrants from Karnataka knew about and ate at government-run Indira Canteens which provided subsidised food to the poor compared to those from outside Karnataka (Figure 15).

Figure 15: Information about and access to state-run food kitchens (percentage of migrants)

Source: Primary Survey in Bengaluru, 2024.

Similarly, survey data on the access and use of subsidised food rations through the Public Distribution System (PDS) show that over one-third of within-Karnataka availed food rations in Bengaluru all 12 months in the past year, compared to just 5 outside Karnataka migrants. PDS entitlements are linked to one's domicile status which explain higher utilization among migrants from within Karnataka than those from outside it. But greater access to government-run safety nets did not improve food security among migrants. Indeed, the higher usage of government-run food safety nets among Karnataka migrants can also be suggestive of more deprivation among them compared to non-Karnataka migrants. For example, many within-Karnataka migrants told us they ate at Indira Canteens because that is all they could afford on some days.

Figure 16: Migrants who/whose families availed food rations in Bengaluru all 12 months in the past year by origin state (percentage of migrants)

Source: Primary Survey in Bengaluru, 2024.

There are two possible explanations of these wellbeing differentials between within-Karnataka and outside Karnataka migrants. First, it seems that the inter-state migrants are better-off economically than the within-Karnataka migrants. This is because travelling long-distance requires more resources which the poorest in backward northern and eastern states (where the majority of inter-state migrants came from) are often not able to afford (a well-established finding in migration research: Connell et al., 1976). This follows that the inter-state migration therefore involved the slightly better-off than those from within Karnataka who travelled relatively short distance and incurred less costs. Second, migration pattern from Karnataka involved family migration compared to largely single-male inter-state migration. This meant that the incomes of Karnataka migrants were shared with the entire family resulting in less per capita incomes, particularly in households where there was a single earner.

6. Conclusion

This report looks at the food security implications of migration and urbanization in India, within the wider context of accelerating urbanization of the globe. A close reading of the key policy documents and academic literature on urbanization and food security at the wider global level suggests that the connections between them are inadequately acknowledged and explored. This neglect seems to emanate from the dominant frames of enquiry that posit food insecurity as a production concern and view cities as having a distinct urban advantage. However, the nature of the global urban transition, as it is currently occurring, defies these dominant logics. In many parts of the Global South – where much of the current and future urban growth is concentrated – urban environments are increasingly the hotspots of chronic hunger and undernutrition due to their inability to provide decent, stable livelihoods to a large majority of urban dwellers (Crush, 2016). Worryingly, moreover, recent patterns of urban-centric economic growth in many developing economies have also weakened the traditional role of land and agriculture as a source of income and food security and intensified rural-urban labour migration (Pritchard et al., 2016; Choithani, 2017). But a bulk of urban jobs are informal which, while enabling migrants and their families to make up for the agrarian decline, preclude opportunities for them to carve out permanent urban futures. In other words, rural-urban migrants in developing countries face the double curse of farm decline and curtailed urban prospects.

Perhaps nowhere in the world are these exclusionary outcomes as prominent as in India. Over the past three decades, Indian economy has witnessed tremendous growth, and urban areas contribute a large bulk of country's national income (Planning Commission 2011). India's urban-centric economic growth also means livelihoods are increasingly detached from farming and millions of former agricultural households now increasingly depend on nonfarm, urban jobs in India's large cities where income and employment opportunities are concentrated. But these alternative jobs are predominantly in the informal sector and are of low-wage, high-precarity nature which prevent a complete shift from rural-farm to urban-nonfarm existence for millions in this transition. Add to this the escalating costs of basic amenities in India's big cities, as well as increasing attempts by the better-off urban denizens to deny the poor migrants space in these cities (Kundu 2003, 2014; Parthasarathy, 2011). While rural-urban labour migration has grown significantly but much of it is of circular nature with migrants earning in cities while maintaining their rural base (Choithani, Van Duijne & Nijman, 2021).

India's exclusionary urbanization is manifested in national statistics that show slowing of urban growth despite rapid economic advancement.

The report also presents a case study of involving primary surveys with 589 low-skilled migrant workers living in informal settlements in the fast-growing city of Bengaluru in south India. The findings show high level of food insecurity among migrants, with 40 percent of surveyed migrants reporting suffering from some form of food insecurity in the past month. This food insecurity was linked with their low-wage, precarious urban jobs. Second, women migrant workers experienced greater food insecurity. This was despite the fact that all surveyed women migrant workers engaged in paid work which would generally be expected to lead to their improved bargaining position and claim on household resources. But gender-based disparities in incomes which, combined with other disadvantages women face, seem to translate into greater food insecurity among them. It is important to note that women's engagement in paid work does not always relieve them of their domestic duties and the time poverty created by this double burden of work often contributes to greater food insecurity among them as they skip meals or eat regularly. Third, another key finding revealed by the preliminary analysis of primary survey data is that the within-Karnataka migrants coming from the state's backward northern district experienced greater food insecurity than the inter-state migrants who were also predominantly from backward northern and eastern states of India. While the northern and eastern states have suffered from long spells of misgovernance and economic stagnation and are thus identified as outmigration hotspots, the fact that the migrants from within the prosperous Karnataka state fare poorer than inter-state migrants on basic wellbeing outcomes of food security points to the huge within-state inequalities in Karnataka. Indeed, Karnataka's capital city of Bengaluru is touted as the Silicon Valley of India and contributes nearly 40 percent of the state's income, while the northern districts in Kalyan-Karnataka region including many from which surveyed migrants came such as Bidar, Kalburugi, Raichur and Koppala rank lowest in terms of per capita incomes with populations lacking basic amenities (Government of Karnataka, 2024).

The report also points to two issues of wider significance. First, with a growing number of rural households in India becoming dependent on urban jobs and incomes, public policy on urbanization must inescapably include food security on the agenda, and safety nets must be made more expansive to cover all migrants irrespective of origin. Second, the right to food research and action in India which has hitherto focused on rural areas must also expand to include cities and towns as emerging geographies where food and nutritional deficits are increasingly concentrated.

References

- Bairoch, P. (1988). *Cities and economic development from the dawn of history to the present*. Chicago: University of Chicago Press.
- Bhagat, R. B. (2012). A turnaround in India's urbanization. *Asia-Pacific Population Journal*, 27(2), 23-39.
- Breman, J. (2010). *Outcast labour in Asia: circulation and informalization of the workforce at the bottom of the economy*. Oxford: Oxford University Press.
- Care India (2012). *Prioritizing nutrition in India – the silent emergency: a strategy for commitment building and advocacy*. New Delhi: Care India.
- Census of India (various years). Census tables 1991, 2001 and 2011 (online data). New Delhi: Office of the Registrar General and Census Commissioner, Government of India. <https://censusindia.gov.in/census.website/data/census-tables>
- Chen, M. A., & Raveendran, G. (2014). Urban employment in India: Recent trends and patterns. *WIEGO Working Paper Number 7*. Manchester: WIEGO. <https://www.wiego.org/sites/default/files/publications/files/Chen-Urban-Employment-India-WIEGO-WP7.pdf>.
- Choithani, C. (2017). Understanding the linkages between migration and household food security in India. *Geographical Research*, 55(2), 192-205.
- Choithani, C. (2020). Gendered livelihoods: migrating men, left-behind women and household food security in India. *Gender, Place & Culture*, 27(10), 1373-1394.
- Choithani, C. (2021). Of left-behind places and people: inequality, labour migration and development in India. *NLAS Working Paper Number 22 (NLAS/SSc/IHD/U/WP/22/2021)*. Bengaluru: National Institute of Advanced Studies. <http://eprints.nias.res.in/2244/1/WP22-2021-Chetan-Choithani.pdf>
- Choithani, C. (2022). *Migration, food security and development: Insights from rural India*. Cambridge and New Delhi: Cambridge University Press.
- Choithani, C., Van Duijne, R. J., & Nijman, J. (2021). Changing livelihoods at India's rural–urban transition. *World Development*, 146, 105617.
- Coates, J., Swindale, A., & Bilinsky, P. (2007). Household Food Insecurity Access Scale (HFIAS) for measurement of food access: indicator guide. Washington, DC: USAID.
- Connell, J., Dasgupta, B., Laishley, R., & Lipton, M. (1976). *Migration from rural areas: The evidence from village studies*. Delhi: Oxford University Press.
- Crush, J. (2016). Hungry cities of the Global South. Hungry Cities Partnership Discussion Paper 1. Waterloo: Hungry Cities Partnership.
- Davies, J., Hannah, C., Guido, Z., Zimmer, A., McCann, L., Battersby, J., & Evans, T. (2021). Barriers to urban agriculture in Sub-Saharan Africa. *Food Policy*, 103, 101999. <https://doi.org/10.1016/j.foodpol.2020.101999>

- Deshingkar, P., & Akhter, S. (2009). Migration and human development in India. *Human Development Research Paper No. 2013*. Available online at http://hdr.undp.org/sites/default/files/hdrp_2009_13.pdf.
- Drèze, J. (2004). Democracy and right to food. *Economic and Political Weekly* 39(17): 1723–31.
- Dyson, T., & Moore, M. (1983). On kinship structure, female autonomy, and demographic behavior in India. *Population and Development Review*, 9(1), 35-60.
- FAO (2024). Selected indicators, FAOSTAT. Rome: Food and Agriculture Organization of the United Nations. Available online at <https://www.fao.org/faostat/en/#country/100> (accessed 09/12/2024).
- FAO, IFAD, UNICEF, WFP, & WHO (2024). *The state of food security and nutrition in the world: financing to end hunger, food insecurity and malnutrition in all its forms*. Rome: Food and Agriculture Organization.
- FAO. 2019. FAO framework for the urban food agenda. Rome: Food and Agriculture Organization. <https://doi.org/10.4060/ca3151en>
- Fay, M., & Opal, C. (2000). *Urbanization without growth: a not so uncommon phenomenon*. World Bank Policy Research Working Paper 2412. Washington D.C: The World Bank.
- Gillespie, S., & S. Kadiyala (2012). Exploring the agriculture-nutrition disconnect in India. In *Reshaping Agriculture for Nutrition and Health*, edited by S. Fan and R. Pandya-Lorch, pp. 173–81. Washington, DC: International Food Policy Research Institute.
- Glaeser, E. L. (2010). Introduction. In E. L. Glaeser (Ed.), *Agglomeration economics* (1-14). Chicago: University of Chicago Press.
- Glaeser, E. L. (2012). *Triumph of the city: How urban spaces make us human*. London: Pan Macmillan.
- Glaeser, E. L. (2014). A world of cities: The causes and consequences of urbanization in poorer countries. *Journal of the European Economic Association*, 12(5), 1154-1199.
- Gollin, D., Jedwab, R., & Vollrath, D. (2016). Urbanization with and without industrialization. *Journal of Economic Growth*, 21, 35-70.
- Government of India (2017). Economic Survey 2016-17. New Delhi: Ministry of Finance.
- Government of India (2024). Economic Survey 2023-24. New Delhi: Ministry of Finance.
- Haddad, L., H. Alderman, S. Appleton, L. Song, & Y. Yohannes (2003). Reducing child malnutrition: how far does income growth take us? *World Bank Economic Review* 17(1): 107–31.
- Henderson, J. V. (2010). Cities and development. *Journal of Regional Science*, 50(1), 515-540.
- IFPRI. (2017). Global Food Policy Report 2017. Washington, DC: International Food Policy Research Institute.
- IIPS & ICF. (2021). National Family Health Survey (NFHS-5), 2019-21, Dataset. DHS Program. https://dhsprogram.com/data/dataset_admin/login_main.cfm.

- IIPS & ICF. (2022). National Family Health Survey (NFHS-5), 2019-2021, India report (volume 1). Mumbai: International Institute for Population Sciences. Available online at <https://dhsprogram.com/pubs/pdf/FR375/FR375.pdf>
- Kotwal, A., Ramaswami, B., & Wadhwa, W. (2011). Economic liberalization and Indian economic growth: What's the evidence? *Journal of Economic Literature*, 49(4), 1152-1199.
- Kundu, A. (2003). Urbanisation and urban governance: search for a perspective beyond neo-liberalism. *Economic and Political Weekly*, 38(29), 3079-3087.
- Kundu, A. (2014). Exclusionary growth, poverty and India's emerging urban structure. *Social Change*, 44(4), 541-566.
- Kuznets, S. (1973). Modern economic growth: findings and reflections. *The American Economic Review*, 63(3), 247-258.
- Lipton, M. (1980). Migration from rural areas of poor countries: The impact on rural productivity and income distribution. *World development*, 8(1), 1-24.
- Mehrotra, S. (2019). Informal employment trends in the Indian economy: persistent informality, but growing positive development. Employment Working Paper 254. Geneva: International Labour Organization. Accessed online from https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_734503.pdf
- Mehrotra, S., Gandhi, A., Saha, P., & Sahoo, B. K. (2013). Turnaround in India's employment story: silver lining amidst joblessness and informalisation? *Economic and Political Weekly*, 48(35), 87-96.
- Ministry of Agriculture (2019). Agriculture census 2015-16: all-India report on number and area of operational holdings. New Delhi: Government of India.
- Mukherji, S. (2006). *Migration and urban decay: Asian experiences*. Jaipur: Rawat Publications.
- Nayyar, G., & Kim, K. Y. (2018). India's internal labor migration paradox: The statistical and the real. *World Bank's Policy Research Working Paper 8356*. Washington, DC: World Bank. <https://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-8356>.
- Nichols, C. E. (2016). Time Ni Hota Hai: time poverty and food security in the Kumaon hills, India. *Gender, Place & Culture*, 23(10), 1404-1419.
- Nijman, J. (2015). India's urban future: views from the slum. *American Behavioral Scientist*, 59(3), 406-423.
- Nijman, J. (2019). Urbanization and economic development: comparing the trajectories of China and the United States. In R. Forrest, J. Ren, and B. Wissink (eds.), *The city in China* (pp. 101-124). Bristol: Bristol University Press.
- Nizam, A., Sivakumar, P., & Rajan, S. I. (2022). Interstate migration in India during the COVID-19 pandemic: an analysis based on mobile visitor location register and roaming data. *Journal of South Asian Development*, 17(3), 271-296.
- Parthasarathy, D. (2011). Hunters, gatherers and foragers in a metropolis: commonising the private and

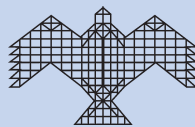
- public in Mumbai. *Economic and Political Weekly*, 54-63.
- Planning Commission (2011). Eleventh Five Year Plan (2007-12): mid-term appraisal. New Delhi: Government of India.
- Pradhan, P., Callaghan, M., Hu, Y., Dahal, K., Hunecke, C., Reußwig, F....& Kropp, J. P. (2023). A systematic review highlights that there are multiple benefits of urban agriculture besides food. *Global Food Security*, 38(100700). <https://doi.org/10.1016/j.gfs.2023.100700>.
- Pritchard, B., Dixon, J., Hull, E., & Choithani, C. (2016). Stepping back and moving in: the role of the state in the contemporary food regime. *The Journal of Peasant Studies*, 43(3), 693-710.
- Pritchard, B., Rammohan, A., Sekher, M., Parasuraman, S., & Choithani, C. (2014). *Feeding India: livelihoods, entitlements and capabilities*. Oxon: Routledge.
- Scott, A. J. (2017). *The constitution of the city: economy, society, and urbanization in the capitalist era*. Cham: Palgrave Macmillan.
- Tumbe, C. (2012). Migration persistence across twentieth century India'. *Migration and Development* 1(1): 87-112.
- Tumbe, C. (2018). *India moving: a history of migration*. Gurgaon: Penguin Random House India.
- UN-Habitat (2022). Envisaging the future of cities (World Cities Report 2022). Nairobi: United Nations Human Settlements Programme.
- United Nations (2018). *World urbanization prospects: the 2018 revision (data)*. Department of Economic and Social Affairs, Population Division. New York: United Nations. Accessed from <https://population.un.org/wup/Download/>
- United Nations (2019). *World urbanization prospects: the 2018 revision (report)*. Department of Economic and Social Affairs, Population Division. New York: United Nations. Accessed from <https://population.un.org/wup/Publications/Files/WUP2018-Report.pdf>
- Van Duijne, R. J., & Nijman, J. (2019). India's emergent urban formations. *Annals of the American Association of Geographers*, 109(6), 1978-1998.
- Wiemers, M., Bachmeier, M., Hanano, A., Chéilleachair, R. N., Vaughan, A., Foley, C....& Fritschel, H. (2024). Global Hunger Index: how gender justice can advance climate resilience and zero hunger. *Bonn/Berlin/Dublin/Bochum. Welt Hunger Hilfe, Concern Worldwide and IFHV*.
- World Bank (2022). Distribution of gross domestic product (GDP) across economic sectors for India. World Development Indicators. *World Bank's online data repository*. <https://databank.worldbank.org/>

DOCUMENT CONTROL SHEET

- 1 **Document No and Year** : NIAS/SSc/IHD/U/RR/02/2025
- 2 **Title** : Migration, Urbanization and Food Security in the
Global South: Evidence from Urban India
- 3 **Type of Document** : Research Report
- 4 **No. of Pages and Figures** : 42 + vi pages, 10 tables and 16 figures
- 5 **No. of References** : 62
- 6 **Authors** : Chetan Choithani
- 7 **Originating School** : School of Social Sciences
- 8 **Programme** : Inequality and Human Development Programme
- 9 **Collaboration** :
- 10 **Sponsoring Agency** : Australian Consulate, Chennai
- 11 **Abstract** : This report looks at the linkages between migration, urbanisation and food security in India. Urban-centric nature of India's recent economic growth is driving millions of rural dwellers to seek livelihoods in cities. But urban expansion is occurring without decent jobs which can make rural-urban migrants vulnerable to food and nutritional insecurity. Using a case-study approach involving primary survey with nearly 600 low-skilled migrant workers in the fast-growing city of Bengaluru, this research shows overall high levels of food insecurity among migrants and argues that food research and policy agendas in India that have hitherto focused on rural areas must expand to cities and towns where food and nutritional insecurity are increasingly concentrated.
- 12 **Keywords** : Food Security; Gender; India; Informality; Migration; Urbanization
- 13 **Security Classification** : Unrestricted
- 14 **ISBN** : 9789383566723

NATIONAL INSTITUTE OF ADVANCED STUDIES

The National Institute of Advanced Studies (NIAS) was conceived and established in 1988 by the vision and initiative of the late Mr. J.R.D. Tata primarily to nurture a broad base of scholars, managers and leaders to address complex and important challenges faced by society through interdisciplinary approaches. The Institute also engages in advanced multidisciplinary research in the areas of humanities, social sciences, natural sciences and engineering, as well as conflict and security studies.



NATIONAL INSTITUTE OF ADVANCED STUDIES

Bengaluru, India