COPING WITH CLIMATE

How extreme weather is already impacting internal migrants

A comprehensive study across five countries in South and Southeast Asia

People's Courage International

ISET International

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Bangladesh - Association for Community Development (ACD)

India - Migrants Resilience Collaborative (MRC)

Indonesia - Palangkaraya Ecological and Human Rights Studies (PROGRESS)

Nepal - Samari Utthan Sewa (SUS)

Philippines - Myrasol G Dela Cruz (Consultant)

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EXECUTIVE SUMMARY

Globally, both internal and external migration play a role in development and economic growth. This is particularly true in Southeast Asian and Asian countries, where internal migrants are a large and growing population which constitutes a large portion of the workforce. However, though their role as central in their country's economies is relatively established, their economic situation is often precarious, leaving them highly vulnerable when migrating, and largely overlooked. As a result, they are poorly served by existing policy and mechanisms, with limited access to social protections and services.

Future predictions suggest climate change impacts could result in an increase of over 200 million additional internal migrants globally by 2050. Extreme weather events, which are already seeing an increase in frequency and intensity as a result of climate change, are expected to further increase this vulnerability. However, how exactly climate is contributing, what factors are most problematic, and what can be done to better support internal migrants, is less well understood. The research discussed in this report was undertaken to explore these questions and identify preliminary opportunities to address climate change impacts on internal migrants in South and Southeast Asia.

The study was conducted across five countries in South and Southeast Asia – Bangladesh, India, Indonesia, Nepal and Philippines – using a mixed methods approach that included surveys, Focus Group Discussions (FGD), and Key Informant Interviews (KII). **In total, we surveyed 23,915 internal migrants, conducted 27 focus group discussions with 183 respondents, and carried out 30 key informant interviews with stakeholders from the government(s), civil society, and academia.**

KEY TAKEAWAYS

1

Extreme weather is already impacting the well-being of internal migrants; without immediate, broad action, climate change will make this much worse. 90% of internal migrants surveyed for the report having been impacted by weather, either at source or destination locations and 10% of those surveyed, said that weather impacts were the primary reason they decided to migrate.

2

Heat is ranked as one of the three weather impacts faced by internal migrants. This is particularly true for migrants at destination locations, where heat was ranked first by survey respondents as the dominant weather impact faced in almost all countries—Bangladesh (86%), India (77%), Nepal (75%) and the Philippines (65%)—except Indonesia (52%), where it was ranked second, after flooding. It was also a significant factor at source locations. This is highly concerning because we know temperatures will continue to increase for at least the next several decades.

3

Impacts on the primary livelihoods and occupations of internal migrants from extreme weather events are already severe. Climate change could make this much worse. At source locations, migrants in Bangladesh, India and Nepal predominantly faced wage loss (57% to 74%), crop loss (43% to 73%) and wage cuts (41% to 56%), while in Indonesia and Philippines, job loss (37% to 64%) was prominent. At destination locations, most migrants across all five countries faced wage loss (39% to 57%) and wage cuts (40% to 56%).

4

Social protection coverage and access, especially in the South Asian countries covered in our survey is low, even compared to informal workers in general. Survey respondents, other than in the Philippines, indicated they receive virtually no social support from government or NGOs. For example, as little as 6% to 22% at source locations and 3% to 18% at destination locations, received emergency relief by governments during or after a weather event. Many migrants across countries in such instances resorted to negative coping mechanisms such as loans. For instance, in Bangladesh, India and Nepal, between 29% to 63% migrants took informal loans while 17% to 20% took formal loans in Indonesia and Philippines at source locations when faced with an extreme weather event.

5

Women migrant workers are particularly invisible and are often more vulnerable than male migrants, and therefore need specific consideration. Our survey results indicated that domestic work is a dominant sector for female migrants (26%). This is important information, because the domestic work sector is one in which social protections are least likely to reach, leaving many of these women with limited support.

RECOMMENDATIONS

1

Manage climate risks by prioritising action to address weather events that have the greatest negative impact on internal migrants in each country. Heat and drought should be a priority for every country. Priorities should include improving emergency response and access to emergency relief, as well as designing social protection and assistance programs to better anticipate needs and address slow-onset events in addition to rapid-onset events/disasters, and by strengthening social protection and assistance programs targeted at supporting livelihoods and housing to reduce the reliance on negative coping mechanisms.

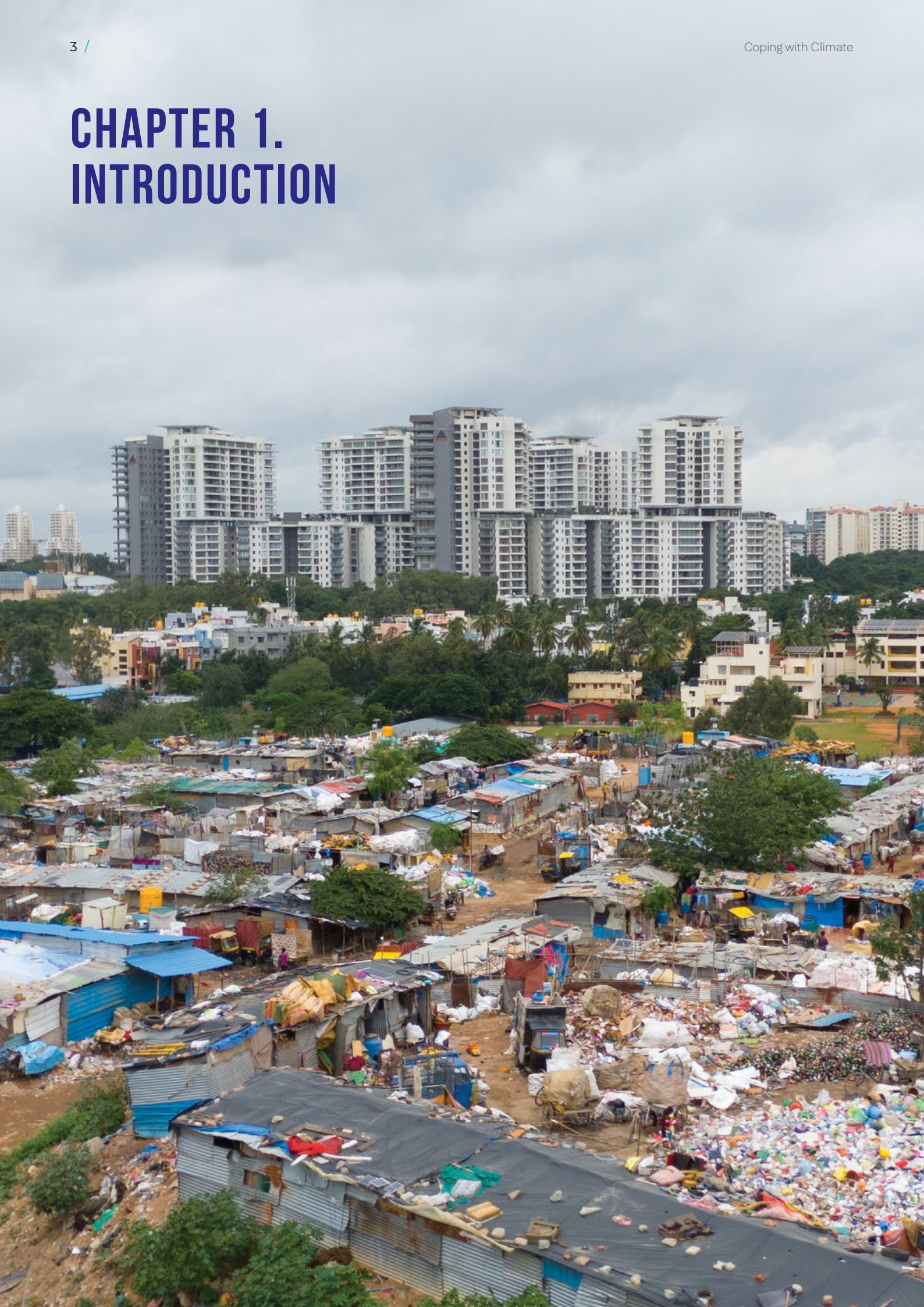
2

Strengthen access to and the design of social protection systems to address underlying vulnerability and build longer-term resilience. Priorities should include expanding the portability of entitlements, promoting the formalisation and/or registration of informal workers so that they can access support more easily, encouraging private sector participation, and integrating internal migrant considerations into urban planning and development decisions in urban centres where internal migrants make up a large part of the workforce and population.

3

Fund and promote research and pilot programs focused on the specific needs of internal migrants (especially women) to bridge the evidence-to-action gaps. With limited visibility of internal migrants and limited funding across governments and civil society, there is a need for more evidence on solutions that can scale in each context. Philanthropies and bilateral and multilateral organisations will need to work closely with grassroots organisations to surface issues, test and prove models that can address these issues, and advocate with policymakers and industries.

CHAPTER 1. INTRODUCTION



Migration, the movement of people away from their home residence across borders or to other states, is a key demographic transition that contributes to development and economic growth. Globally, there are over a billion migrants (about 12.8% of the global population) moving both internally and internationally across countries. 763 million, 75% of them, migrate internally (i.e. they move within domestic boundaries of their own country). Of these 763 million migrants, 282 million reside in Asia alone.[1] Indeed, internal migrants are a large and growing population across both South and Southeast Asian countries. And this growth will likely continue with the increasing impacts of climate change. In recent years, the impacts of climate change have become more pronounced, with most research suggesting that climate change could become a significant push factor for increased internal migration in the future.[2] A recent global estimate suggests that climate change impacts could result in over 200 million additional internal migrants by 2050.[3]

Internal migrants make up a large proportion of the workforce in Asian countries. Research by the International Labour Organisation (ILO), the Institute of Development Studies (IDS) and Overseas Development Institute (ODI) observed that internal migrants represent significant proportions of informal workers in sectors such as construction, garments, electronics and other manufacturing industries in Asia.[4] For example, 85% of workers in Bangladesh's garments industry are internal migrants[5] and as much as 50% of textile workers in India are internal migrants.[6]

Because they make up such a large portion of the workforce in key industries, internal migrants are major contributors to economic growth; for instance, in India, migrants are directly responsible for producing 10% of the national GDP.[7] They also strengthen rural economies through remittances[8] and play a key role in supporting urban economic growth. For example, internal migrants make up 43% of the population in the city of Delhi, India[9]; without them, many urban economies would come to a standstill.

Recognising their critical role in economic growth, overlooking internal migrants' needs and their very existence could increasingly damage urban socio-economic development.

Internal migrants' central role in their country's economies is relatively established, yet their economic situation is often precarious, leaving them highly vulnerable when migrating, and they remain largely overlooked. Their role as informal workers, high poverty levels, and limited political capital at migration destinations, where they typically cannot vote, render them invisible to policymakers, institutions, and social support systems. As a result, they are poorly served by existing policy and mechanisms, with limited access to social protections and services.

Extreme weather events, which are already seeing an increase in frequency and intensity as a result of climate change, will further increase their vulnerability. South and Southeast Asia have some of the fastest urbanising regions, with high-exposure coastal cities facing extreme heat, sea-level rise, and climate-related disasters. With their pre-existing social and economic vulnerability, extreme weather events can compound the poverty of internal migrants and contribute to increased inequality within their countries.

Knowing how vital the internal migrant population is to many economies around the world and that they will face increasingly extreme weather over the coming decades, it is important to learn how their socio-economic vulnerability and exposure to climate impacts can be reduced. Even with ideal mitigation plans, a much-improved adaptation will be needed, as the impacts of extreme weather are already being felt and will continue to be so in the future.

This study, as a first step, aims to share a baseline of the weather-related impacts experienced by this large, critical, yet particularly underserved population (i.e. internal migrants). It focuses on understanding internal migration in India[i] [10], Nepal[ii] [11], Bangladesh[iii] [12], Indonesia[iv] [13] and Philippines[v] [14] where, in total, over 200 million people are internal migrants. This study aims to understand who internal migrants are, why they migrate, what challenges they face and what support would better enable them to thrive amongst changing conditions.

[i] 140 million migrants moving for work

[ii] 9.3 million internal migrants

[iii] 13.7 million internal migrants

[iv] 27 million internal migrants

[v] 29.87 million internal migrants

We also sought to understand the role extreme weather and climate change play in the migration decisions of internal migrants. While there is extensive research on what drives internal migration and the challenges migrants face, the role that climate change is playing and will increasingly play in driving internal migration, and its contribution to their vulnerability, is less clear. At this point, globally, we are already seeing significantly more intense weather events, where event intensity has been attributed to climate change.[15] For instance, according to World Weather Attribution (WWA), the extreme heat events that occurred in 2023 and 2024 in South Asia are 30 to 45 times more likely as they would have been pre-climate change, and 0.85°C hotter. In the Philippines, WWA found the May 2024 heatwave would have been impossible without human caused warning, today it is an event that has a 10% chance of occurring in any given year, and at 2°C of warming, there would be a 50% chance of a similar 15-day heat event occurring in any given year.[16] If such extreme weather is already proving problematic for internal migrants, there is potential for it to become catastrophic, unless urgent action is taken.

Finally, an additional aim of the study was to explore specific social protection measures to address the vulnerability of internal migrants. Each of the countries of focus for this study has social protection mechanisms. Though, they vary across contexts. However, even with these measures, internal migrants face barriers in accessing such support. We also hoped to learn more about why these barriers exist and what the implications are for migrants' vulnerability. Similarly, each country also has policies and programs to manage climate risks. However, these are mostly geared towards emergency relief and, as indicated in the survey results, access still remains relatively low. We also sought to understand the implications of this low access; issues related to limited access and policy implementation challenges could lead to migrants' increased precarity and to resorting to negative coping measures during crises.

The report includes six chapters:

1. **An introduction,** which outlines our rationale for conducting this research study and key objectives

2. **The study methodology and limitations chapter,** which outlines the method used to conduct the research and the limitations of our study

3. **A chapter on migrant demographics and weather impacts,** which reviews the demographics of the migrant population surveyed, explores the factors pushing them to migrate, their motivations for choosing specific destination locations, and the interlinkages between weather events, climate change, and migration

4. **A chapter on the experiences of internal migrants at source locations,** which outlines the impacts, coping mechanisms, and assistance received in the face of different weather events

5. **A chapter on the experiences of internal migrants at destination locations,** which outlines the impacts, coping mechanisms, and assistance received in the face of different weather events

6. **A chapter on key takeaways and recommendations,** which discusses in detail the key new learning from this work and recommendations for strategies to build the resilience of internal migrants both in general and when faced with extreme weather events

The findings and recommendations detailed in this report are framed to provide a foundation for policymakers and practitioners to understand and address specific social and climate challenges facing internal migrant communities today.

CHAPTER 2. STUDY METHODOLOGY AND LIMITATIONS

2.1 STUDY METHODOLOGY

This research draws on the insights and experiences of internal migrants in Bangladesh, India, Indonesia Nepal and the Philippines. In these countries, internal migrants represent large proportions of the total workforce, and are predominantly part of the informal workforce.

For the purpose of this research, three different methods were used to collect data: Surveys, Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs).

The research was conducted in partnership with grassroot organisations and consultants working on climate and/or with internal migrants across the five countries. Each of these organisations was engaged in survey area selection and data collection for the research in their respective countries.

- Association for Community Development (ACD) – Bangladesh
- Migrant Resilience Collaborative (MRC) – India
- Progress Palangkaraya – Indonesia
- Samari Utthan Sewa (SUS) – Nepal
- Myrasol G Dela Cruz – Philippines

Country selection

Five countries were selected for the research to ensure a cross-comparative understanding within South and Southeast Asian regions. They were selected on the basis of the following parameters:

- **Population size** – Countries with larger populations were prioritised to provide more insights into different vulnerabilities that result from extreme weather induced migration.
- **Migration intensity**[vi] – Areas with higher migration intensity were prioritised.
- **Global Risk Index ranking**[17] – Countries with higher risk rankings were prioritised, based on the Global Risk Index analyses of quantified impacts of extreme weather events in terms of fatalities and impact.
- **Destination-related challenges due to weather events** – Destination-related challenges in different countries were assessed qualitatively through country-specific secondary literature to identify and understand a range of different challenges in different contexts. Countries were selected based on the challenges faced.
- **Feasibility** – This was an important factor considered to narrow down to five countries and included both People's Courage International's existing work in the countries, and the ability to complete the planned work in a timely fashion.

Quantitative survey at source and destination locations

Survey data was collected from source (migrant home villages) and destination (typically, though not solely, urban) locations. In total, 23,915 migrants—15,317 internal migrants (64%) at source and 8598 (36%) at destination—participated in the survey.

To narrow down the site selection in each of the five countries, known migration corridors to focus on were selected, based on evidence from national databases such as census or population surveys for each country. After this, larger administrative areas[vii] with high out-migration source areas and high in-migration destination areas were selected. We further narrowed our selection by choosing smaller administrative areas[viii] based on available data on population size and relative percentages of populations that migrate. In countries where detailed migration data was unavailable (Indonesia and Philippines), sites were finalised in discussion with research partners based on their extensive experience working with vulnerable communities and internal migrants.

Once we narrowed down where we would survey, we then selected participants based on the following criteria:

- Willingness to participate in the survey: consent through a pre-decided script was taken before starting the survey;
- Participants needed to be 18 years or above;
- Participants should have migrated at least once in the last three years.

The survey was conducted over a span of four months across all five countries with the survey running for a maximum period of two months in each country.

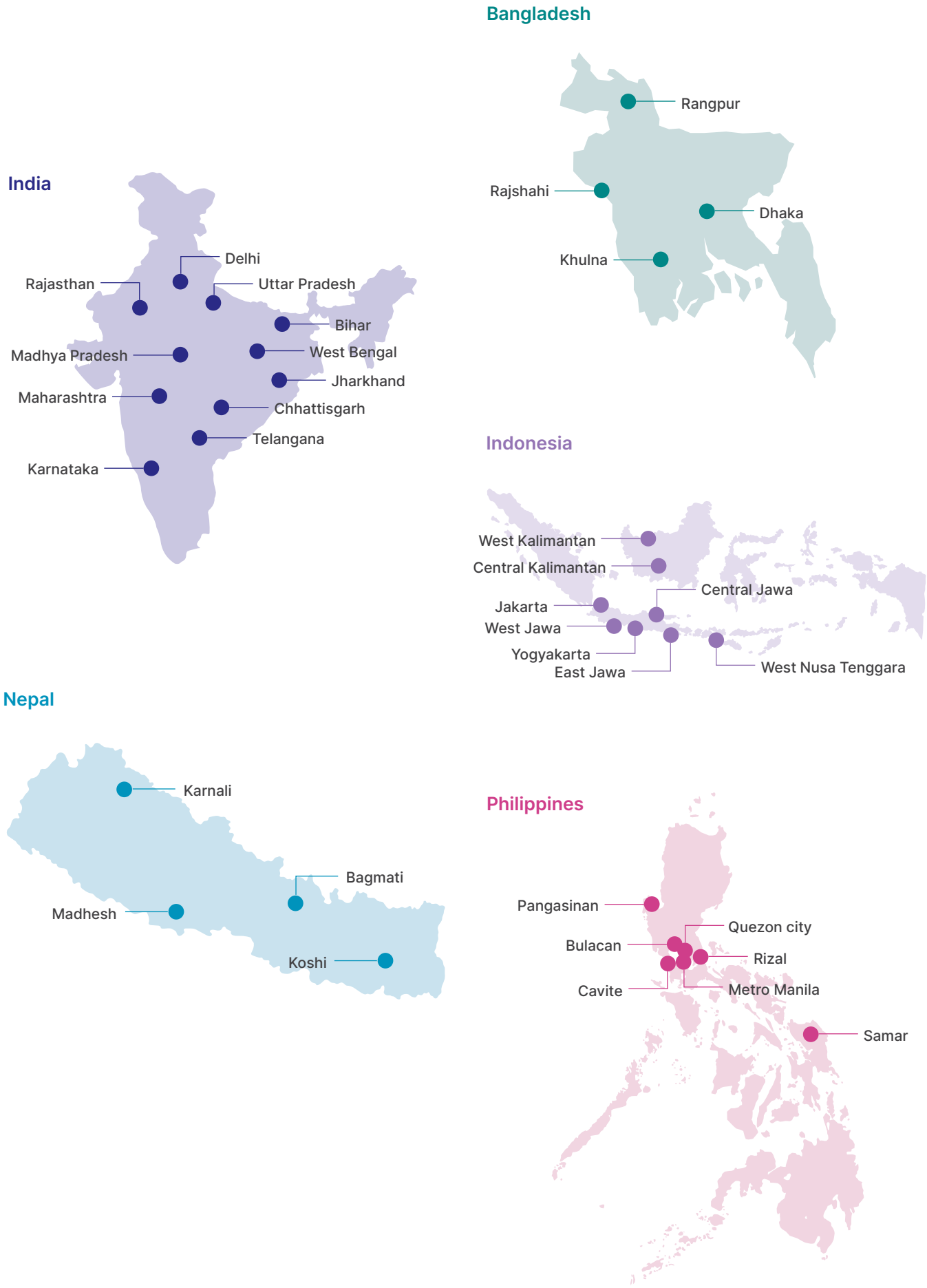
Survey questions focused on understanding basic demographic features, migration patterns and trends, and weather impacts faced by migrants at source and destination locations.

[vi] The number of internal migrants out of the total population that wants to move

[vii] Based on country-wise terminology, this could be either provinces or states or regions

[viii] Based on country-wise terminology, this could be either districts or barangay or regencies/city

Figure 2.1: Country-wise locations of survey



Maps not to scale, for representation purposes only

Key demographics of our sample include:

Figure 2.2: Age-wise distribution of internal migrants surveyed

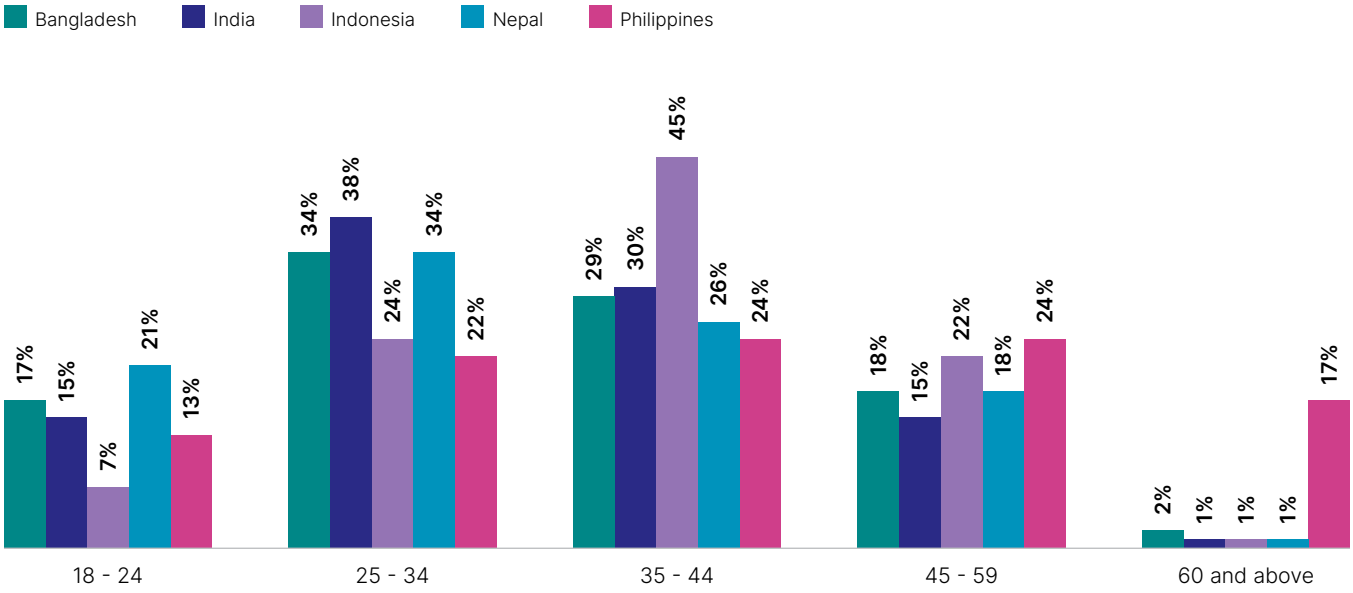


Figure 2.3: Gender wise distribution of internal migrants surveyed

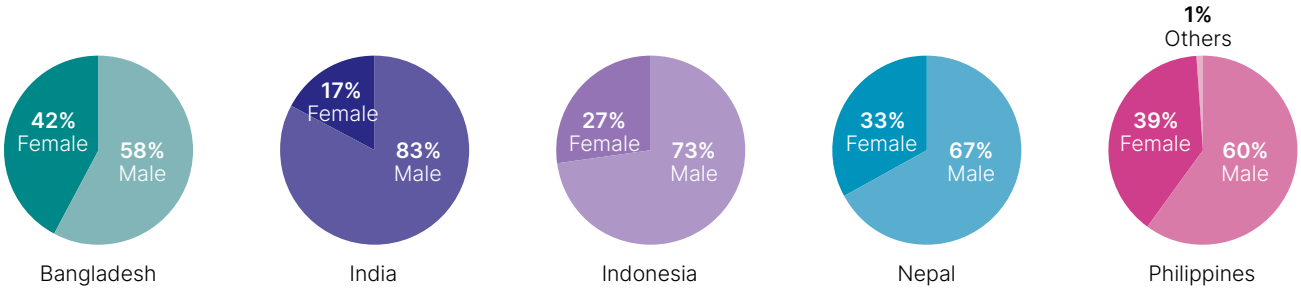
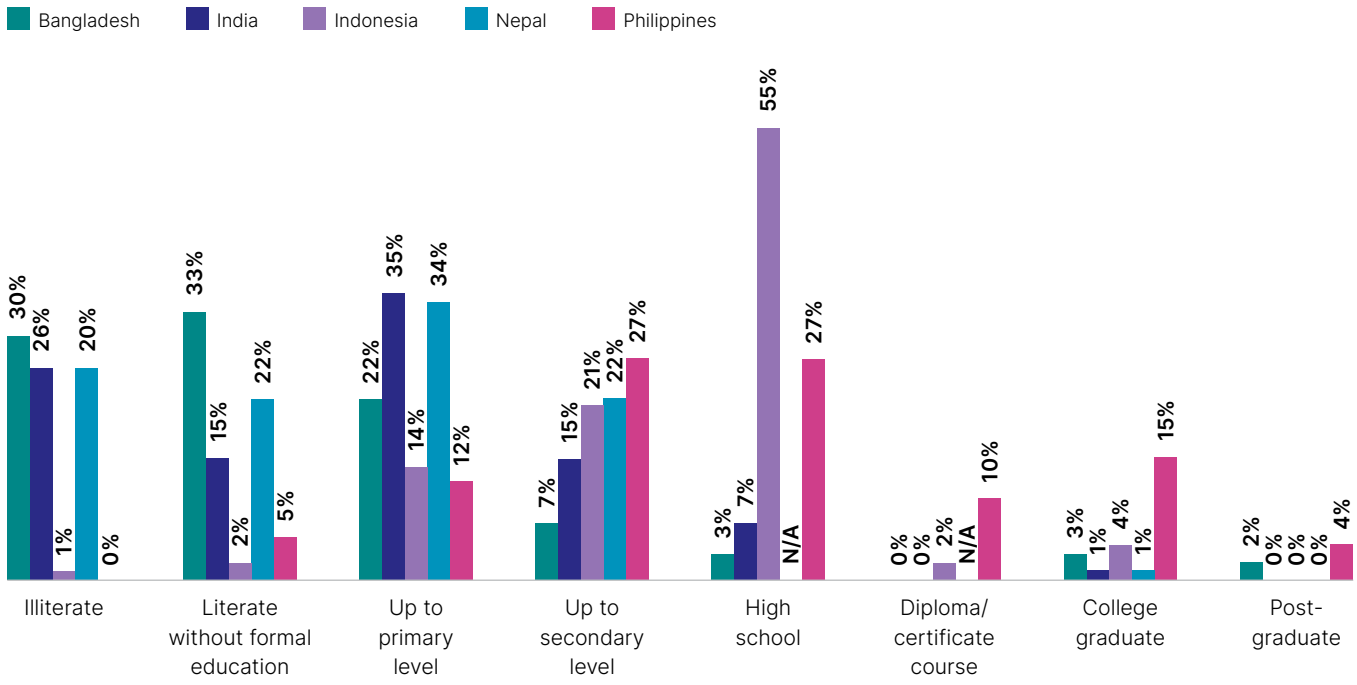


Figure 2.4: Education levels of internal migrants surveyed*



*Options not country-specific to Nepal therefore value is NA

Focus Group Discussions (FGD) at source and destination locations

A total of 27 FGDs were conducted with internal migrants across five countries. 10 were conducted at source locations and 17 at destination locations. Additional FGDs were conducted at destination locations for multiple reasons: higher availability of migrants at destination when conducting these discussions, feasibility (time and travel) for research partners and requirement of more detailed responses to supplement the smaller sample of migrants surveyed at the destination.

TABLE 2.1

Total number of FGDs conducted and participants across sample countries

Country	No of FGDs conducted	Total number of FGD participants
Bangladesh	4	22
India	12	80
Indonesia	4	43
Nepal	4	26
Philippines	3	43
Total	**27**	**183**

The number of FGDs were kept uniform across countries with 3 to 4 FGDs conducted per country, with the exception of India, where the sample size for the survey was much larger, therefore requiring a greater number of FGDs (12) to ensure we had full coverage of the diversity of contexts we surveyed. Each FGD consisted of about four to ten people.

The locations for these FGDs were chosen based on the presence of internal migrants at their village and keeping in mind, our selected migration corridors. For destination locations, we selected the most prominent cities with high in-migration rates such as Delhi and Quezon city. The exception was Indonesia, where we selected Kalimantan, a predominantly rural area, to incorporate palm oil plantation workers.

We selected participants in FGDs based on social norms of the country and advice from our partners, i.e. a decision was taken on mixed men and women interviews in cases where it was assumed women would not hesitate to speak in front of men while alternatively, in areas where this could have posed as a challenge, separate male and female FGDs were conducted with male and female facilitators respectively. For example, in northern states of India, separate FGDs were conducted, while in Indonesia and Philippines, mixed FGDs were conducted.

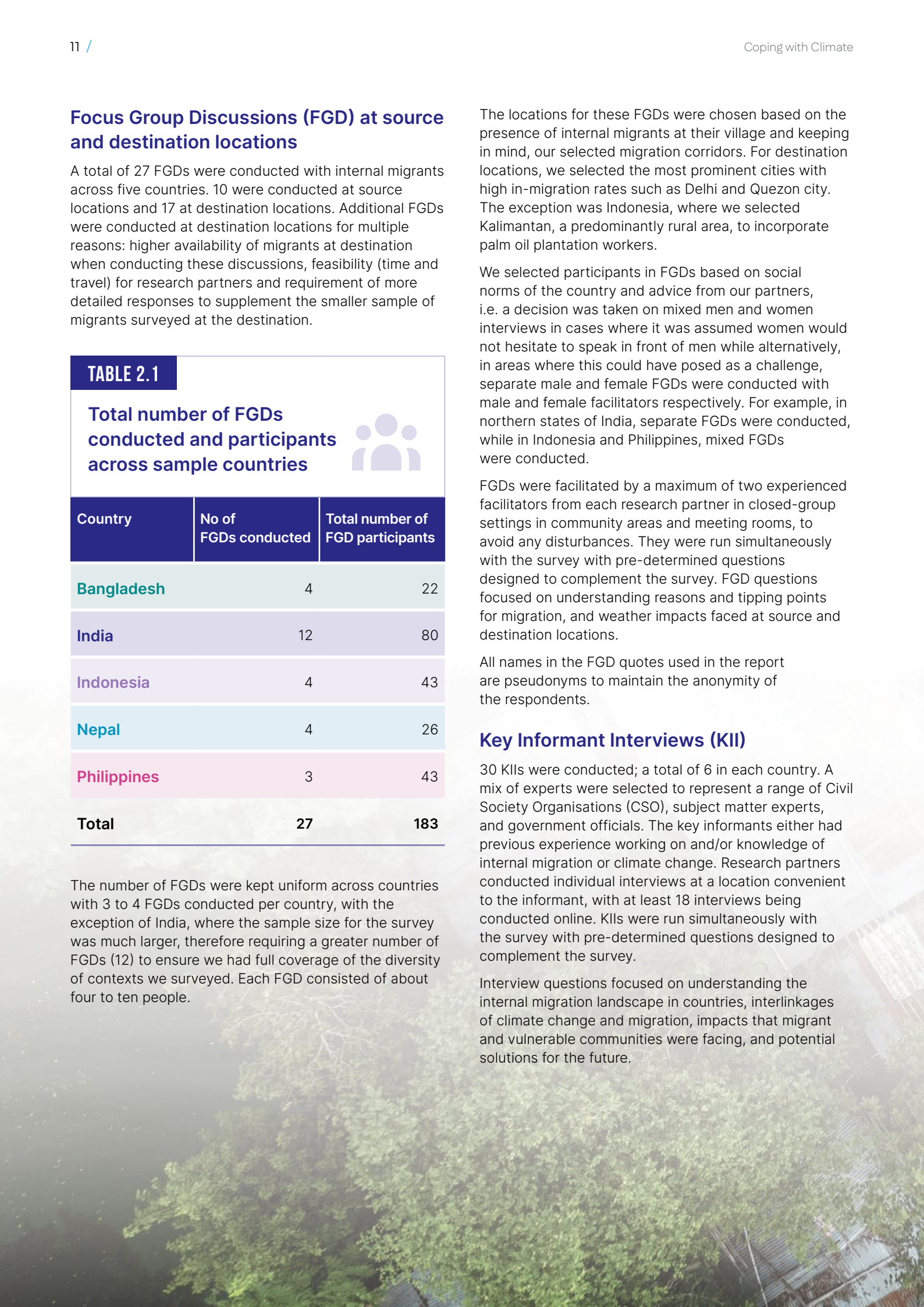
FGDs were facilitated by a maximum of two experienced facilitators from each research partner in closed-group settings in community areas and meeting rooms, to avoid any disturbances. They were run simultaneously with the survey with pre-determined questions designed to complement the survey. FGD questions focused on understanding reasons and tipping points for migration, and weather impacts faced at source and destination locations.

All names in the FGD quotes used in the report are pseudonyms to maintain the anonymity of the respondents.

Key Informant Interviews (KII)

30 KIIs were conducted; a total of 6 in each country. A mix of experts were selected to represent a range of Civil Society Organisations (CSO), subject matter experts, and government officials. The key informants either had previous experience working on and/or knowledge of internal migration or climate change. Research partners conducted individual interviews at a location convenient to the informant, with at least 18 interviews being conducted online. KIIs were run simultaneously with the survey with pre-determined questions designed to complement the survey.

Interview questions focused on understanding the internal migration landscape in countries, interlinkages of climate change and migration, impacts that migrant and vulnerable communities were facing, and potential solutions for the future.



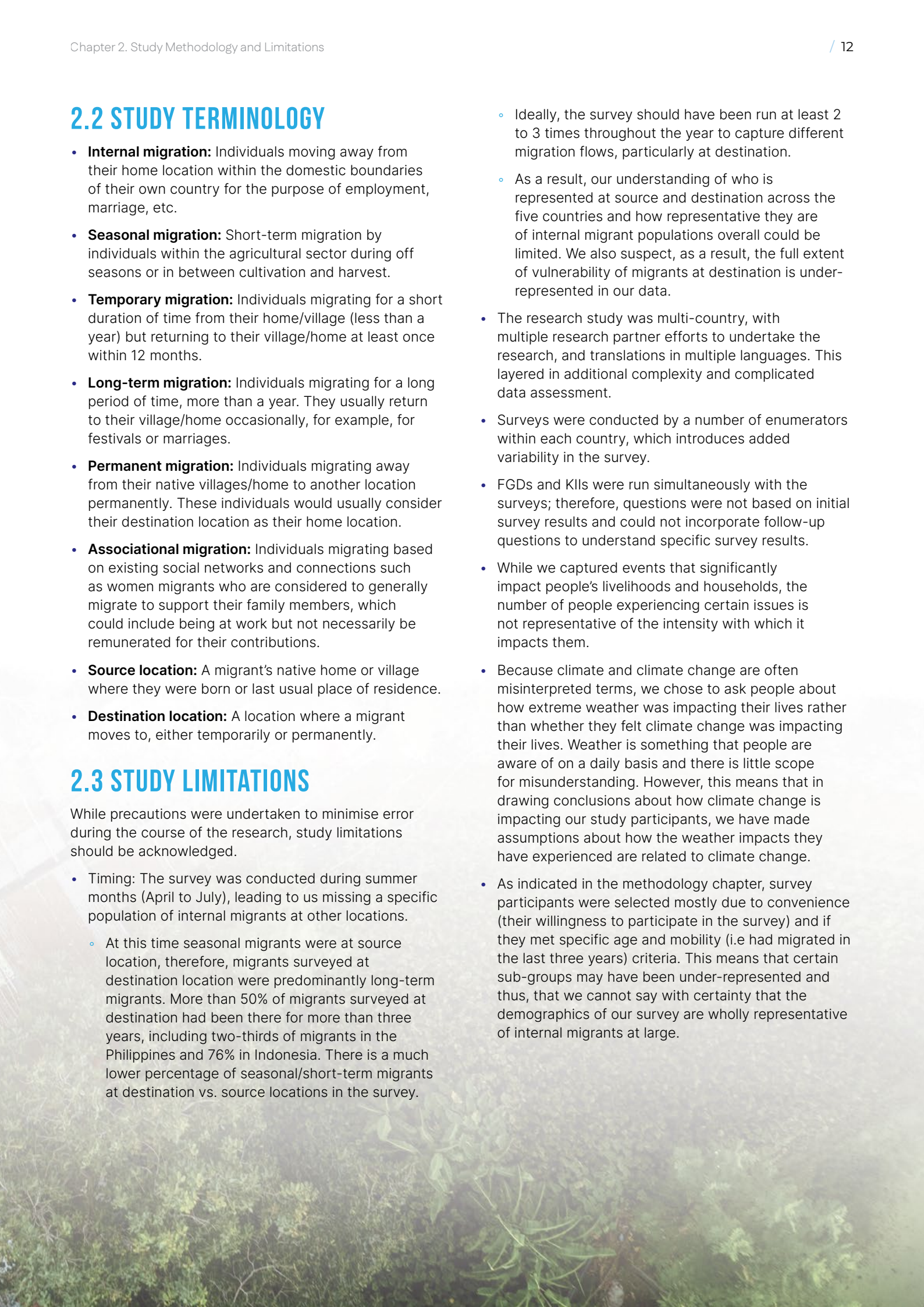
2.2 STUDY TERMINOLOGY

- **Internal migration:** Individuals moving away from their home location within the domestic boundaries of their own country for the purpose of employment, marriage, etc.
- **Seasonal migration:** Short-term migration by individuals within the agricultural sector during off seasons or in between cultivation and harvest.
- **Temporary migration:** Individuals migrating for a short duration of time from their home/village (less than a year) but returning to their village/home at least once within 12 months.
- **Long-term migration:** Individuals migrating for a long period of time, more than a year. They usually return to their village/home occasionally, for example, for festivals or marriages.
- **Permanent migration:** Individuals migrating away from their native villages/home to another location permanently. These individuals would usually consider their destination location as their home location.
- **Associational migration:** Individuals migrating based on existing social networks and connections such as women migrants who are considered to generally migrate to support their family members, which could include being at work but not necessarily be remunerated for their contributions.
- **Source location:** A migrant's native home or village where they were born or last usual place of residence.
- **Destination location:** A location where a migrant moves to, either temporarily or permanently.

2.3 STUDY LIMITATIONS

While precautions were undertaken to minimise error during the course of the research, study limitations should be acknowledged.

- Timing: The survey was conducted during summer months (April to July), leading to us missing a specific population of internal migrants at other locations.
    - At this time seasonal migrants were at source location, therefore, migrants surveyed at destination location were predominantly long-term migrants. More than 50% of migrants surveyed at destination had been there for more than three years, including two-thirds of migrants in the Philippines and 76% in Indonesia. There is a much lower percentage of seasonal/short-term migrants at destination vs. source locations in the survey.
    - Ideally, the survey should have been run at least 2 to 3 times throughout the year to capture different migration flows, particularly at destination.
    - As a result, our understanding of who is represented at source and destination across the five countries and how representative they are of internal migrant populations overall could be limited. We also suspect, as a result, the full extent of vulnerability of migrants at destination is under-represented in our data.
- The research study was multi-country, with multiple research partner efforts to undertake the research, and translations in multiple languages. This layered in additional complexity and complicated data assessment.
- Surveys were conducted by a number of enumerators within each country, which introduces added variability in the survey.
- FGDs and KIIs were run simultaneously with the surveys; therefore, questions were not based on initial survey results and could not incorporate follow-up questions to understand specific survey results.
- While we captured events that significantly impact people's livelihoods and households, the number of people experiencing certain issues is not representative of the intensity with which it impacts them.
- Because climate and climate change are often misinterpreted terms, we chose to ask people about how extreme weather was impacting their lives rather than whether they felt climate change was impacting their lives. Weather is something that people are aware of on a daily basis and there is little scope for misunderstanding. However, this means that in drawing conclusions about how climate change is impacting our study participants, we have made assumptions about how the weather impacts they have experienced are related to climate change.
- As indicated in the methodology chapter, survey participants were selected mostly due to convenience (their willingness to participate in the survey) and if they met specific age and mobility (i.e had migrated in the last three years) criteria. This means that certain sub-groups may have been under-represented and thus, that we cannot say with certainty that the demographics of our survey are wholly representative of internal migrants at large.



CHAPTER 3. MIGRANT DEMOGRAPHICS AND WEATHER IMPACTS

In total, we surveyed 23,915 internal migrants across five countries, providing insight into who migrates, why they migrate, and how they migrate. Below we provide an overview of these results and delve into how weather and climate impact their lives and livelihoods. This chapter reflects the full sample of 23,915 migrants surveyed, including those who did not face weather impacts at source or destination locations.

3.1 WHO MIGRATES

Our survey results indicate that:

- Informal workers make up the vast majority of the migrants surveyed.
- The demographics of our participants indicate that our sample is roughly representative of internal migrants in general in our study countries. For example, in national datasets, most individuals migrating were between 18 to 44 years.[18 19 20 21 22] This proportion was similar to those we surveyed i.e. 79% of respondents fell within this age range.
- 74% of those surveyed are men.
- 64% of those surveyed were between the age of 25 and 44 years.
- The majority of migrants surveyed indicated they have up to a secondary education; exceptions are in Indonesia and Philippines where there were significant percentages of migrants with high school and post-high school education, respectively.
- Migrants surveyed reported they largely came from poorer, rural communities, reflective of observed increasing rates of rural to urban migration within countries.[23]
- Internal migrants in all five countries are/were predominantly involved in agricultural livelihoods at source.[24 25 26 27 28]

3.2 WHY THEY MIGRATE

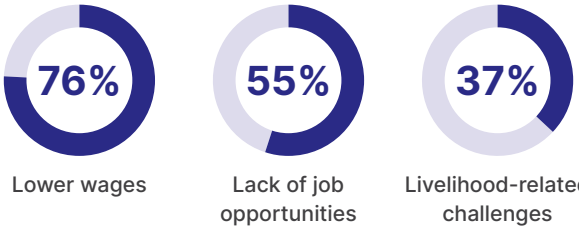
Multiple push factors influence a migrant's decision to move. Economic distress, economic opportunity, conflict, and disasters are all motivating factors for people to migrate. Economic distress in particular, time and again, has been observed as a significant driver influencing migrant workers to move out of their source locations.[ix] In the survey, economic distress faced by migrant communities primarily included limited job opportunities, lower wages, and livelihood-related challenges.

FIGURE 3.1

Top 3 reasons migrants chose as reasons for their migration

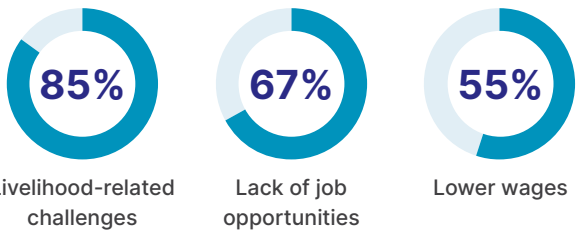
Bangladesh

India

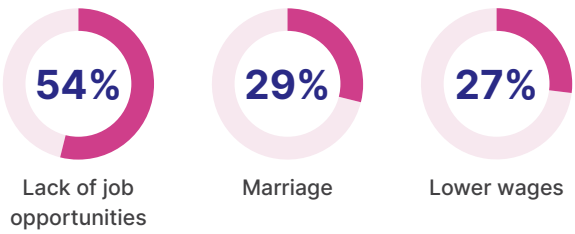


Indonesia

Nepal



Philippines



[ix] Learn more about distress caused by loan repayment in vulnerable migrants in the case study 'Feeling the heat: The life of a brick kiln worker' from our report 'Voices of Resilience'

Linked to this, is the decision to migrate to pay back loans. Migrating to pay back loans (see data Table 7.5 in Annex) was a significant driver in India and Nepal (~30%) and in Bangladesh (15%). However, it was not a dominant factor in Indonesia or the Philippines. In India, taking loans is predominant, with estimates in rural areas suggesting that at an average, one in two agricultural households were in debt.[29] A research study with internal migrants across six districts of Odisha observed that almost 48% of households surveyed migrated to repay family loans.[30] Our FGDs in India echoed our survey results: many internal migrants mentioned loans as a major driver for their migration and that these loans were taken due to agricultural unproductivity and crop failure. As a female migrant from Gursarai in Jhansi district shared, *"If we take a loan, we have to put it in agricultural expenditure, following which, we have to repay the loan every month, even if we incur a loss. We have to pay monthly instalments. We get calls from the banks reminding us about the instalments. So, we have to go out to the cities and pay our loans."*

"The communities that are highly prone to migration include day labourers, people with debt and the landless or people whose land is damaged."

Academic expert,
Begum Rokeya University, Bangladesh

In other South Asian countries too, loans and debt were common drivers of migration.[31] Indeed, debt is an additional factor that can increase the vulnerability of migrants as it can push people into exploitative situations that create risk factors for other rights violations and can make it difficult for them to leave, increasing the likelihood of forced labour situations.[32] [x]

[x] Learn more about distress caused by loan repayment in vulnerable migrants in the case study 'Feeling the heat: The life of a brick kiln worker' from our report 'Voices of Resilience'

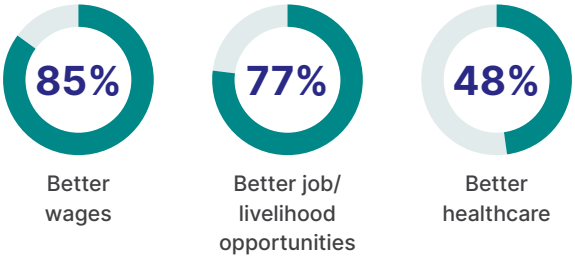
Marriage as a driver of migration was a dominant factor only in the Philippines, and there was not a large difference between women (33%) and men (27%) migrating for marriage in the country. A survey conducted in the Philippines on internal migrants had similar findings, it found marriage and living with spouse as important reasons for migration and the difference between male and female marriage migrants was marginal.[33]

Because economic distress plays a role in influencing a migrant's decision to migrate, it makes sense that hopes of better opportunities at destination locations would also play a role in migration decision-making.

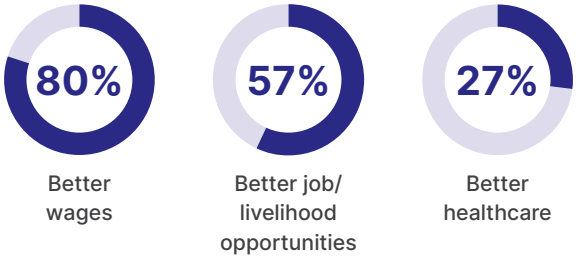
FIGURE 3.2

Top 3 reasons migrants chose regarding how they selected destination locations

Bangladesh



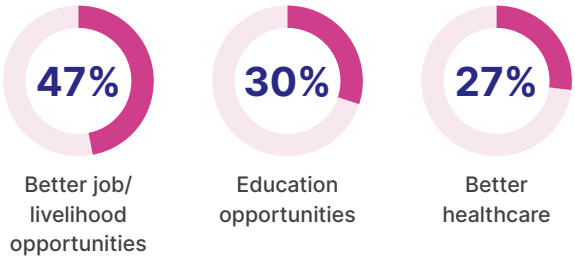
India



Indonesia

Nepal

Philippines



Survey results highlight that migrants choose destination locations primarily on the basis of their ability to find better jobs and better wages. However, tertiary reasons for migrating are also informative.

In Bangladesh, India and the Philippines, healthcare was the third most common reason for migrants choosing a particular destination to migrate. These results were underscored in our focus group discussions; in these countries, migrants mentioned the importance and need for better healthcare facilities at destination locations, signalling poor quality healthcare in their villages. This is supported by the broader literature. In a desk review of migration in South Asia, in addition to better opportunities and higher wages, authors found that better education for children, better household/food availability, and improved access to healthcare were also important push and pull factors for migration.[34]

Our survey results indicate that joining family members is not an influential driver for migrants when choosing a destination location in most countries, though it ranked in the top three reasons for migration in Indonesia. Across countries, proximity to home/village was also

not amongst the top three reasons for migrating except in Nepal. **That migrants are not choosing migration locations based on proximity to home villages or to be with other family members has significant implications.** For migrant communities, as will be further detailed in the following chapter (see 4.3), family and friends are often a primary means of coping with financial challenges. By moving away from these support systems and not necessarily choosing destinations based on the existence of similar support systems, migrants may increase their vulnerability when they move. This has significant implications for the support they might need in their destination locations if economically impacted.

In the Philippines, marriage and education (30%) were important reasons for migrants choosing destination locations. This is markedly different from the other four countries surveyed. According to a national survey in the Philippines (2020), economic reasons were indicated as the most important for movement but moving for education or schooling and joining one's spouse or partner were among the top five reasons for internal migration.[35]

Survey results indicated marriage is not an important reason for migrating in India, Nepal, Bangladesh and Indonesia, especially for female migrants. This finding contradicts most national surveys where marriage as a reason for migration is the most likely reason for female migration. For instance, the Periodic Labour Force Survey 2020-21 in India found more than 86% of all female migrants in the country migrate due to marriage.[36] However, in our survey, where 25% of the respondents were female migrants, ~ 63% of women listed economic reasons as among their three main reasons for migrating while only 16% across the sample mentioned moving as a result of marriage.

It is important to note that women's migration is often perceived as being due to marriage or as associational migrants. Women migrating for economic reasons is not widely recognised. Several micro-level research studies have noted this challenge when assessing female migrants' motivation for migrating. For example, a research study in South Asia found this as a gap and a micro study in India indicated that major pull factors for women migrants were better income (67%) and better job opportunities (60%), and that push factors were 'no money in the household' (54.2%), followed by dissatisfaction with work they did at home (43.6%), and finally lack of employment in their home districts (15%).[37] Women migrants' economic and social contributions are often undervalued or go unrecognised in such instances which could result in increasing their precarity and limiting their socio-economic empowerment.[38] Clearly, more research is essential to understand the representation of female migrants as labour migrants.

"In 1998, my husband got an assignment in Jakarta, I migrated with him. I didn't work at that time, I only depended on his salary, until he abandoned me and the children. After returning, I migrated to Jakarta again with my parents for work to support my four children as he did not leave anything and never even sent money for our expenses."

Annisa,
Jakarta, Indonesia

3.3 HOW PEOPLE MIGRATE

The survey indicated that duration of migration varied across the five countries with some commonalities based on regions.

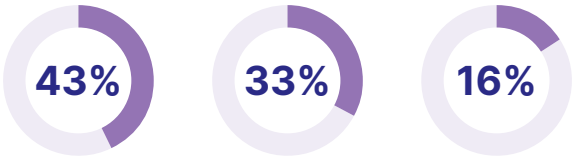
FIGURE 3.3

Duration of migration

Bangladesh

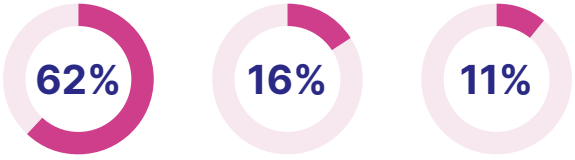
India

Indonesia



Nepal

Philippines



In Bangladesh, India and Nepal, migrants tend to move for shorter term or to migrate annually. This is in line with other studies conducted across these three countries which indicate that temporary or seasonal migration is more common than long-term migration. For example, in the northwestern region of Bangladesh, seasonal migration is prominent between the cultivating and harvest season due to unavailability of work. The region suffers from almost yearly recurring seasonal famines called 'monga' leading to seasonal hunger. As a means to cope, they move temporarily to return in time for harvest season.[39] A key informant from Nepal echoed this finding, noting that *"they normally migrate at the beginning or middle of the monsoon season and return to their homes at the end of the monsoon season, or in the middle of September or October, to harvest the paddy"* (Prakash Madai, NEEDS, Nepal). A migrant's temporary migration may mean they retain stronger ties to their villages than they would, if they migrated long-term.

In Indonesia and the Philippines, migration is more likely to be long-term (one or more years). A possible reason for this is the high migration costs associated with them returning to their home or village. For instance, in Indonesia, longer duration migration is considered to be more common as a result of the archipelagic landscape of the country; thus, the most likely and quickest (though extremely expensive) mode of transport would be by air.[40] This could be a less economically viable option for migrants to return home as often as compared to in Bangladesh, India, and Nepal, where

relatively inexpensive options to travel between most source and destination locations exist.

While not asked specifically in our survey, secondary research indicates that for most of our survey countries, cities are the dominant destination for internal migrants. Consequently, internal migrants make up a significant percentage of urban populations in the countries studied.[41] For example, 43% of the population in the city of Delhi, India consists of migrants.[42] This indicates that there is a need for cities to pay particular attention to the struggles of internal migrants, as they play a key role in the economy.

When migrants do return to their home or village, not everyone indicated that they returned to their primary livelihood. We observed these responses could be linked to the duration of migration; for example, in India and Nepal, two-thirds of migrants mentioned that they returned to their primary livelihood when they returned to their home or village locations. In case of migrants not returning to their primary livelihood, reasons might include drastic impacts on agriculture[43] from increasing weather events and climate impacts as well as income from migration being more profitable and reliable than rural agriculture.[44]

In Indonesia and the Philippines, many migrants indicated they do not have a primary livelihood to return to at their source locations. In the focus groups for both countries, migrants engaged in agriculture in their villages informed us that poor agricultural productivity and crop failure were their main reasons for not returning. In Rizal, Manila, Philippines, Gabriel mentioned crop failure due to floods was the reason for him to leave farming *"I used to be a farmer. Our area was also flooded... we were having trouble growing our crops, so we chose to move here to Rizal because it is more relaxed here and life is easier."*

3.4 HOW WEATHER AND CLIMATE CHANGE AFFECT INTERNAL MIGRANTS

Most people in our survey reported migrating due to economic factors, however, extreme weather events often contribute to these economic factors. For example, in many of the source areas we studied, agriculture is a major livelihood for internal migrants in the sample countries. Weather impacts on agriculture can be beneficial of course, but extreme weather often results in negative impacts which contribute to economic challenges. Our FGDs and KIIs reinforced these findings, where participants noted that weather events and longer-term changes in climate contribute to agricultural stress. For example, in Central Kalimantan, Indonesia, Banyu attributed this crop failure to droughts at his source location saying that "*the farm in my hometown was prone to drought because there is no water. I can't farm there. So, it is better for me to find a job outside my hometown.*"

TABLE 3.1 Migrants negatively impacted by weather events

Country	Impacted at source/ village	Impacted at destination	Impacted at both source and destination	No impact
Bangladesh	55%	13%	31%	0%
India	53%	16%	16%	14%
Indonesia	23%	30%	37%	10%
Nepal	20%	11%	62%	6%
Philippines	53%	21%	21%	4%
Overall %	48%	17%	25%	10%
Overall impact			**90%**	

"I think that climate has a big impact on vulnerable communities especially, when agricultural production is affected. This can be mainly attributed to those engaged in agriculture, as weather events affect the quality and quantity of agricultural produce. It might not be the only factor, but it definitely amplifies crop loss. When people's livelihoods are affected, they are forced to leave their current livelihoods to find something that is sustainable that they can depend on. Climate change affects livelihoods to a huge extent."

KII with Cora Jazmines,
Citizens Disaster Response Center Philippines

Most of the internal migrants who participated in our study reported that weather events are a harsh reality for many of them. As shown in table 3.4 above, 90% of survey participants reported having been impacted by extreme weather. Of these, 74% of people interviewed at source reported that weather negatively impacted them at source, while 53% of the migrants surveyed at destination reported negative weather impacts at destination.[xi] This small shift in numbers indicates that migrants might slightly reduce their exposure by moving, but the majority of migrants remain exposed regardless of where they are.

"When we worked with migrants, we saw that those who moved due to droughts, water scarcity in their source areas migrated to destination areas which had other risks, such as flooding, vector-borne diseases. There is a complete change in the risks they are exposed to at destination locations. Moreover, they do not have the skills/capacities to adapt to those new changes."

Chandni Singh,
Indian Institute for Human Settlement, India

In addition to being negatively impacted, 10% of those surveyed said they moved primarily due to climate-related factors such as weather disasters and long-term changes. As one focus group participant noted,

"The increasing frequency and severity of these events have disrupted daily life, destroyed infrastructure, and made the local environment less hospitable, forcing many of us to seek more stable and secure living conditions elsewhere."

Abdul,
Jassore, Bangladesh

While we can only extrapolate out from our survey numbers, that so many participants noted they were impacted by weather is notable. This suggests that, if we were to multiply out our survey numbers by the number of internal migrants in each of the study countries, an enormous number of people would be impacted. This is quite significant, especially given that we are only just starting to see weather events that are clearly more extreme and intense because of climate change. With this in mind, climate change can be expected to increase internal migration dramatically, as extreme weather events become both more frequent and more intense.

[xi] This is explored further in chapters 4.1 and 5.1.

3.5 EXTREME WEATHER, CLIMATE CHANGE, AND CONCERNS FOR THE FUTURE

While climate change and extreme weather are not the only reasons people might choose to migrate, they may increasingly become more of a driver. It is now well established that in South and Southeast Asia, climate change is already resulting in increased frequency and severity of extreme weather events, and these trends will continue.[45] Extreme heat events are becoming more intense and/or more frequent, including an increase in extreme heat duration. Monsoon circulation will increase seasonal contrasts, resulting in wetter wet seasons and drier dry seasons.[xii] Total flood damage will likely increase in Southeast Asia (due to a combination of climate and demographic shifts including urbanization) and heavy precipitation is very likely (90-100%) to become more intense and frequent.[46]

These changes will have far-reaching consequences for livelihoods and the well-being of migrants; agriculture will likely be negatively affected and with it the economic sustainability of subsistence and small-holder farming. Source and destination households will likely also experience additional and more intense weather-related impacts, deepening existing pressures and perhaps creating new and/or compound ones. Increased heat will result in increased morbidity and mortality for people, animals, and crops in both source and destination locations.

Unless we actively anticipate and address the added stresses that climate change will pose for internal migrants in South and Southeast Asia, we are likely to see more people pushed to migrate for economic reasons, increased vulnerability of both source and destination households, and dire human health impacts on migrants as a result of heat. Indeed, the World Bank estimates that in a 'climate-friendly scenario' incorporating mitigation and adaptation efforts, internal migration is likely to increase by 44 million globally by 2050. In a "pessimistic scenario", they estimate that up to an additional 216 million could be driven to migrate internally by 2050[47]; 40 million and 49 million of these internal climate migrants would be in South and East Asia and the Pacific respectively.[48]

[xii] There is medium confidence (66-100%) that monsoonal floods will become more intense in South Asia.

CHAPTER 4. INTERNAL MIGRANTS AT SOURCE

In this chapter, we explore the types of extreme weather internal migrants face at source locations, its impact on them and their ways of responding and coping with these impacts.

4.1 WHO WE SURVEYED

At source locations, we surveyed 15,317 migrants, out of which 11,326 (74%) had faced impacts by weather events at either source or at both, source and destination locations. The findings in this chapter reflect just these 11,326 migrants, so that we could focus specifically on source-related weather challenges.

TABLE 4.1 Total number of migrants surveyed at source locations

Country	Total number of migrants surveyed at source	Total number of migrants surveyed at source who were impacted by weather at source[xiii]	Percentage of total migrants surveyed at source who were impacted by weather at source
Bangladesh	1,255	1,048	84%
India	10,415	7,340	70%
Indonesia	638	368	70%
Nepal	18,32	1,494	82%
Philippines	1,177	1,076	91%
Total	**15,317**	**11,326**	**74%**

At source locations, for migrants who had been impacted by weather events, not surprisingly, their primary livelihoods were in agriculture including farming their own land, working as agricultural labourers, and/or in animal husbandry. Specifically (see table 7.7 in annex):

- In India (76%), Indonesia (62%) and Nepal (59%), migrants were working predominantly as agricultural labourers.
- In Indonesia (73%), the Philippines (57%), and Nepal (57%), they were farming their own land.
- 25% of migrants were involved in the fishing sector in the Philippines.
- About one-third of migrants from India and Nepal mentioned construction sector as one of their livelihoods at source locations.

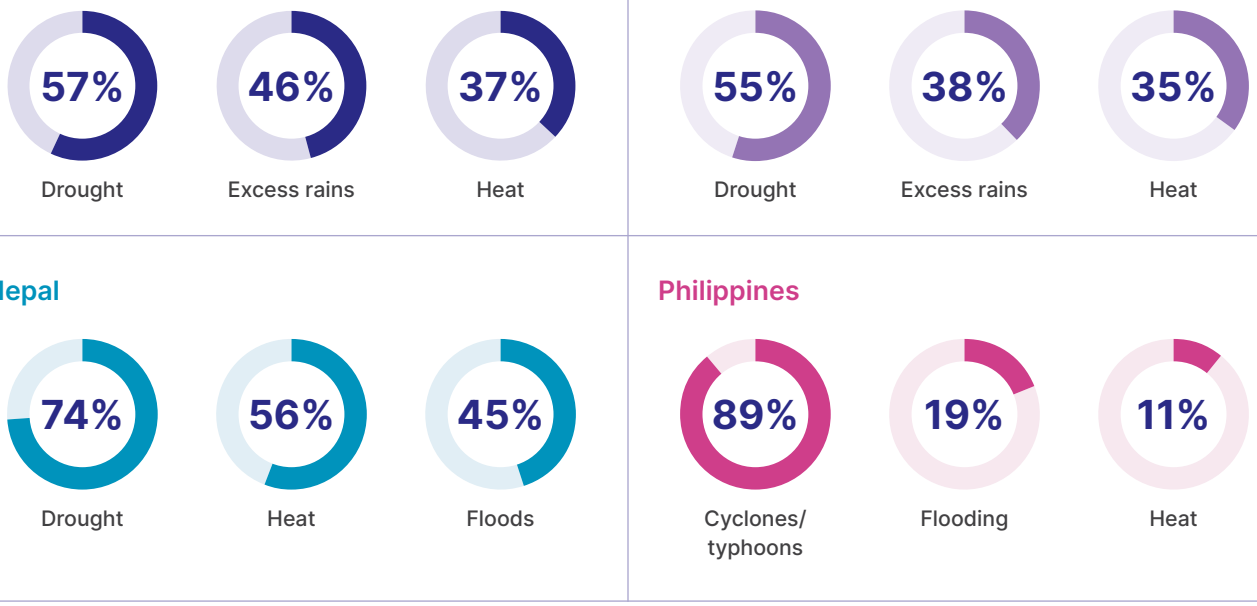
[xiii] These numbers also include those also impacted both at source and destination. We excluded those only impacted at destination, or not impacted at all, so that we could focus our question specifically on impacts at source (Check table 7.6 in annexure for more details).

4.2 ISSUES FACED

At source locations, floods, excess rainfall, drought, and heat are the dominant weather challenges that internal migrants face. That migrants are already mentioning drought and heat is concerning given that unlike precipitation, we can definitively say that climate change will make both of these hazards worse in the coming years.

FIGURE 4.1

Top 3 weather events faced by migrants at source



Drought is a particular challenge faced by migrants; which makes sense, given the number of individuals in the survey engaged in agricultural livelihoods at their villages and the increasing frequency of drought in many of these countries. These findings align with a climate vulnerability assessment conducted in Jharkhand, India, which noted that without consistent irrigation due to fluctuating precipitation, farmer livelihoods are adversely affected.[49] In Jharkhand, it was also observed that farmers were migrating out for better employment opportunities to sectors such as construction.[50]

"Farmers are experiencing droughts when the rains do not come on time. This leads to crop failure. Then they have no option other than to shift from a farm-based livelihood to non-farm-based livelihood. When the farm-based livelihoods fail due to droughts, they must take up non-farm based livelihoods. Such opportunities are not available in the rural areas. Then they migrate to the urban setup."

Binaya Pasakhala,
Governance and Institution Analyst,
Project Coordinator SUCCESS, Nepal

In the survey, excess heat in source locations in Bangladesh (70%) and Nepal (56%) also stood out. This is not surprising; India has experienced severe heat waves over the past three years[51], as have Nepal[52] and Bangladesh[53], with temperatures reaching as high as 40°C or more in some areas in these countries. In 2024, Bangladesh experienced a heatwave for 30 consecutive days, resulting in multiple heat-related deaths.[54] During this period, as temperatures rose, farmers in the country experienced large-scale crop losses leading to reduced yields and food insecurity. This adversely impacted the livelihoods of smallholder farmers, already grappling with the challenges of climate variability.[55]

"During the summer season, it has become so difficult to work in the field as the weather becomes so hot during this time. Several times our family members got sick during this hostile weather. The weather pattern is changing frequently day after day. We didn't notice such extreme temperatures in the past. But now, the temperature is increasing alarmingly and stays for a long time which creates health hazards for the people especially for the vulnerable ones like us who are engaged in day labourer occupation."

Ahmed,
Jassore, Bangladesh

A key informant, Abdur Rahman, RDRS in Bangladesh, spoke about increased heat and migration to urban locations in the past few years. *"Climate plays an integral role in the northern part of Bangladesh in the increasing rate of the migration to other places, leaving their existing occupations. The pattern and reason for migration has been changing with time. People have been migrating to new places, leaving agriculture due to the recurrent hot weather which makes their work more difficult. It has been observed that over the years, extreme hot weather pushes people who are engaged in agriculture to shift to other professions in cities like rickshaw pullers or garment industry workers, as they are easier means of income than agriculture in the given climate."*

In the survey, we found the Philippines to be an exception – 89% of the migrants impacted by weather at source mentioned cyclones/ typhoons as the dominant weather event that adversely impacted them in the country. Given that the Philippines is highly prone to typhoons with about twenty cyclones threatening the country yearly and six to nine making landfall, that typhoons are the primary weather challenge is understandable. Typhoon Haiyan in 2013, for example, displaced 4.1 million people. While many of those displaced returned shortly after the typhoon hit[56], a survey by the International Organisation for Migration (IOM) observed, almost 30% individuals felt there were not enough jobs or livelihoods anymore in the areas where they lived during the typhoon.[57]

A key informant, Enrico Manuel, Citizens Disaster Response Center, Philippines underscored the impacts of typhoons in the Philippines: *"Look at farmers – because of the intensity of typhoons, the intensity of El Nino, they find it difficult to sustain their livelihood. So, the farm workers sometimes look for other sources of income. They migrate to Manila to look for income."*

Survey participants at source locations reported facing significant impacts to their primary livelihood due to weather events. They primarily face wage loss or wage cuts, crop loss, and job loss which can increase the precarity of their economic situation. These findings were echoed by focus group participants who noted the impacts of weather events leading to crop failure and land damage, and thereby impacting their livelihoods.

For instance, Suresh from Kathmandu, Nepal who previously worked as a farmer informed, *"We had a small piece of land, and it was divided between us brothers. But the land productivity was very low, and the location was highly vulnerable to flood disasters. It was very difficult for our family to survive, and we migrated here to Kathmandu. Every farmer is facing the same problem as crops are being destroyed due to floods and landslides."*.

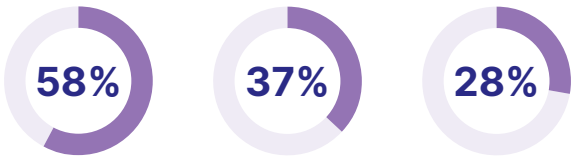
FIGURE 4.2

Top 3 livelihood-related impacts due to weather events faced by migrants at source

Bangladesh

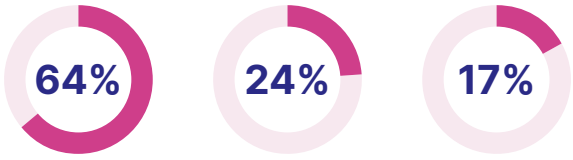
India

Indonesia



Nepal

Philippines



Job loss in Indonesia and Philippines was considerably higher at source locations in comparison to other countries. Typhoon Odette in the Philippines in February 2022, provides some insight into this weather-related impact: Odette directly impacted 4.4 million workers, many of whom were engaged in agriculture, wholesale and retail trade and construction. Even prior to the typhoon, those impacted were already extremely vulnerable with limited social protection and income security. The typhoon heightened their precarity.[58] This increasing vulnerability and direct impacts on work could also explain why migrants in both these countries (43% in Indonesia and 62% in the Philippines; see section 3.3) move for longer durations relative to migrants in other countries. This would be apart from existing reasons for migration such as lack of economic opportunity in rural areas, high migration costs and greater job security in cities, etc.

"The real effect of this is on the people… people who don't have the ability, they don't have the capacity, they don't have the resources, and they don't have any alternatives in mind when it comes to disasters and climate-related events. So, the real effect on them is loss of livelihood and life. As our farmers, fisherfolks and indigenous people work on their ancestral lands, their dependence on natural resources for their life and livelihood is higher."

Dr. Gene Talens,
Climate Change Network for Community Based Initiatives, Philippines

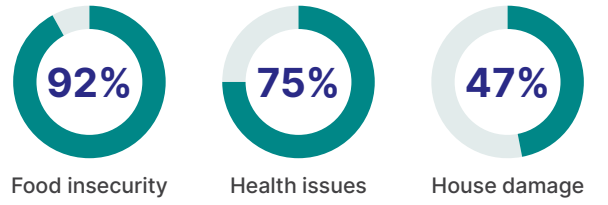
The Philippines was the only country where few migrants mentioned crop loss as a prominent impact. A potential reason for this could be the decline of individuals involved in the agricultural sector in rural areas and increased migration. In recent years, the agricultural sector's contribution to the country's overall GDP has significantly reduced to become one of the smallest shares.[59] This is indicative of a finding shared in the previous chapter on individuals returning to their primary livelihood at source locations where 54% of Filipinos mentioned they were not returning to their primary livelihoods.

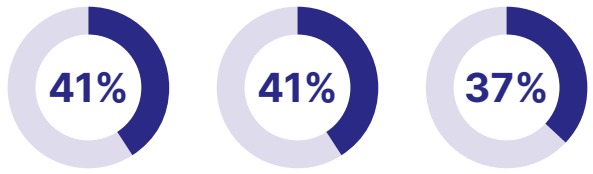
In the survey, animal loss in Bangladesh (37%) and Nepal (30%) was also observed at source locations. This issue was also mentioned in the FGDs; participants noted that weather impacts lead to cattle loss or force them into selling their cattle. As Kamran in Jassore, Bangladesh explained, *"The level of water increased alarmingly in the rainy season which washed away our lands, crops, cattle."*

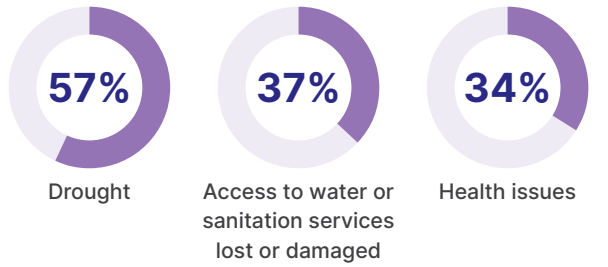
Weather events also impact households at source locations, resulting in food insecurity, health issues and lost or damaged access to water and sanitation. In Bangladesh and Nepal, respondents indicated the highest number of impacts per respondent, suggesting that there is vulnerability across the board (housing, food, and access to critical services).

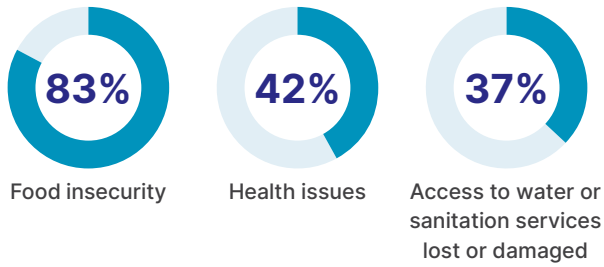
FIGURE 4.3

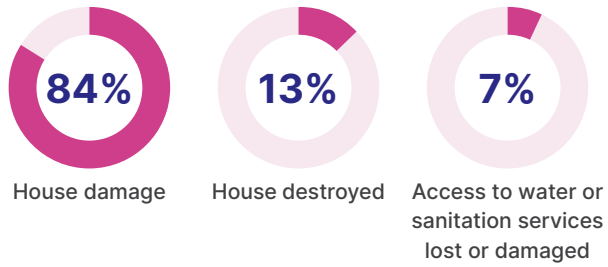
Top 3 household related impacts due to weather events faced by migrants at source locations











Food insecurity is particularly acute in Bangladesh (92%) and Nepal (83%), and is the top impact faced in all but the Philippines. This was also reflected in FGDs where respondents mentioned drought or crop failure as the reason for this insecurity. A research study in Indonesia further underscores this issue, finding that in the drought-affected areas of the country, about 3 million people live below the poverty line and that late onset of rains extends the dry season, affecting food production and impacting over 1.2 million people.[60]

"We had to rely on outside help and sometimes we went hungry. Moving was our only option to try to find a better life"

Shahla,
Varda, Bangladesh

Health issues were among the top three issues in all but the Philippines, and particularly acute in Bangladesh (75%). While the specific health issues are not overly clear from the survey or the FGDs, a few respondents did mention heat-related health issues. In Bangladesh, a report on health impacts due to climate change highlighted issues of malnutrition due to droughts, vector-borne diseases like diarrhoea, cholera, etc. due to floods, and heat stroke, dehydration and cardiovascular diseases due to heatwaves.[61]

"The heat has increased. Two people died. My father-in-law passed away recently due to the heat. He was absolutely fine and talking to everyone. He had gone to graze the goats and couldn't bear the heat. He passed away at the very moment. He was burnt from this area to this area due to the heat. He went at 1:30 p.m. and passed away around 4:00 p.m. due to the heat."

Sangeeta,
Jhansi, India

Food insecurity and health issues, which are felt by a large proportion of those surveyed in Bangladesh, India, Indonesia and Nepal, are not felt as strongly in the Philippines. This indicates that while household infrastructure is damaged by typhoons – house damage/ destruction is the top impact (more than 84%) – people are likely able to meet their basic needs such as food and healthcare after a major weather event.

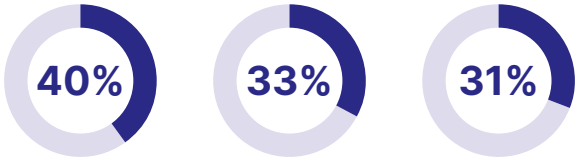
4.3 COPING STRATEGIES AND AVAILABLE SUPPORT

FIGURE 4.4

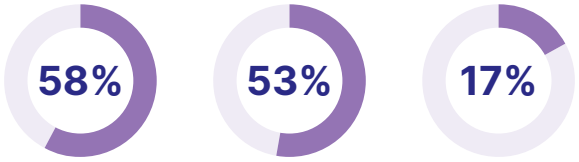
Top 3 coping mechanisms adopted by migrants at source location

Bangladesh

India



Indonesia



Nepal

Philippines

Coping strategies and support are key to helping migrants deal with the negative impacts of life and weather events. **In all five countries, support from family and friends for coping was ranked as one of the top three coping mechanisms of migrants at source.** In the Philippines, it was the most common coping mechanism at source locations with 66% migrants saying they relied on support from family and friends.

In Bangladesh (45%), India (40%), and Indonesia (58%), migration was the first or second-ranked coping mechanism adopted by migrants surveyed at source, to deal with weather impacts; it was not listed as one of the top three reasons in Nepal or the Philippines. However, as highlighted in Section 3.2, migrating to pay back loans was a migration driver for internal migrants in Nepal. So, while migration may not necessarily be seen as a coping mechanism for migrants at source in Nepal, it could be an underlying factor in migration decision-making.

As a participant from a focus group in Bangladesh noted, *"The drought was the final straw. We had no water for our crops, no rain, and everything dried up. Without water, we couldn't grow food or survive. We had to find a place where we could at least have water and a chance to work."* Asifa, Varda, Bangladesh.

Migrants at source also mentioned both, drawing on savings and turning to loans as coping mechanisms. Informal loans are prominent, especially in Nepal (63%) and Bangladesh (46%). While in Indonesia (17%) and Philippines (20%), more formal loans than informal loans were used to cope. In regards to drawing on savings, **about one-third of migrants in Bangladesh, India and Nepal mentioned using savings as one of the coping**

mechanisms they adopted when faced with problematic weather events. While these coping mechanisms may be helpful for dealing with the immediate impacts of extreme weather events, over the long-term, they may prove to further vulnerability, especially if migrants are unable to pay back loans or if another event hits and they have not had time to recoup their savings.

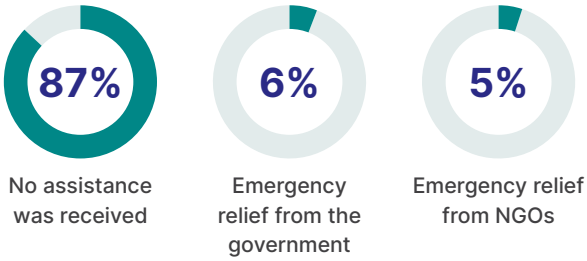
"Whatever we have earned, is exhausted in coping with these floods."

Rajeev,
Bengaluru, India

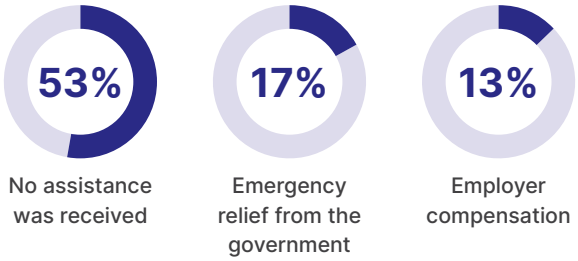
FIGURE 4.5

Top 3 assistance received by migrants at source locations

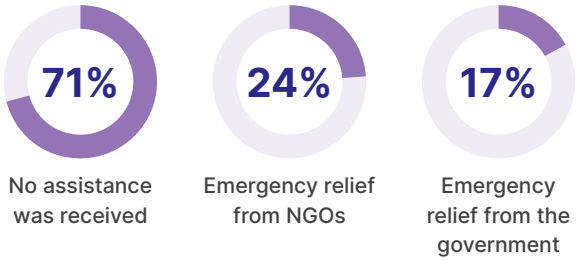
Bangladesh



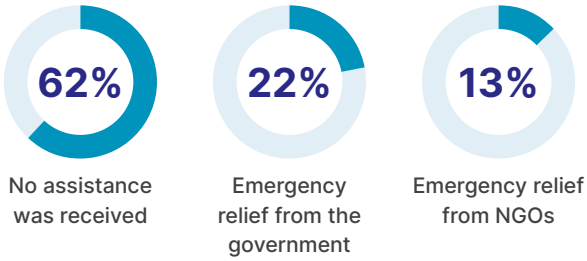
India



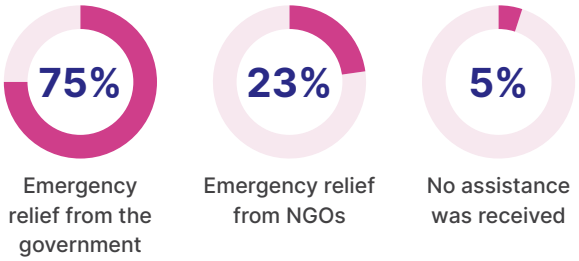
Indonesia



Nepal



Philippines



In terms of external assistance received, **virtually no one at source received /identified the support received from government or CSOs as a coping strategy.** Even an increase in remittances for coping was barely cited by migrants at source locations (see table 7.8 in annex). Indeed, the top assistance noted by migrants in Bangladesh, India, Indonesia and Nepal was 'no assistance received'. The Philippines was an exception, with 75% of those surveyed at source noting they had received emergency relief from the government. Additionally, emergency relief support from NGOs at source was slightly higher in Southeast Asian countries – Indonesia (24%) and Philippines (23%) – than in South Asian countries (13% or less). This, and the previous table, suggests that people are largely reliant on themselves, their social networks, and informal/formal loans for coping and recovery.

Policymakers, civil society, and employers need to consider and take into account, how to protect communities they are engaged with, and the role social protection can play in bolstering coping and recovery. In addition, those designing social protection systems should consider the negative impacts of climate change and the coping assistance that will be needed to help migrants build resilience.

ADDITIONAL FINANCING

In survey countries, social protection is significantly underfunded relative to developed countries.

Based on ILO estimates, countries would have to increase their public expenditure by 70% to 430% for universal social protection to cover basic benefits such as essential health care, and income security guarantees for children, persons with severe disabilities, mothers of newborns, older persons and the unemployed.[62] However, while this would address a gap in social protection in general, it would not be sufficient to cover the additional impacts of climate risks.

Country	Annual public expenditure on social protection as % of GDP[63]	Annual financing gap for universal social protection, as % of GDP[64]
Bangladesh	1.1%	4.8%
India	2.4%	3.3%
Indonesia	2.7%	2.8%
Nepal	3.3%	9.2%
Philippines	4.0%	3.1%

At the same time, global climate adaptation financing for developing countries is at less than 10% of the estimated need. According to UNEP, estimated adaptation costs and needs for developing countries are estimated to be between US$215 billion to US$387 billion per year until 2030. Funding in 2021 stood at just $21 billion.[65] According to the principle of "common but differentiated responsibility and respective capacities", the more industrialised countries should bear more of the responsibility for mobilising and contributing to these funds, as they have contributed the most to the problem.[66]

There is also a need to invest in both efficiency of capital and leveraging alternative sources of financing to bridge these gaps. In the long term, national governments will be expected to bridge the majority of these gaps. In the short to medium-term, international support will be crucial, in recognition of climate change as a global problem. Exploring all other available avenues is important as well, including large-scale technology transfer for climate action, Corporate Social Responsibility (CSR) programs, private sector contributions for workers in their supply chains, and leveraging community-financing models such as individual contributions and faith-based giving programs.

FADING RIVERS AND FADING LIVELIHOODS

> ***If we get help, maybe my children will not have to struggle like I did. Maybe they can go back to school. But without help, we will keep losing everything—the land, the rivers, our future.***

"The river used to give us life, but now it feels like it's slipping away," says 34-year-old Santa Kumar Majhi from the rural municipality of Champadevi in Nepal. The calloused hands of this father of six are a testament to a life of labour. He belongs to the community of Majhis, an indigenous group that relies on fishing and boating along the riverbanks of the inner Terai region. Santa Kumar who was taught how to fish by his father says, *"Fishing has been part of my family's legacy for generations, but it's no longer enough".*

Development projects, environmental degradation, and overfishing have severely disrupted the community's way of life. Over the last several years, water levels in the once abundant rivers of Sunkoshi and Likhu have dropped. *"There are about 80 Majhi households here, and most of us depend on the rivers. The water is reducing, the fish are disappearing, and with them, our ability to survive,"* Santa Kumar notes.

The Majhi community has, in addition to fishing, also relied on small-scale agriculture to make ends meet. However, irregular weather patterns, including prolonged droughts and unseasonal rains, have ravaged farmlands. Most in the community are landless labourers who own tiny parcels of land. Droughts have reduced grazing pastures, impacting livestock and crop yields. *"I work on my small farm, but it's not enough. The crops fail often, and we barely make it through the year. It's ruining our harvests,"* Santa Kumar says. In recent years many from the community often have to leave their farmlands fallow.

The intensifying impacts of climate change intersect with social and economic challenges such as limited access to education, healthcare, and stable employment for vulnerable communities like the Majhis. *"There are few opportunities for us,"* Santa Kumar admits. *"Most young people are forced to leave home for work, but even then, it's hard to find good jobs."*

Santa Kumar admits that his family struggles to even make it through a few months of the year. With six children to care for, his eldest daughter has already begun working in Kathmandu as a domestic worker while his son has taken on daily wage labour in the village. *"I wanted my children to get an education, to have a better life than me,"* he says, his voice heavy with regret. *"But we had no choice. They had to work to help us survive."*

Santa Kumar emphasises the need for systemic support. He believes vocational training and a push for small-scale businesses could help his community diversify their incomes instead of depending on fishing and agriculture. *"Without support, our children will continue to leave for cities, and our village will slowly disappear,"* he says. Despite the hardships life keeps throwing his way, Santa Kumar's determination when it comes to his family's survival is inspiring. *"I have some hope left,"* he says, his eyes fixed on the horizon.

CHAPTER 5. INTERNAL MIGRANTS AT DESTINATION

In this chapter, we explore the types of extreme weather that internal migrants face at destination locations, its impact on them and their ways of responding and coping.

5.1 WHO WE SURVEYED

At destination locations, we surveyed 8698 migrants, of which 4517 (52%) indicated they had been negatively impacted by weather at their migration destination or both source and destination locations. The findings in this chapter reflect just these 4517 migrants, so that we could focus specifically on destination-related weather challenges.

TABLE 5.1 Total of migrants surveyed at destination locations

Country	Total number of migrants surveyed at destination	Total number of migrants surveyed at destination who were impacted by weather at destination[xiv]	Percentage of total migrants surveyed at destination who were impacted by weather at destination
Bangladesh	1,250	615	49%
India	3,125	1,135	36%
Indonesia	854	662	78%
Nepal	864	734	85%
Philippines	2,405	1,371	57%
Total	**8,598**	**4,517**	**53%**

At destination locations, for migrants who had been impacted by weather events occupations varied (see Table 7.10 in Annex for further detail):

- In India (71%) and Nepal (48%), construction work was the most common occupation for workers surveyed.
- In Indonesia, 28% of migrants were involved in the palm oil plantations as labourers.
- In Bangladesh, Indonesia and the Philippines a significant number of migrants chose the 'others' option apart from the responses categorised for the survey. In the 'others' option, a high proportion of workers mentioned they were engaged in the transport sector (for example, auto rickshaw drivers, taxi and bus drivers, etc.). Street vendors were also surveyed at destination locations in Indonesia and Philippines.

More than 50% of migrants at destination locations mentioned they were at their destination locations for more than three years, this included two-thirds of migrants in the Philippines and three-quarters in Indonesia. This is a much higher proportion of long-term migrants than for the entire survey sample. This is likely because the study took place when many short-term migrants were at their source location. This suggests that study results might not be fully representative, as long-term migrants may have more stable employment and housing and more access to local services than short-term migrants.

5.2 ISSUES FACED

At destination locations, heat is the dominant weather event affecting internal migrants. This is highlighted in both the survey and, to an extent, in the FGDs as well. In the summer months of 2024, South and Southeast Asia faced some of the hottest months and most intense heat waves on record. These events followed two previous years of extreme heat, in 2022 and 2023. Increasingly, this is what we can expect – on average, every year will be warmer than the last. The lethal impacts of this year-on-year increase are becoming increasingly visible. In 2024, reported heat-related deaths came close to 200 in India's capital, New Delhi with the temperature shooting to 49°C.[67] A focus group participant highlighted this shift in temperatures.

"When I started living in Jakarta, the weather was still cold in the morning, sometimes even at 10 a.m. it still felt cold. Now, at 8 a.m. in the morning, even though the weather looks dark, the temperature is already incredibly hot."

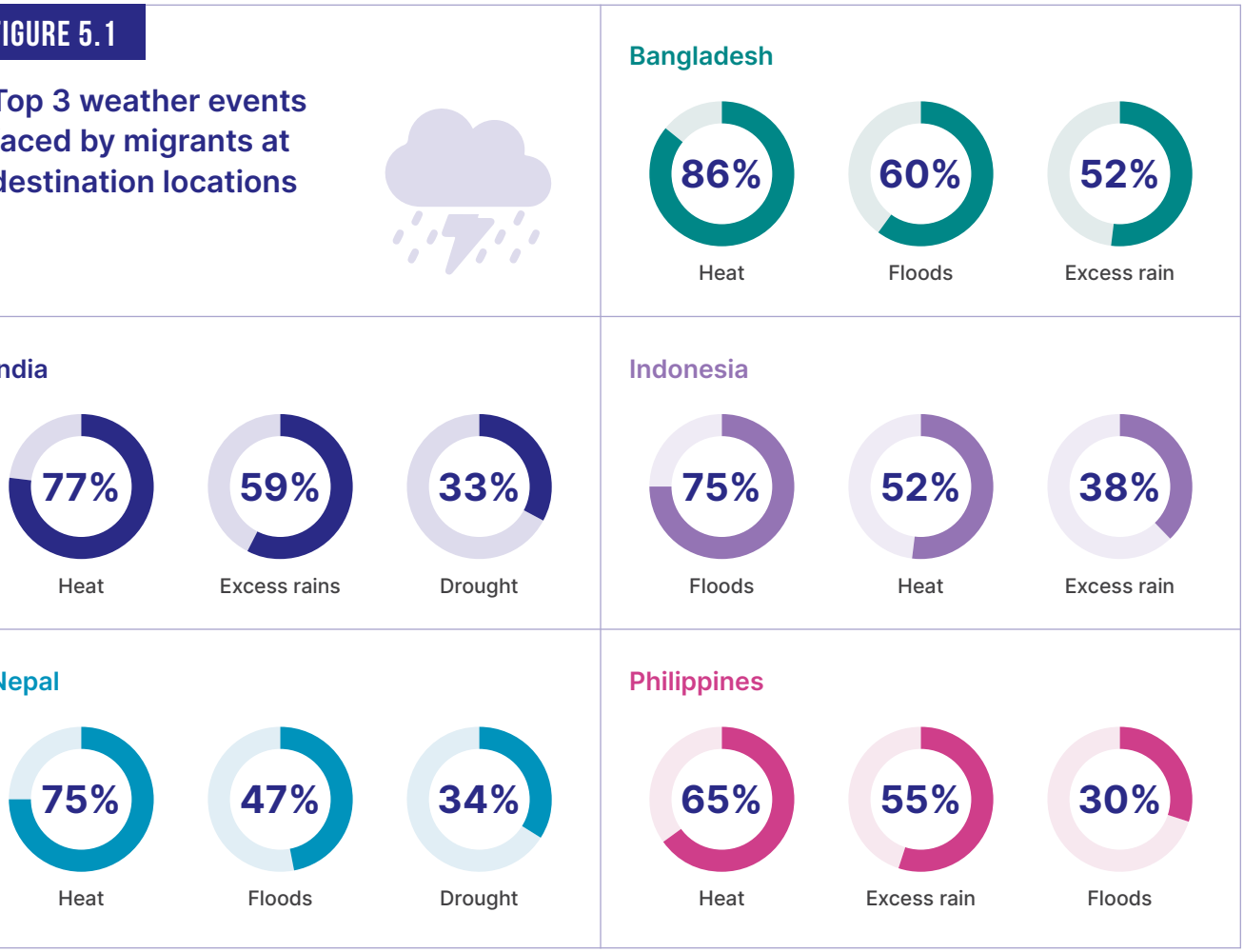
Burhan,
Jakarta, Indonesia

[xiv] These numbers also include those also impacted both at destination and source. We excluded those only impacted at source, or not impacted at all, so that we could focus our question specifically on impacts at destination (Check table 7.9 in annexure for more details).

Most migrants at destination are employed in outdoor and/or labour-intensive work such as construction work, street vending, domestic work and factory work which means, in the absence of active mitigation, increased heat will impact them severely. A study on the impact of heat on outdoor workers found, for example, that increased heat could cause significant impacts on the safety and health of workers.[68] Yet during conversations with migrants in focus groups in India, it was clear that employers provide employees with little to no relief from the heat, in some instances even denying water breaks. As one participant noted, *"It is more problematic at this time, during the summers. We have to climb up 5-6 floors with bricks, cement, etc. It is so hot right now. Sometimes, we get work where we are exposed to heat. They even keep monitoring when we go to the washrooms. In this heat, if we take multiple water breaks then they taunt us, saying that we seem too thirsty."* Ajay, Noida, India.

FIGURE 5.1

Top 3 weather events faced by migrants at destination locations



Excess rain, floods and drought were also highlighted as challenges across countries in the survey, though focus groups mentioned rain and floods more than drought. In Indonesia, floods were the top-most challenge faced by migrants which is supported by secondary research; Indonesia is ranked 17th most at risk from flooding[69], and Jakarta has faced yearly floods with increasing intensity over the past few years[70]. A study from 2018 predicted an up to 402% increase in flood related damage costs by 2050 in Jakarta, if not addressed[71].

"In Bekasi and Jakarta, flooding is very frequent. Only a few days ago, it rained two days in a row and my house was flooded. This is a disaster that we experience almost every year. From year to year, the situation is getting worse. If it rains for less than 2 hours, then it is still safe. But if it rains for more than 2 hours, the situation becomes worrisome."

Ashar,
Jakarta, Indonesia

IMPACTS OF INCREASING HEAT ON WORKERS AND MIGRANTS

As seen in the survey, at source and destination locations, workers are already facing heat-related distress. In the past few years, increasing temperatures have led to devastating impacts on vulnerable populations. Globally, 2.41 billion workers are exposed to excessive heat every year, causing ~23 million occupational injuries, ~19,000 deaths, and the loss of 2 million disability-adjusted life years (DALY).[72] Workers in the informal sector are particularly exposed because they have to work daily to survive, they have little or no negotiating power with employers who determine working conditions and hours, and they often have limited access to social protection and health systems.

There has been an estimated 34.7% increase in exposure to heat over the past 20 years, leaving over 70% of the global workforce at risk of excessive heat.[73] Those at greatest risk include outdoor workers, many of whom also do physically demanding work such as construction or transportation, and those working in hot, poorly ventilated indoor environments such as garment workers. Environments or livelihoods with added heat, such as foundries and brick kilns, are particularly dangerous and can become deadly quickly.

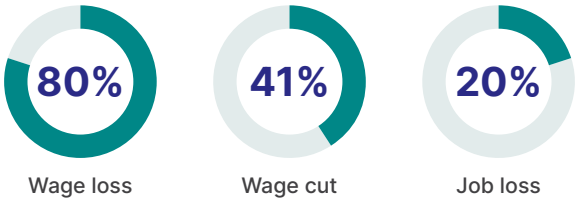
South and Southeast Asia face some of the greatest risk of labour productivity losses due to heat stress, particularly in countries such as India and Bangladesh.[74] A recent report by ILO suggests that by 2030, 2.2% of total working hours globally will be lost due to high temperatures, equivalent to a productivity loss of 80 million full-time jobs. In South Asia, approximately 5% of working hours are projected to be lost.[75]

At destination locations, migrants faced similar income-related impacts to migrants in source locations.

FIGURE 5.2

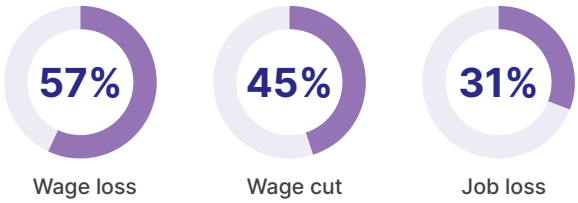
Top 3 occupation-related impacts due to weather events faced by migrants at destination locations

Bangladesh



India

Indonesia



Nepal

Philippines

Wage loss and wage cuts were the most common challenges faced by migrants across the five countries at destination. However, wage loss and wage cuts were less pronounced in Indonesia and Philippines than in Bangladesh, India, and Nepal. During focus group conversations with migrants, they mentioned their inability to go to work after a weather event, which usually led to wage loss for at least that day. In some cases, such as in Indonesia, even if they started work prior to weather events such as excessive rain, work might not be counted if it was not completed. As Marwan in Central Kalimantan, Indonesia noted, *"If it rains at 9 a.m., we can't count work on that day even if we already worked from 6 a.m. because of the pesticides that were sprayed and fertiliser that was sprinkled will dissolve with water and not absorb on the tree. So, it is wasteful, that's why they don't count it as work for that day and they will not pay us."* Wage cuts or threats of wage cuts for missing work due to weather events were also seen in FGDs. In Beed, India, Sanjay, migrating to sugarcane fields, reported that, *"If it rains, sometimes we have to sleep without food. Even if it's raining, we have to go for work, otherwise we have to give ₹1000 as penalty for being absent. No matter what happens, even if we get wet in the rain or we get sick or we get injured during work, we have to go to work to earn."*

Weather events also significantly impact migrants and their households at destination locations.

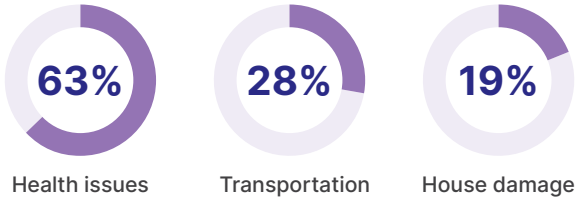
FIGURE 5.3

Top 3 household related impacts due to weather events faced by migrants at destination locations

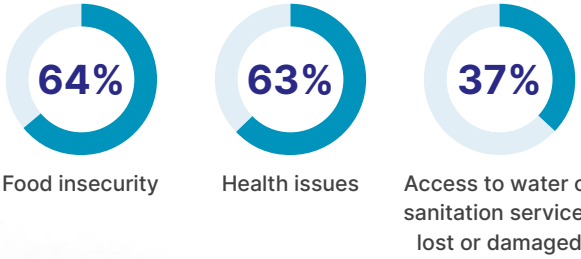
Bangladesh

India

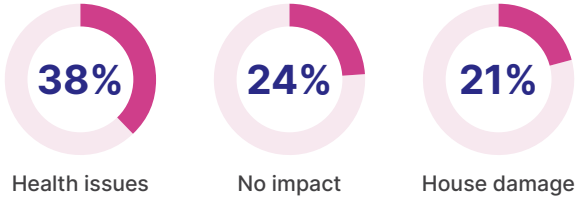
Indonesia



Nepal



Philippines



Health issues were a primary impact that migrants faced in Bangladesh (84%), Nepal (64%), Indonesia (63%) and India (59%), with health issues affecting more than half of the respondents at each of these locations. Even in the Philippines, where migrants reported fewer impacts overall, health issues were listed as the most commonly faced issue, impacting 38% of migrants at destination. Health issues were also a focus in the FGDs.

"We face problems in doing work due to heat. We have to lift 25-50 kg of weight. We have to lift it. If we don't, then they will ask us to leave the job. We also fall sick due to that."

Vijay,
Delhi, India

A key informant in Bangladesh, Sunzida Sultana, Karmojibi Nari provided insight into the health-related impacts migrants faced at destination locations in Bangladesh, *"In destination areas, migrants mostly faced heat waves which cause illness like dehydration, heat stroke especially for the day labourers. These weather events risk their daily livelihood, earnings, increasing their living cost. These weather events affect migrants both physically and economically. When they get sick, they have to see a doctor and buy medicines which are very costly for the vulnerable migrants as their income source is very limited."*

Similar to source locations, food insecurity is also a primary issue in Bangladesh (83%), Nepal (64%), and India (45%). A paper on climate change and food security in India observed that urban food insecurity was as worrisome as in rural areas. Most individuals migrating to urban areas resided in highly climate-vulnerable informal settlements. Any impact on their households such as job loss or damage to assets could leave them in a precarious position. As food is a significant expenditure for many of these households, in the aftermath of any weather event, household expenses such as food would likely be the first to be reduced in order to cope with the impacts.[76]

Loss of services are more problematic at destination locations than at source location; migrants reported challenges with water or sanitation, loss of communication and damage or slowing of transport routes. However, while focus groups also mentioned impacts to water, sanitation, and transport routes, loss of communication did not emerge as a major issue.

"There is always a flood in Manila when it rains, even if it rains a little bit, the straight road is flooded, it's hard to travel because of the flood."

Christina,
Rizal, Manila, Philippines

Housing damage/destruction and loss of household assets were less of a problem as compared to source locations. This is surprising, as in many countries, migrants mentioned living in extremely precarious housing at destination locations. In India, Nepal and the Philippines – the precarity of the houses they live in at destination is clear with only 5%, 14% and 15% respectively living in permanent structures. In Bangladesh, 47% of those surveyed said their housing was a permanent structure; however, secondary research points towards the dismal living conditions in urban settlements of destination cities in the country.[77] In Indonesia as well, even with migrants mostly living in either employer accommodations or permanent housing, living conditions are terrible in these areas.[78] During focus group conversations, many individuals, when asked about the support they required as a result of extreme weather events, mentioned the need for better housing facilities, better living conditions, and better infrastructure at destination location. This suggests that though housing damage and destruction as well as loss of household assets may be less of a problem, this should not be interpreted to mean housing overall is not a problem. This highlights the complexity of conducting research with such marginalised groups – even our questions fail to fully reflect their reality – and point to the need for more systematic research.

5.3 COPING STRATEGIES AND AVAILABLE SUPPORT

Access to external assistance is as low or even lower at destination, when compared to source locations.

FIGURE 5.4

Top 3 assistance received by migrants at destination location

Bangladesh

- 86% — No assistance was received
- 7% — Emergency relief from the government
- 5% — Skilling course

India

- 57% — No assistance was received
- 14% — Alternate job
- 12% — Employer compensation

Indonesia

- 48% — No assistance was received
- 21% — Emergency relief from NGOs
- 18% — Emergency relief from the government

Nepal

- 75% — No assistance was received
- 16% — Emergency relief from the government
- 10% — Alternate job

Philippines

- 46% — Emergency relief from the government
- 41% — No assistance was received
- 19% — Emergency relief from NGOs

At destination locations, more than half of those surveyed reported they did not receive any external assistance. Emergency relief from the government—already low at source—was even lower at destination for India and Nepal (17% and 22% at source, compared to 8% and 3% at destination, respectively). While fewer people received government relief at destination than at source in the Philippines too (75% at source compared to 46% at destination), the Philippines remains an outlier in our set; emergency relief measures are much more accessible in Philippines compared to other countries. Nonetheless, even in the Philippines, more than half of those at destination are not receiving support from the government when impacted by extreme weather events. In Nepal, survey respondents indicated that, though only reaching 16% of those impacted, NGOs are nonetheless providing far more emergency relief than the government. *"NGOs are playing a great role in our community providing us emergency support like food and health facilities"* Ajay Kumar, Kathmandu, Nepal

"If you are a migrant and there is a calamity, it seems like they don't have any mechanism at all. Their life is really difficult because there is no service. They survive on whatever they have, I cannot imagine how they survive in that kind of situation. That is the reason why the number of peddlers and scavengers has increased. I have also seen children becoming domestic workers."

Christina,
Rizal, Manila, Philippines

Research highlights that migrants face particular exclusions and challenges in accessing government support. The primary reason for this is the lack of portability of benefits. Eligibility for social protections is often tied to an individual's official residence, which generally is their source area, especially for short-term migrants. So, when people move to different states or provinces, they lose access to what little social protection they have. We see this in South Asia in particular, where migration duration is typically shorter. This could explain in particular why access to government relief is lower in India and Nepal at destination compared to source. Recognizing this, policies and social protection should be adapted to regional migration patterns.

ACCESS TO SOCIAL PROTECTION

Social protection are programs and policies that are aimed at protecting people from poverty and exclusion. In theory, they should help individuals cope with weather-related impacts as well.

Unfortunately, ILO data on social protection coverage across countries in our study indicates low reach across all countries (see table below on national social protection coverage), though health-related social protection coverage is stronger in Indonesia and the Philippines.[79] Low access and coverage to social protection is often related to multiple barriers such as domicile documents requirements which migrants usually lack, confusing eligibility criteria, portability constraints such as inability to access schemes at migrant locations, and limited information about schemes which often leads to limited or no knowledge among migrants.[80]

Country	Population covered by at least one social protection benefit (excluding health)	Population affiliated to a social health protection scheme
Bangladesh	28.4%	Not available
India	24.4%	20.2%
Indonesia	27.8%	81.3%
Nepal	17%	10.9%
Philippines	36.7%	90.4%
Global Average	**46.9%**	**66%**

Source: ILO Social protection platform [81]

It is, thus, not surprising that for populations that are already vulnerable, such as low-income communities and the informally-employed, that weather events could lead to or exacerbate issues such as food insecurity and health issues, especially in South Asian countries. While some individuals do receive emergency relief, broader and longer-term support that mitigates the negative impacts of weather events is lacking.

Evidence indicates the significant role social protection could play as a response to the impacts of extreme events – it could overall reduce vulnerability, act as a key response mechanism, reduce negative coping mechanisms adopted during such crises, and support in facilitating mitigation and adaptation measures.[82] Therefore, it is essential that policymakers, civil society, and employers, all consider how to protect communities they are engaged with and the role social protection could play in protecting them. Those designing social protection systems should consider critical gaps creating such access barriers for migrants while understanding the assistance that migrants really need to cope with such weather events.

Internal migrants in cities face additional challenges and exclusions stemming from a complex interplay of factors. In addition to restrictive eligibility criteria tied to official residence, which excludes them from social protection programs and hinders their access to healthcare, housing assistance, and other essential benefits, the informal nature of their work (i.e that is not necessarily monitored by the government) also can leave them susceptible to exploitation, low wages, and unsafe working conditions. Coupled with a lack of legal status and limited bargaining power, migrants can become further marginalised in the urban labour market. This is particularly true for women migrants, who experience even greater financial vulnerability, earning 20% less than men[83] for the same work while facing heightened risks of exploitation and unsafe environments. Inadequate housing and limited access to basic services like water, sanitation, and electricity further compound their vulnerability.

WOMEN IN DOMESTIC WORK

26% of women in our total destination sample were engaged in domestic work; out of the women surveyed in Nepal and Bangladesh, 41% and 40% respectively were working as domestic workers. In this sector, women face particular struggles as they often work for private households, may not have well-defined terms of employment, and may be excluded from existing labour protections. In addition, women domestic workers face challenges of lower wages, unregulated and long work hours, no guaranteed days off, and limitations on movement.[84]

In countries where there are specific laws, implementation is typically weak, such as in Bangladesh.[85] As a result, domestic workers struggle to access minimum wages, social protection or workplace safety and health to which they are legally entitled.[86] In other countries, such as in India, there is no legal framework addressing domestic work and this sector of workers cannot be addressed under existing labour laws due to the missing interpretation of, and ambiguity surrounding, who a domestic worker is, their space of work, and who is their employer.[87]

In the absence of external assistance or support – internal migrants adopt coping mechanisms, both positive and negative, to deal with the impacts of weather events. Negative coping mechanisms such as informal loans, which may have high interest rates, typically have adverse effects on migrant households as they can be difficult to pay back.

FIGURE 5.5

Top 3 coping mechanisms adopted by migrants at destination locations

Bangladesh

- 53% — Received support from family and friends
- 39% — Used savings
- 30% — Loan from informal sources such as moneylenders

India

- 40% — Used savings
- 37% — Received support from family and friends
- 29% — Loan from informal sources such as moneylenders

Indonesia

- 47% — Received support from family and friends
- 35% — Used savings
- 32% — I found additional work at the migrant location

Nepal

- 55% — Loan from informal sources such as moneylenders
- 49% — Received support from family and friends
- 41% — Used savings

Philippines

- 33% — Received support from family and friends
- 23% — No coping mechanism
- 20% — Used savings

Similar to the results at source location, at destination locations, migrants across countries rely on support from family and friends to deal with weather event impacts. These findings were echoed in our FGDs. In Bangladesh, Indonesia and Philippines, support from family and friends was the top-most common coping mechanism while in India and Nepal, it was ranked second.

In South Asian countries, informal loans from moneylenders as a way for coping was common; 63% of migrants surveyed in Nepal, 46% in Bangladesh and 29% in India said taking informal loans was one of the coping mechanisms they turned to. Use of savings to cope with weather events was also commonly used as a coping mechanism across countries, which was highlighted in focus groups in India and Nepal. However, in Indonesia, (32%) of survey respondents at destination locations reported taking on additional jobs or additional family members taking on jobs to cope.

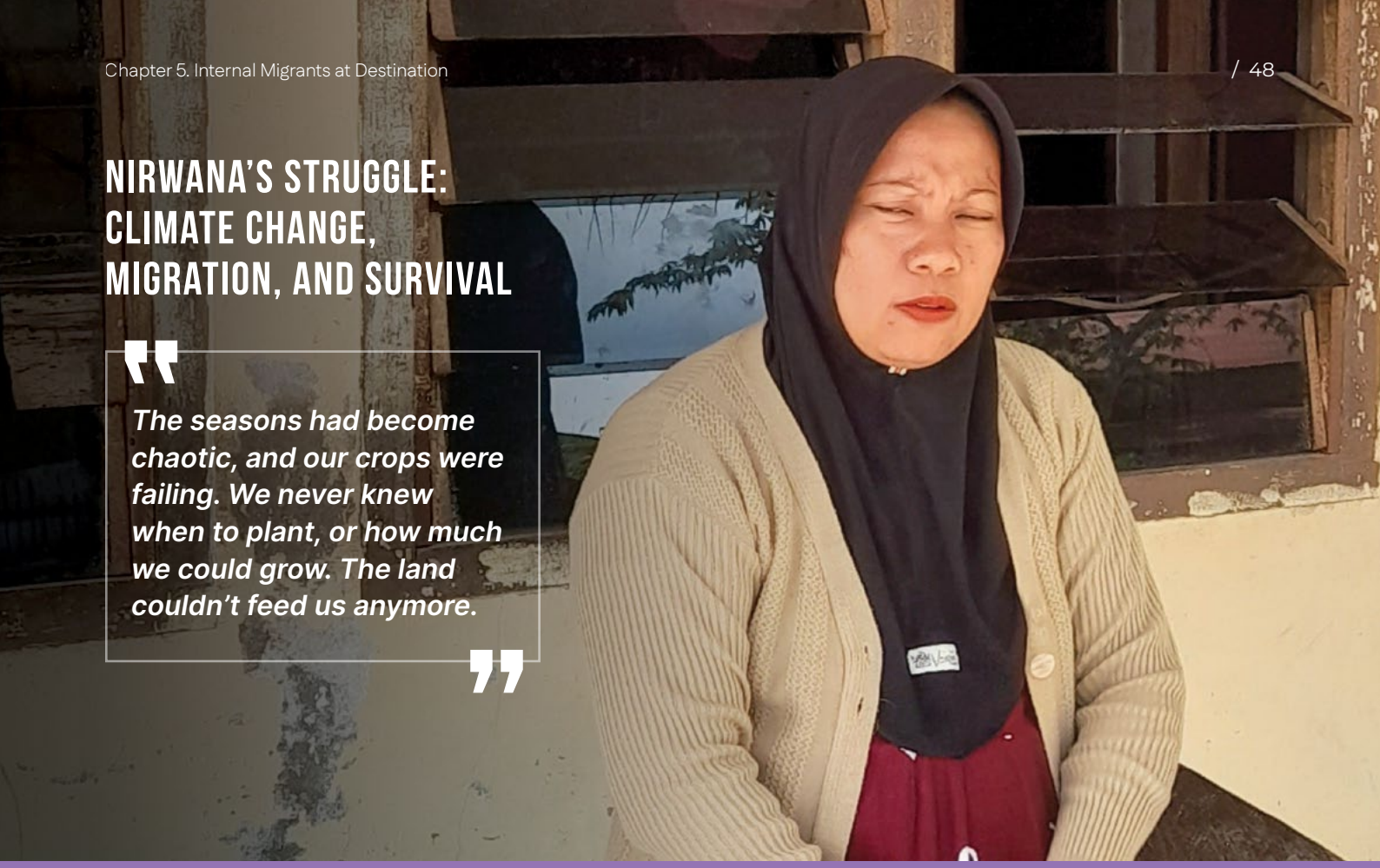
In Nepal (25%) and Indonesia (18%), a number of migrants at destination locations also mentioned that they decreased remittances back to their source locations as a way to deal with the negative impacts of weather events (see annex). As most household members at source heavily depend on the income from remittances, limiting remittances could lead to dual impacts at source and destination locations for migrant families.

More individuals at destination locations spoke about no coping strategies at destination locations when compared to source locations (see annex). In the Philippines, for example, close to a quarter of respondents at destination locations noted they had no coping mechanisms while just over 20% reported a lack of coping strategies in Indonesia. While some coping mechanisms might be more negative than others, having no coping mechanisms highlights the vulnerability of these migrants. If they have nothing to turn to in times of duress and extreme need, they are left with limited options to minimise the long-term impacts from extreme weather or life events.

"What can we think of? What we think never happens in such circumstances. We will work for a week and then go home."

Manoj,
Noida, India
When asked how he faces wage loss during extreme heat

NIRWANA'S STRUGGLE: CLIMATE CHANGE, MIGRATION, AND SURVIVAL



> ***The seasons had become chaotic, and our crops were failing. We never knew when to plant, or how much we could grow. The land couldn't feed us anymore.***

"We cannot rely on the seasons anymore. Climate change has taken that away from us", says 36-year-old Nirwana about her life in the palm oil plantations of Central Kalimantan, Indonesia where she lives with her husband and daughter.

Unpredictable rains and crop failure in her village drove Nirwana to migrate to the palm oil plantations seven years ago. Originally from the remote village of Bontobajinema, South Sulawesi, Indonesia, Nirwana and her family farmed rice for generations. *"Back home, the rains used to be our lifeline. Now, we don't know when the rain will come,"* she informs. The untimely advent of rains and subsequent droughts forced Nirwana's family into a dire situation. In the face of adversity, marked by poor harvests and mounting debts, Nirwana and her husband Arwan made the difficult decision to mortgage their land to pay for their trip to Central Kalimantan. *"Here, we could at least find work in the palm oil plantations. It was our only option,"* explains Nirwana about their decision to migrate, leaving behind their ageing parents.

Life in the plantations in Central Kalimantan is not devoid of weather extremities and hardships. *"The heat is worse here,"* says Nirwana. Adding to this, early and long hours of backbreaking work, lesser wages and exposure to hazardous chemicals are typical to the daily lives of plantation workers. In the heart of Indonesia's palm oil industry, Nirwana mixes fertilizer in a warehouse from dawn until late afternoon. *"We have to pack 250 sacks a day, and sometimes the fumes make me dizzy",* she explains. The extreme heat, exacerbated by climate change, and the chemicals Nirwana handles every day, make her job both physically exhausting and dangerous.

Nirwana recalls 2019 to be a particularly challenging year in the plantation, where she had to continue working amidst the haze and smoke from a nearby forest fire. Indonesia witnessed one of its most devastating forest fires in 2019 caused by the burning of peatlands and exacerbated by prolonged dry seasons and El Niño. Peatlands, highly inflammable, are typically cleared to make way for palm oil cultivation through the slash and burn technique. This directly puts the health of plantation workers at risk due to the fine particles of pollutants from smoke causing severe respiratory and cardiovascular issues.

Migrants in labour-intensive sectors, such as palm oil, are particularly vulnerable, as they often work outdoors or in conditions exacerbated by changing weather conditions. Apart from increasing heat, untimely rains pose a significant challenge for Nirwana and her family. With the rains comes a stop to most work in the plantations, resulting in wage loss for workers. The unpredictability of rains has increased uncertainty, as earlier prior to monsoon season, they would be able to accumulate enough to be able to cope with the limited or no income during this period. Nirwana informs, *"Maybe the rains could come again. But for now, we will keep working and saving."*

Despite the hardships, Nirwana and her family are determined to survive. They work tirelessly. They have finally reclaimed their land in Sulawesi. Yet, the prospects of returning home seem distant. Nirwana's hopes now comprise of a better future for her daughter, Humairah. *"I want her to study and have a better life,"* she says with a note of hope in her voice. *"I don't want her to end up like me, working in the fields or factories, always worried about the weather and debt."*

CHAPTER 6. KEY TAKEAWAYS AND RECOMMENDATIONS

6.1 KEY TAKEAWAYS

Weather is already impacting the wellbeing of internal migrants, and climate change will likely make this much worse.

90% of internal migrants surveyed report having been impacted by weather, either at source or destination locations. Multiply these results by the estimated number of internal migrants in the five countries studied here, 200 million, and the number of people negatively impacted by weather events is an enormous number - 180 million of the most vulnerable people in these countries are already being negatively impacted by weather. That so many migrants already report being impacted by weather is a stark reminder that as climate change results in more intense and more frequent extreme weather events, current migrants are likely to experience even more impacts, and more of those living in precarious economic situations but not yet resorting to migration will likely start migrating.

Heat is ranked as one of the top three weather impacts faced by internal migrants.

This is particularly true for migrants at destination, where heat was ranked as the dominant weather impact faced in almost all countries – Bangladesh (86%), India (77%), Nepal (75%) and Philippines (65%), except Indonesia (52%) (where it was ranked second, after flooding). However, heat is also an issue at source, though currently it is ranked second or third in all but Bangladesh (where 70% rank it first). Because of climate change, heat will, without question, continue to rise in the next several decades posing serious challenges to people's health and wellbeing. Heat is already the leading cause for extreme weather-related deaths; if adaptation actions are not taken, the consequences will be catastrophic.

Impacts to primary livelihoods and occupations of internal migrants are already severe, this will likely worsen as the frequency and intensity of weather events increase.

Across source and destination locations in all five countries, income-related impacts due to weather events were widespread. At source locations, migrants in South Asian countries predominantly faced wage loss (57% to 74%), crop loss (43% to 73%) and wage cuts (41% to 56%), while in Southeast Asian countries, job loss (37% to 64%) was prominent. At destination, most migrants faced wage loss (39% to 57%) and wage cuts (40% to 56%). As frequency and intensity of weather events increases, such livelihood or work-related impacts could also further intensify.

Social protection coverage and access, especially in the South Asian countries covered in our survey, is low, even compared to informal workers in general.

Survey respondents, other than in the Philippines (where 75% of respondents at source and 46% of respondents at destination noted they received government support), indicated they receive limited social support from government or NGOs. For example, as little as 6% to 22% of respondents at source (excluding the Philippines) and 3% to 18% migrants at destination (excluding the Philippines) reported receiving emergency relief during or after a weather event. We know due to domicile requirements, internal migrants are often denied services and protections, and even union membership, available to other informal sector workers at destination. Additionally, seasonal migration, i.e., people moving for part of the year, can limit people from accessing supports/services they are eligible for, at source. As a result, they rely on family, friends, and negative coping strategies, such as taking out high interest loans, to address the impacts of extreme weather and other life shocks. While relying on family and friends can be supportive, when respondents migrate, they effectively leave behind their social and economic support system, presumably exacerbating their vulnerability.

Women migrant workers are particularly invisible as they are less likely to be recognised as workers and work in sectors where social protections are less likely to reach.

Our survey results also indicated that domestic work is a dominant sector for female migrants (26%). This is important information, because the domestic work sector is one in which social protections are least likely to reach, leaving many of these women with limited support.

Women made up 25% of our survey respondents providing us with insight into drivers of migration, livelihoods, and weather impacts for female internal migrants in particular. In terms of drivers, outside of the Philippines, marriage did not factor as a primary reason for migration for women, which was surprising given that most national surveys suggest marriage to be the main reason for female migration. In our survey results, marriage was listed roughly equally often for male and female respondents. This implies that women are economic migrants as often as men, but this is not yet broadly recognised.

6.2 RECOMMENDATIONS FOR ADDRESSING INTERNAL MIGRANT VULNERABILITIES

The countries covered in this study face distinct challenges. In this section, based on insights, the most pressing issues that emerged from this research, and our experiences working in this field, we share broad recommendations to tackle these challenges. Critically, while each of these recommendations may be targeted at distinct stakeholders, a multi-faceted approach that involves government, industry, philanthropies, workers, and communities working together is needed in order to build a more resilient workforce capable of adapting to the challenges of a changing climate.

These recommendations fall into two categories: 1) addressing the climate risks internal migrants face today and are likely to face in the future and 2) addressing the general vulnerability of internal migrants. In addition, we share some specific recommendations for donors—philanthropies, bilaterals, and multilaterals—to address the evidence-to-action gap across climate, migration, and social protection.

6.2.1 Manage climate risks faced by internal migrants

The specific needs of internal migrants vary by country, and within each country, by source and destination locations. Results from our survey are indicative of the most pressing issues that should be addressed to reduce internal migrants' vulnerability and their exposure to climate risks.

Strengthen climate policy

1. **Prioritise action to address weather events which have the greatest negative impact on migrants (as indicated in our survey findings).** For example, all countries should prioritise actions to address increasing heat; drought should be a key additional priority for India, Nepal, and Indonesia.
2. **Design social protection and assistance programs that target the negative impacts of extreme weather events on livelihoods and households while strengthening coping mechanisms for migrants.** For example, mitigating house damage would be a key priority for source areas in the Philippines hit by typhoons. Similarly, income and employment assistance programs, as well as investment in crop insurance and climate-resilient agriculture should be a key priority to tackle wage loss and crop loss at source locations in other countries.
3. **Promote partnerships between governments and community-based networks such as nonprofits, community-based institutions, and unions to improve access to emergency relief as well as longer term support.** In Indonesia, Nepal, and Bangladesh, migrants reported receiving support from NGOs in similar or even higher numbers compared to relief from the government. Systematic partnerships across institutions/organisations will boost access to support.

Address key gaps in climate response

1. **Address needs beyond immediate post-event relief.** Findings show that even where people receive external support, it is generally limited to food, first aid and cash transfers. While immediate relief is critical, additional support can help migrants to minimise impacts from extreme weather events and/or build long-term resilience. For example, access to insurance helps address the financial impact of health issues or crop loss from a typhoon. Similarly, improving early warning signals, clear communication on actions to take when those signals are received, and pre-emptive support including anticipatory assistance (e.g., cash transfers before imminent events) can help to reduce food insecurity and improve wellbeing post event.[88] For example, targeted work-based cash transfers under MGNREGA in India, which served as a 'buffer' during drought-induced crises[89] as well as during floods,[90] allowed households to maintain their livelihoods and food security.[91] To do this effectively, governments will need to invest in risk assessment, ongoing monitoring, and develop localised plans in collaboration with communities likely to be affected by extreme weather.
2. **Address both slow onset and fast onset weather events.** Fast onset events like floods, hurricanes, and extreme heat waves draw attention and aid. But our study results indicate slow onset events like drought, extreme rainfall, and slowly increasing heat stress are equally problematic, yet we know they are less likely to draw support. These findings align with other research; a 2023 UNFCCC report on slow-onset events acknowledges a 'notable gap in institutional and policy responses to slow-onset events' and highlights their lack of 'immediate visibility and dramatic impact' compared to rapid-onset disasters.[92] Urgent action and policy focus are warranted.
3. **Implement heat action plans and labour occupational health and safety standards, particularly at destination.** Every local-government – especially in cities – should implement a heat action plan that combines infrastructure and urban planning investments, social services such as healthcare assistance, advisories for work schedule adjustments, and public awareness. For example, the Ahmedabad Heat Action Plan[93] in India and Philadelphia's Heat Health Emergency Plan[94] in the USA include specific measures to protect outdoor workers and training on heat illness prevention. Local governments and labour departments should work together to integrate ILO conventions and occupational health and safety standards relating to heat to meet the needs for different types of industries and workers.

6.2.2 Reduce the vulnerability of internal migrants

Over the long-term, governments need to work towards enabling an umbrella of protections to help vulnerable people, including internal migrants, cope with life and climate shocks. This, coupled with stronger delivery systems leveraging digital public infrastructure and simplified processes would help translate policy into resource access. Recommendations below address issues around specific exclusions that internal migrants face in access to social protections and support services.

1. **Introduce/expand portability of entitlements to ensure people can access their entitlements no matter where they migrate to/work in the country, without being subjected to restrictive domicile requirements.** This would address the gap in coping capacity that internal migrants face when they migrate. For example, the Government of India introduced the 'One Nation, One Ration' scheme that ensures people eligible for the national food assistance program can access their entitlement at any place in the country.
2. **Promote the formalisation of informal workers and/or ensure that informal workers – including gig workers – have access to basic social protections and protection under labour laws.** For example, informal workers can be registered in government databases and recognised as workers. Connecting such databases to social protection (e.g., for employment support) and government service systems (e.g., for accessing emergency relief) would improve the visibility of informal workers, including internal migrants, as well as strengthen policy design and access to these systems.
3. **Strengthen private sector participation in social protection access and financing for workers in their supply chains**
   a) Introduce regulations and guidelines for employers in highly informal sectors (e.g., construction) to track and facilitate access to social protections for those working/employed by contractors and sub-contractors.
   b) Establish employer financial contributions and support for social protection access. For example, companies can be charged a small government tax on profits / revenue or employers can directly ensure access to key protections via mandated CSR programs.
4. **City governments should include internal migrant considerations in planning and development and support services in recognition of their value to the city**
   a) Cities with large migrant populations and those that depend on the migrant workforce should extend coverage of social assistance programs to migrants and integrate their needs and perspectives in urban plans. For example, cities can establish migrant support centres in areas with high migrant populations, which can serve as hubs for information and access to key services.
   b) City response plans such as construction bans due to pollution, water shortages should consider the impact on daily-wage workers, including migrants, and provide basic assistance (e.g., food support) for the impacted period.

6.2.3 Philanthropic, bilateral, and multilateral contributions

1. **Fund research and pilots to bridge the evidence-to-action gap.** Recognizing internal migrants are an invisible group, targeted research should be conducted to understand the specific needs and vulnerabilities of internal migrants, especially women. These studies should be quite granular, accounting for the significant source-destination, country-to-country variation seen in this study, as well as the rapidly changing climate landscape (i.e., increasing intensity and frequency of heat events). Funders should prioritise research that addresses knowledge gaps of key policymakers (e.g., labour and environmental agencies) and industry actors (e.g., investors and large businesses in migrant-heavy sectors such as construction) with the power to drive large-scale action.
2. **Fund social protection and other adaptation pilots that can be scaled by policymakers and businesses.** Funders can invest capital to test and evaluate what social protection, adaptation, and mitigation investments are most effective. Such investments can clarify scalable solutions and build confidence in models that policymakers and businesses can adopt. Examples of context-specific models that address key needs across source and destination include:
   - At source: fund agricultural climate resilience, adaptation, and mitigation solutions. Support could range from improved seeds and technology for improving productivity to crop insurance and parametric insurance to address crop loss.
   - At destination: fund programs designed to improve working conditions, labour practises, and health care access, and advocate with key actors such as investors and corporate entities to address risks faced by informal workers more broadly.
3. **Collaborate with community-based organisations and networks to cover those who are missed by government systems.** Working with community-based organisations and networks leverages the understanding and last-mile distribution of such networks. Work could focus, for example, on strengthening the ability of people to access government support systems by identifying, in detail, the barriers internal migrants face, building recognition of these challenges, and developing and advocating for realistic and cost-effective solutions.

6.3 CLOSING REFLECTIONS FROM SPEAKING TO 23,915 PEOPLE

While there are many different reasons people choose to migrate, for millions of people, migration is a critical livelihood strategy. And for many, this strategy works. However, our study also shows that extreme weather events and limited access to social protections is furthering their vulnerability. At both source and destination locations, our study showed that migrants have limited coping capacity for extreme weather events, and they are not prepared for increased impacts due to climate change. Our study also underscores the invisibility of these populations, the difficulty in tracking them, highlights that aid is not reaching them, and our FGD data illustrate the ways current mechanisms designed to support them are not being enforced.

Solutions—in many cases, simple policy improvements coupled with better enforcement could address these gaps—are needed at both source and destination locations. Migrants are vulnerable in both locations, but in different ways and for different reasons. We need to develop packages of solutions that support them regardless of where they are. However, running this study across five countries highlighted both commonalities, but more importantly, differences.

One-size-fits-all solutions clearly won't work. It is only by understanding the contextual nuance across South and Southeast Asia that we can better adapt working solutions from one location to another. And we need to; climate change is rapidly intensifying, and we need solutions that can keep up with these changes including solutions that remove the onus on migrants to adapt on their own to a rapidly changing risk landscape. Rather, solutions need to lie within policy and government mechanisms structured to address migrant needs.

The role of local, community-based actors cannot be understated. This research was – for the most part – executed by research-oriented grassroots organisations. They had staff and volunteers on the ground and close ties with communities which enabled richer, detailed conversations. Such actors are well placed to bring out the voice of the internal migrant communities and collaborate on designing and delivering solutions.

Internal migrants are phenomenally resilient people. Participatory and inclusive planning and action that create supportive, enabling environments that allow them to not just survive but thrive, will provide economic benefit far outweighing the cost.

ANNEXURE

DEMOGRAPHICS TABLES

TABLE 7.1 Age distribution of migrants surveyed

Country	18 - 24	25 - 34	35 - 44	45 - 59	60 and above
Bangladesh	17%	34%	29%	18%	2%
India	15%	38%	30%	15%	1%
Indonesia	7%	24%	45%	22%	1%
Nepal	21%	34%	26%	18%	1%
Philippines	13%	22%	24%	24%	17%

TABLE 7.2 Gender distribution of internal migrants surveyed

Country	Male	Female	Others
Bangladesh	58%	42%	0%
India	83%	17%	0%
Indonesia	73%	27%	0%
Nepal	67%	33%	0%
Philippines	60%	39%	1%

TABLE 7.3 Education level of internal migrants surveyed

Country	Illiterate	Literate without formal education	Up to primary level	Up to secondary level	High school (NA for Nepal)	Diploma/ certificate course (NA for Nepal	College graduate	Post-graduate
Bangladesh	30%	33%	22%	7%	3%	0%	3%	2%
India	26%	15%	35%	15%	7%	0%	1%	0%
Indonesia	1%	2%	14%	21%	55%	2%	4%	0%
Nepal	20%	22%	34%	22%	NA	NA	1%	0%
Philippines	0%	5%	12%	27%	27%	10%	15%	4%

TABLE 7.4 Religion of internal migrants surveyed

Country	Buddhism	Christianity	Hinduism	Islam
Bangladesh	0%	1%	4%	95%
India	0%	1%	86%	10%
Indonesia	8%	1%	0%	91%
Nepal	12%	10%	76%	1%
Philippines	0%	96%	0%	1%

DETAILED TABLES

TABLE 7.5 Reasons/Drivers of internal migration

Country	Lack of job opportunities	Marriage	Lower wages	Livelihood related challenges	Loan repayment	Land damage or destroyed	Shelter damaged/destroyed	Land related challenges – land loss	Disasters	Long-term changes in weather	Conflict
Bangladesh	71%	3%	69%	71%	15%	14%	5%	8%	10%	1%	0%
India	55%	5%	76%	37%	30%	16%	4%	5%	6%	4%	0%
Indonesia	63%	9%	46%	57%	10%	1%	1%	7%	3%	11%	1%
Nepal	67%	6%	55%	85%	30%	2%	5%	5%	7%	7%	0%
Philippines	54%	29%	27%	25%	6%	8%	4%	8%	8%	5%	3%

TABLE 7.6 Total migrants surveyed at source with exclusions

Migrants surveyed at source	Migrants surveyed at source locations who faced impacts at only source or both - source and destination locations	Excluded migrants from chapter 4	
		No. of migrants surveyed at source but did not face any impact	No. of migrants surveyed at source but only faced impact at destination locations
15,317	11,326	1,711	2,280

TABLE 7.7 Primary livelihoods at source locations

Country	Farm own land	Agri-cultural labour-er	Animal hus-bandry	Fishing	Shop/ busi-ness owner	Shop/ busi-ness worker	Factory work	Con-struc-tion work	Brick kiln	Mining	Power sector	Remit-tances	Ce-ment	Steel plant	Trans-port
Bangladesh	17%	58%	14%	2%	2%	2%	3%	9%	3%	0%	0%	0%	0%	0%	4%
India	35%	76%	29%	5%	3%	3%	14%	34%	17%	2%	0%	1%	2%	0%	1%
Indonesia	73%	62%	14%	7%	5%	4%	1%	3%	0%	0%	0%	0%	0%	0%	0%
Nepal	57%	59%	62%	4%	4%	3%	2%	35%	5%	0%	1%	0%	13%	7%	11%
Philippines	57%	56%	33%	25%	4%	10%	6%	2%	0%	1%	0%	1%	0%	0%	2%

TABLE 7.8 Coping mechanisms to deal with negative weather impacts for migrants at source locations

Country	Re-ceived support from family and friends	Loan from formal insti-tutions such as banks	Loan from informal sources such as money-lenders	Use savings	I migrat-ed	My family mem-ber(s) migrat-ed	Children re-moved from school	Re-duced number of meals	Addi-tional family mem-bers took on jobs locally	I found addi-tional work locally	Increase in remit-tances from migrant family mem-bers	Support from govern-ment	Support from CSOs	None
Bangladesh	32%	20%	46%	31%	45%	0%	0%	0%	1%	0%	0%	0%	1%	0%
India	33%	15%	29%	31%	40%	8%	4%	2%	1%	1%	1%	1%	0%	6%
Indonesia	53%	17%	8%	15%	58%	4%	0%	1%	5%	8%	0%	6%	4%	5%
Nepal	67%	29%	63%	36%	1%	2%	6%	25%	11%	3%	1%	7%	3%	1%
Philippines	66%	20%	15%	5%	2%	2%	1%	6%	1%	2%	1%	2%	0%	3%

TABLE 7.9 Total migrants surveyed at destination with exclusions

Migrants surveyed at destination	Migrants surveyed at destination locations who faced impacts at only destination or both - source and destination locations	Excluded migrants from chapter 5	
		No. of migrants surveyed at destination but did not face any impact	No. of migrants surveyed at destination but only faced impact at source locations
8,598	4,517	701	3,380

TABLE 7.10 Occupations of internal migrants at destination location

Country	Construction worker	Brick kiln	Textile industry worker	Factory worker	Domestic work	Digital platform worker	Food processing	Cleaning/ waste processing	Mining	Power sector	Other manufacturing	Cement	Steel plant	Plantation workers	Not found employment
Bangladesh	8%	0%	12%	9%	23%	0%	8%	0%	0%	0%	1%	0%	0%	-%	4%
India	71%	11%	2%	15%	15%	0%	0%	12%	1%	0%	1%	11%	0%	-%	3%
Indonesia	8%	0%	0%	27%	5%	2%	7%	1%	1%	2%	6%	0%	0%	28%	0%
Nepal	48%	10%	4%	13%	17%	1%	5%	3%	0%	1%	13%	15%	12%	-%	0%
Philippines	12%	2%	2%	15%	6%	2%	5%	6%	0%	2%	7%	1%	0%	1%	16%

TABLE 7.11 Duration of migrant living at destination location

Country	Less than a month	1 month to less than 1 year	1 year to less than 3 years	More than 3 years
Bangladesh	1%	9%	61%	30%
India	11%	30%	16%	43%
Indonesia	4%	2%	17%	76%
Nepal	8%	37%	14%	41%
Philippines	2%	7%	25%	66%

TABLE 7.12 Coping mechanisms to deal with negative weather impacts for migrants at destination locations

Country	Received support from family and friends	Loan from formal institutions such as banks	Loan from informal sources such as money-lenders	Additional family members took on jobs locally	I found additional work at the migrant location	Used savings	None
Bangladesh	53%	9%	30%	2%	11%	39%	9%
India	37%	22%	29%	6%	19%	40%	10%
Indonesia	47%	2%	2%	14%	32%	35%	22%
Nepal	49%	11%	55%	9%	6%	41%	6%
Philippines	33%	9%	15%	6%	18%	20%	23%

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