



University of  
Nottingham  
Rights Lab

# Climate change, migration and human trafficking

Assessing the impact of climate change, migration,  
and human trafficking risks for populations in the  
Bangladesh and India Sundarbans



Funding partners



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# Abstract

The Sundarbans region of Bangladesh and India face several climatic risk factors, and for communities in the area they can be compounded by social, economic, and political struggles. Primary data on the ‘human trafficking-environmental degradation-climate change nexus’ for decision-making has been lacking with an emphasis on the use of proxy data. Being able to fill gaps with evidence from the communities being directly affected by such issues is important to be able to develop support mechanisms that are situation-specific, useful, and easy to access, and which reduce the vulnerabilities of communities and thus their risk of exploitation.

In this report, we outline a three-pronged research project funded by CAFOD in partnership with Caritas Bangladesh, Caritas India and OKUP (all in-country), with research being led by researchers at the Rights Lab (University of Nottingham). First, a review of the current academic and grey literature on topics related to migration, human trafficking and climate change was undertaken. This was followed by a series of in-country stakeholder interviews to gather evidence from organisations and officials to compare against household survey data with communities across the Sundarbans in both India and Bangladesh. Findings indicated that there was a link between climate change factors and the choices households made with regards to livelihoods and migratory practices. Issues of debt bondage, human trafficking and forced marriage were identified, and contrasting viewpoints between stakeholders within the regions, and those who are on the forefront of such impacts were notable.

The research presented took place between May and November 2022 with the aim of feeding into a series of intervention programmes run by Caritas India, Caritas Bangladesh and OKUP – funded by CAFOD – following the conclusion of the research project until December 2023.

# Authorship

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# 1. Introduction

Climate change is no longer an issue that can be denied. In the 2022 IPCC report on climate change threats, it was noted that accelerated action is necessary to ensure that the Sustainable Development Goals (SDGs) can be achieved (IPCC 2022). The SDGs (UN 2016) outlined a series of ambitious goals that aim to tackle some of the most pressing social and ecological issues. There are several issues related to the intersection between climate, migration and vulnerability to human trafficking that are themes integral to the research presented in this report (**Figure 1**).

	<p><b>1.5:</b> By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.</p>
	<p><b>5.2:</b> Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.</p>
	<p><b>8.7:</b> Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms.</p>
	<p><b>8.8:</b> Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.</p>
	<p><b>10.7:</b> Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.</p>
	<p><b>13.1:</b> Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.</p>
	<p><b>13.2:</b> Integrate climate change measures into national policies, strategies and planning.</p>
	<p><b>13.3:</b> Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.</p>
	<p><b>13b:</b> Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities.</p>
	<p><b>16.2:</b> End abuse, exploitation, trafficking and all forms of violence against and torture of children.</p>

Figure 1: Key SDG targets identified as relevant to the research project undertaken within the Bangladesh and Indian Sundarbans.

According to the latest Global Slavery Index estimates (Walk Free 2018) 592,000 people were subjected to modern slavery in Bangladesh, with a further 7.9 million in India. Modern slavery is defined as “the status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised” (Research Network on the Legal Parameters of Slavery 2012). The definition is an umbrella term which accounts for multiple forms of exploitation including forced labour, debt bondage and forced marriage amongst others. In some contexts, this terminology is used interchangeably with human trafficking, but human trafficking requires the transport, coercion and benefit of a work or service (US Department of Justice 2022) – which is why both shall be referred to within the report due to the context of migrant workers being exposed to both modern slavery and human trafficking risks. However, it is not only social issues related to human trafficking and modern slavery that need to be considered.

Bangladesh is predicted to be one of the countries most impacted by a changing climate, and the border regions with India provide migration opportunities for communities to remove themselves from such impacts. However, with cyclones, drought, floods, and extreme heat predicted to affect both Bangladesh and India, climate change risks abound. Such hazards – this term is used throughout due to acknowledgement that hazards can be natural in nature, they only become ‘disasters’ due to the presence of anthropogenic means such as settlements (see UN-ICSU 2012; Chmutina et al. 2017; Shi 2019) – are likely to lead to the migration of people both internally, and across borders often (from Bangladesh to India), with some travelling further internationally.

Alongside migration, vulnerability to trafficking has been identified as part of the theory of the ‘human trafficking/modern slavery-environmental degradation-climate change nexus’ (Coelho 2016; Brown et al. 2019; Decker Sparks et al. 2021; O’Connell 2021); where migration is an added dimension generating or compounding the risks faced by vulnerable communities. The ‘nexus’ is a multi-directional theory where climate change can be viewed as a driver of modern slavery and human trafficking; but the activities in which communities are subjected to exploitative practices can also be an active driver of ecological degradation, inadvertently increasing the impacts of climate change (Jackson et al. 2021). For example, brick kilns are a largely polluting sector due to the lack of air filters and the fuel types used; these emissions can be fuelled by the exploitative employment of workers, meaning the emissions generated by those subjected to human trafficking and modern slavery drive climate change (Boyd et al. 2021). Such activity may have an impact on the wider environment – in Cambodia these emissions have been linked to climate change, increased drought, and crop failures which have meant communities have migrated to urban areas for work. Work opportunities are linked to exploitative practices in these brick kilns that contributed to the generation of climate change impacts in the first instance (Brickell et al. 2018). This cycle can vary across geographies and sectors, but the concept is applicable in many industries and geographic scales.

To assess the validity of the theory as well as support for communities, the gathering of data are required to develop support mechanisms and programming that can reduce vulnerabilities and strengthen community adaptation and resilience to climate change.

“According to the latest Global Slavery Index estimates (Walk Free 2018) **592,000 people** were subjected to modern slavery in Bangladesh, with **a further 7.9 million** in India.”



In this research project we aimed to provide primary evidence to understand the impacts of climate change upon communities, household resilience and support needs. We also provide recommendations and data to strengthen the development of intervention implementation to engage with participant communities in the future. The research presented here contains three distinct elements following the independent development of a theory of change (TOC). First, a review of the current academic and grey literature on topics related to migration, human trafficking and climate change was undertaken. This was followed by a series of in-country stakeholder interviews to gather evidence from organisations and officials to compare against household survey data from communities across the Sundarbans in both India and Bangladesh.

The research presented took place between May and November 2022 with the aim of feeding into a series of intervention programmes run by Caritas India, Caritas Bangladesh and OKUP – funded by CAFOD – following the conclusion of the overall project planned for December 2023.

## 2. Theory of change

Assumptions: Belief ■ Weak evidence ■ Evidence-based ■

### Impact

Reduced prevalence of unsafe migration, modern slavery and trafficking and increase in flourishing livelihoods of the most vulnerable in the climate-vulnerable Sundarbans region.

Risky migration reduces if the full set of needs of potential migrants are met.

### Long-term outcomes

Community voice and agency against unsafe migration, modern slavery and trafficking are strengthened and viable sustainable livelihoods promoted through evidence-based and effective approaches.

Key stakeholders in Bangladesh and India take concerted action to safeguard against trafficking and modern slavery in the climate-vulnerable Sundarbans region.

Efficient, effective sustainable livelihood options and community mobilisation approaches can be scaled up.

### Outcomes

The links between climate change, environmental degradation, migration and modern slavery in the Sundarbans are better understood and evidenced.

Communities and individuals are united and more resilient to avoid modern slavery traps including forced labour, prostitution and trafficking.

Policy makers and key stakeholders in Bangladesh and India understand the need to safeguard against trafficking and modern slavery and support the promotion of climate resilient livelihoods.

Availability of employment and livelihood opportunities.

Vocational skills training and livelihood support is effective and sustainable.

Government is willing to support potential climate migrants.

### Outputs

Action research strengthens the understanding of the links between climate change and modern slavery, the gender dynamics of risky decision making, and vulnerability issues.

Vulnerable individuals and households have the skills and funds to develop sustainable livelihoods.

Community structures raising awareness of modern slavery and unsafe migration are established/strengthened.

Key stakeholders are aware of the links between climate change and modern slavery.

Communities recognise the links between climate change and migration.

Government is open to consider programmes supporting potential climate migrants.

### Activities

- Detailed assessment of the links between climate change, environmental degradation, migration and modern slavery (CAFOD).
- Longitudinal research into links between climate change and modern slavery (OKUP).

- Information campaigns on climate change and modern slavery (CB and OKUP).
- Development of community-level climate and safe migration actions plans (CI).
- Training on agroecological and climate resilient techniques (CB and CI).
- Life skills training and careers counselling (OKUP).
- Entrepreneurship development training and follow up (CB).
- Vocational skills training (MAWTS –technical schools) (CB).
- Seed funding for small businesses (CB).

- National-level advocacy on links between climate change and modern slavery (OKUP).
- Form/activate Counter Trafficking Committees (CB and OKUP).
- Disseminate evidence through action research on links between climate change and modern slavery (CB, OKUP & CI).
- Advocacy events with Government (OKUP).

Figure 2: Climate induced migration and modern slavery in the Sundarbans region of Bangladesh and India as produced by CAFOD, Caritas Bangladesh, Caritas India and OKUP.





## 3. Aims and objectives

### 3.1 Aim

To move from theory to quantified evidence in the understanding of the intersection between trafficking, migration, and climate change along the Bangladesh-India border, to support active programming for climate resilience in communities.

### 3.2 Objectives

- Identify current thinking on the connections between modern slavery, climate change and migration both broadly and with a focus on the regions of interest in India and Bangladesh.
- Establish the current expert understanding of these interconnected issues to identify areas for awareness raising and advocacy within programming activities.
- Elucidate trends and issues faced by vulnerable communities associated with modern slavery, climate change and migration.
- Provide clear evidence from the data to support the implementation of programming in communities at risk of human trafficking, migration, and climate change to improve resilience.

## 4. Research questions

- What impacts from climate change (such as flooding, storm surges, sea-level rise, salt-water intrusion) influence the choices around migration and vulnerabilities to human trafficking in the Sundarbans?
- What are the social, economic, cultural, and climatic factors that mean people migrate between sectors, within the country, or cross-border in Bangladesh and India?
- How does vulnerability to trafficking, migration and climate change vary along the Bangladesh-India border?
- What forms of support are required to ensure communities are resilient to climate change, and become less vulnerable to human trafficking when considering migratory action?

## 5. Evidence review

An evidence review of both academic and grey literature sources was undertaken, utilising the geographic locations of the research team to gather a broad range of evidence across continents. This focused on the previous and current work assessing the connections between climate change, migration, and human trafficking from a micro- and macro-level. Locally focused and global assessments were included for studies that focused on the themes of the research questions. The scoping of literature was important in the development of tailored questions for both the key stakeholder interviews and the household community surveys.

### 5.1 Method

The review was conducted by all research partners (Caritas Bangladesh, Caritas India and OKUP) alongside researchers at the Rights Lab. Utilising previously published work, all collaborators identified key literature sources that may be relevant to the study focusing on terms including ‘**climate change**’ (specific search terms including but not limited to ‘flooding, heat, cyclone(s), and global warming’), ‘**migrant/migration**’, ‘**human trafficking**’, ‘**modern slavery**’ and ‘**debt bondage/bonded labour**’. Both UK and US English spellings were used where applicable, and searches were also conducted in Hindi and Bengali. Searches were undertaken independently by researchers from each organisation and utilised search engines including Google Scholar, Web of Science, Scopus, JStor, and Proquest, as well as conducting general searches of the web for relevant articles that may not be academic in nature.

Literature was also gleaned from non-governmental organisations (NGO), civil society organisations (CSO) and intergovernmental body websites through generalised searches and collaborator familiarity with key sources. As a result, a variety of data sources were included with the majority being peer-reviewed academic articles, alongside reports produced by NGOs and intergovernmental bodies. It was important to include such evidence as a variety of work is being undertaken in this space, and the practice – and merit – of including such data within evidence reviews has previously been identified in the modern slavery-environmental assessment literature (Decker Sparks et al. 2021).

All collaborators were engaged in this phase of the research, as although desk-based in nature, the geographic variations can play a role in the identification of key data sources based on both geography and the servers that are included in the search parameters, and the languages that can be identified and accessed. Researchers from the Rights Lab (UK-based) focused on the overarching connections of what is termed the ‘human trafficking-environmental degradation-climate change nexus’ and its connection to migration. Whereas research staff from Caritas India, and Caritas Bangladesh and OKUP focused the search on local and regional knowledge in India and Bangladesh respectively.

Once literature were identified for review they were coded according to the relevancy of the output in relation to the research questions (**Table 1**) based on previous work undertaken by partners in former desk-based literature review of a similar nature. This enabled both the location of existing evidence on such topics in the region, the support being provided to specific groups, and the identification of gaps in provision and focus, and the strength of knowledge to be gathered. These findings helped to tailor the questions for the survey of households in the Sundarbans (both in Bangladesh and India), and the interview questions for key stakeholders.

Table 1: Relevancy scores and parameters for the review of literature by partners.

Relevancy score	Reasoning
1	Aligns clearly with the themes of migration, climate change and human trafficking within the project research questions and has specific geographical and cultural nuance that are important.
2	Aligns with the themes of migration, climate change and human trafficking, but not necessarily all themes included, and they may reference similar geographical regions, but not the Sundarbans.
3	Has some connection to the themes of migration, climate change and human trafficking, but is broader in scope and not linked to the Sundarbans directly. It still contains important details but they are not as nuanced.

For papers that were reviewed by two or more research partner organisations an average relevancy score was calculated. A full list of the articles and reports (amongst other sources) identified and reviewed are available in **Annex A**.

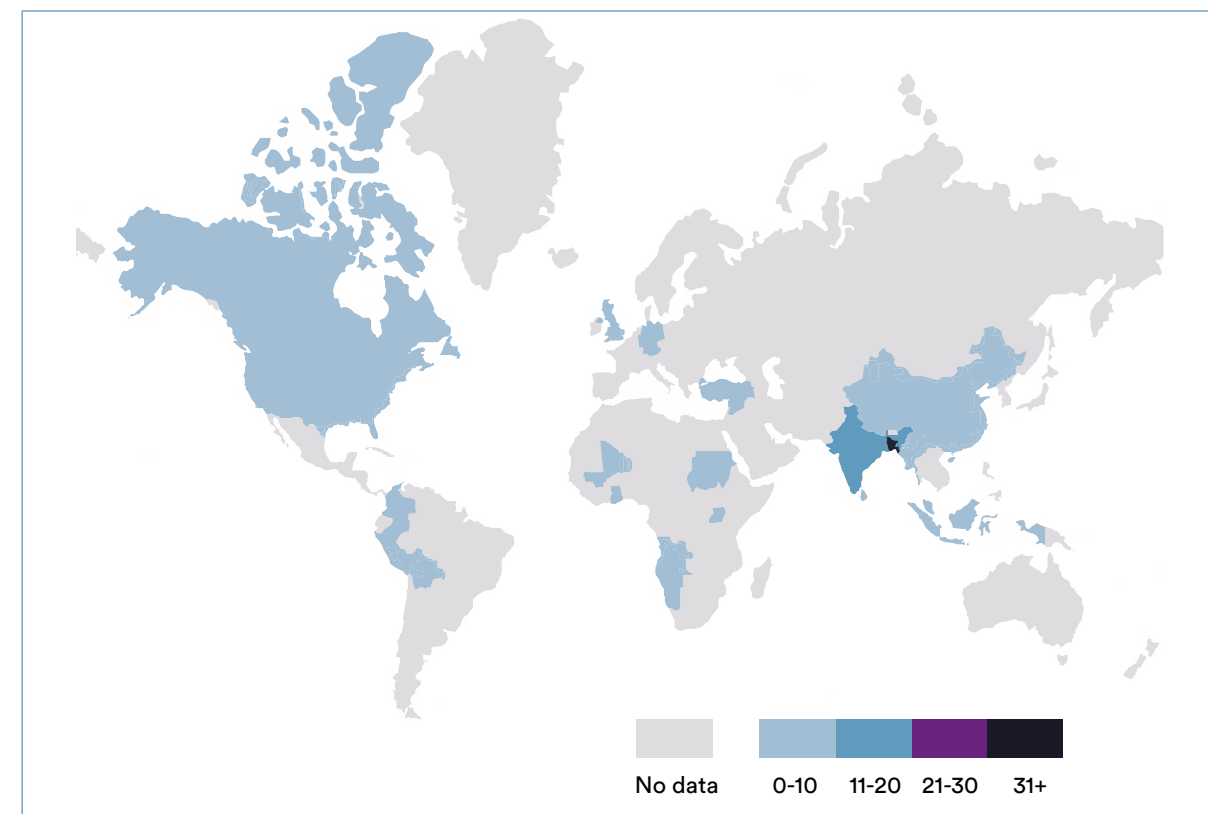
Some sources identified for review were unavailable due to paywalls and geographical access and were therefore noted but not included in the analysis. What we present is a scoping of the literature presently available and is not meant to be a fully comprehensive, thus some texts others may deem relevant may not have been included, nor are some recently released sources. The review was conducted between May-August 2022 and newer sources have been added accordingly when published but may not necessarily have been reviewed.

## 5.2 Findings

A total of 74 reports, academic publications, blogs, and other sources (news reports, policy papers, and theses) were reviewed by all partners with 37 being academic publications and a further 37 identified as grey literature. 18 academic articles were coded as 1 for relevancy: with a further 17 coded as 1 for relevancy in the grey literature. Most of the most relevant literature captured in the evidence review focused on communities directly in the Sundarbans, both in Bangladesh and India, as well as other areas of both countries (**Figure 3**); with only a few papers of the most relevance being focused on wider geographies in their study approaches.

There were several notable considerations within the evidence review but one of the emerging themes was that of the way migration was discussed within the contexts of social and economic factors. For example, Ahsan et al. (2014) note that there has been a shift in the way that migration is perceived overall. It was no longer considered simply as an economic strategy caused by economic factors alone, but a far more complex and nuanced understanding of the drivers are necessary. The authors in the paper noted that much migration is now viewed as being associated with a changing environment – as explored in the broader themes of this research– such as climate change and hazards exposure, as well as political factors that have an increasing effect. Further, there were other papers that identified that migration was used as a coping strategy to offset the impacts of climate change experienced; this concept has been defined as “distress migration” (Bhatta et al. 2015). When combined with the above insights that highlight how this can lead to push factors that may contribute to migration – as well as pull factors, where opportunities can mask and lead to the presence of vulnerability to labour exploitation (Decker Sparks et al. 2021) – the perceived multifaceted nature of choices surrounding migration can also begin to be applied to the income strategies households implement. For example, continued livelihood stresses from

these social, political, economic, and climatic factors can lead to migration being applied by communities as a “livelihood strategy” as noted by Mистри (2013).



**Figure 3:** Map showing the concentration of papers being assessed. Around 40 were in Bangladesh, with around another 20 focusing on India. All other countries that were included in the evidence review were noted on less than five occasions with most only being referenced once. There were many countries not included in the scoping review, and an additional 17 cases which referred to regional or global geographic scopes (such as Asia-Pacific or South East Asia) and thus could not be determined on the map.

One finding noted in the literature were overlapping risks: such as migration routes being linked to the presence of traffickers as nefarious actors often operate and exploit via the same avenues and transport routes migrants use, as well as the environmental factors that expose potentially vulnerable communities to harm, to escape or engage in opportunities. This geographical exposure to risks means that communities are placed in a situation where they may come face-to-face with those who may seek to do them harm. For example, criminal groups may use the disruption caused by climate change hazards to seek out individuals to exploit, and their paths can directly cross as a result (see Coelho 2016). Moreover, in some sectors – such as construction – the convergence of climatic shocks and human trafficking have been noted by Bharadwaj and colleagues (2021) as a form of “converging trauma”, thus suggesting that the two issues of climate change and migratory risk associated with human trafficking should not be investigated, nor should support for vulnerable communities be provided, in silos, but rather intersectional holistic intervention approaches are required.

Interestingly, climate change in and of itself may only, in recent years, have become a specific reason communities have attributed to their reasons for migration, or considered as a greater contributing factor to the household or individual thought process. Previously, hazards may have resulted in migration, but they had not been directly tied to the effects of climate change. As noted by Panda (2010), “climate change is till now not a reason to migrate for many people”. This is a theory that was explored within the survey undertaken in this research (see **Section 7.2**) to assess whether this trend is something still present more than a decade after it was first mentioned. However, in the literature whilst migration was



not explicitly linked to climatic factors previously, there were a few common references to climate change impacts. Many references pertained to the risks of cyclones, riverbank erosion, and flooding. What was clear from the review was how much previous research had focused on the after-effects of acute-onset hazards such as cyclones, but there is now increasingly the development of evidence which suggests that slow-onset hazard occurrences cause prolonged impacts to communities and place them at greater risk of human trafficking (Bharadwaj et al. 2021; 2022).

Perhaps the most clearly outlined support strategy noted in the literature were those associated with livelihood programming, gender-specific skills employment training, and the improvement of social and economic outreach in high-risk areas for climate change effects and human trafficking. These common themes have been noted as areas for potential support development, as well as the implementation of climate solutions (adaptation and mitigation measures for communities), integrating trafficking issues into climate change management plans, and strengthening the safety net for communities at a national level (Bharadwaj et al. 2022; Ministry of Environment 2005). Such evidence was integrated into the household survey tool to assess whether the support needs of communities within the India and Bangladesh Sundarbans wanted to engage with such support or identified other needs that they viewed as priority areas; thus, providing an evidence-base for future intervention and support programming in-country.

“This geographical exposure to risks means that communities are placed in a situation where they may come face-to-face with those who may seek to do them harm.”



## 6. Stakeholder interviews

As part of the development of our understanding of issues on the ground following the evidence review, a series of stakeholder interviews were completed across India and Bangladesh to provide additional contextual information to support our interpretation of the survey findings and the broader support that can be provided to potential migrants at risk of human trafficking both internally and across borders within the Sundarbans.

### 6.1 Method

Interviews were undertaken in June and July by partner organisations. Stakeholders were approached and asked a series of semi-structured interview questions (**Annex B**) which contained topics related to migration, human trafficking risks and climate change experiences from the perspective of community leaders, government officials and other stakeholders. This approach enabled some guidance to be provided to participants on the key research topics, but also allowed for a broader scope of intersecting issues to be explored by the interviewee based on their expertise and personal views (Gill et al. 2008). This method allowed for contextual understanding of migration, human trafficking, and climate change risks for communities across the Sundarbans. Potential interview participants were identified by partners in-country and were approached with a description of the project and the contributions that their insights would make. Written consent was obtained and interviews took place in-person and audio were recorded and transcribed before being deleted. Some interviews occurred online via Microsoft Teams and the same process was undertaken.

Once transcribed and translated, data were coded thematically via NVivo12 by the lead researcher. Qualitative thematic coding is a process by which contextual details are identified and classified to produce a defined series of themes contained within interviews, allowing for the identification of commonalities and differences across stakeholders and their opinions – a similar approach was undertaken for survey responses to open-ended questions (see **Section 7**). For this research an inductive approach to analysis was applied to glean detail about connecting issues that arose to impact households within India and Bangladesh, via thematic content analysis (Burnard et al. 2008).

Overall, data were acquired from 33 stakeholders whose work has influence at several different levels; with district and union leaders, agricultural, fisheries, and forest officials interviewed, as well as NGO workers, teachers, chairmen, and other stakeholders.

### 6.2 Findings

Responses from stakeholders around their understanding of climate change impacts upon communities highlighted commonalities across the India and Bangladesh study regions. Most stakeholders reference cyclones, salt-water intrusion, and flooding within their responses as hazards faced by the majority in the Sundarbans. It was acknowledged in one interview that

“the impact of what we as local people call climate change is increasing day by day”.



When considering the impacts of climate change, some stakeholders identified that

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“slow-onset calamities, people have somewhat adapted to”  
– Stakeholder Interview 32

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which included livelihood alteration strategies (as seen in **Section 7.2**), whereas it was acknowledged that in an acute-onset hazard there was little in way that households could respond in the immediate context.

There were many references to acute-onset hazards, one stakeholder reported the varied impacts felt by contrasting cyclones, with Cyclone Amphan being seen as leading people into situations of illegal activity because of households being damaged, and infrastructure destroyed. Not only did these actions leave communities vulnerable to the exploitation that is often associated with illegal work, but it also placed communities in direct conflict with wildlife and has been noted previously as a key risk to those who have been subjected to forms of modern slavery; for example, human-wildlife conflict with Bengal tigers where some individuals have been mauled whilst being exploited (Jensen 2013; Bales 2016). In addition, although acute hazards were cited, the long-term impacts of multiple hazards were noted as having taken a toll on communities and the compounded effects of these hazards meant that a full recovery had not been made. This was noted specifically in reference to Cyclone Aila in 2009.

Where there was the assumption that many cases were associated with males migrating and potentially being exposed to risks of human trafficking, multiple stakeholders reported concerns associated with women and girls being at risk. For example, one stakeholder in India reported that

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“[if] the father is not there, [and the] mother is not able to earn a living, the agent says, I’ll give you a Rs. 20,000 paying job, they give an advance of maybe 5,000 and they easily take the girl with them without any problem or resistance. The girl who dreamed of getting a good job now is to be found nowhere, she simply gets lost forever.” – Stakeholder Interview 2

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Furthermore, there were numerous risks noted in relation to children, whereas adults – and male adults in particular – were rarely cited as a group who were exposed to trafficking. Again, even in the references to children there were clear gendered impacts that were being identified or perceived by stakeholders, for example girls were seen to be

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“victim[s] of sexual exploitation and forced marriage” whereas “boys are victim[s] of serious child labour”. – Stakeholder Interview 22

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There was an assumption by some that as communities in the Sundarbans experience a high level of poverty that the area is a source from which people can be trafficked. Indian stakeholders identified that the trafficking from this side of the border tends to be internal – with some seeking work abroad in the Middle East and Nepal; whereas in Bangladesh it was noted that

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“girls/women generally migrate internally whereas the boys/men go outside”. – Stakeholder Interview 26

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Brick kilns were mentioned by stakeholders as a primary source of work where migration took place alongside rickshaw pulling and driving, and rice work. Migration to India was also specifically mentioned when work was being identified ‘outside’ of the Bangladeshi Sundarbans. Moreover, one stakeholder responded that

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“more trafficking occur[s] in Sundarbans and Indian border area”  
– Stakeholder Interview 24

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heeding how others were trafficked internally to areas such as Shyamnagar (West Bengal, India) and to Dhaka. The Indian border region was somewhere that was highlighted on multiple occasions as being an area for higher risks of human trafficking activities.

The lack of access to the Sundarbans Reserve Forest (SRF) for many months in the year due to permitting was seen by stakeholders as a key reason for the migration of communities to other areas for work, with one suggesting that in order to combat some of the risks associated with migration and other economic issues that

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“one portion of the Sundarbans should be opened for the community people in order to earn money for maintaining their livelihoods”  
– Stakeholder Interview 29

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These issues can feed into other potential forms of exploitation that were noted.

For example, unmarried children were identified as a source of economic or financial burden and marriage was viewed as a way of alleviating some of these pressures according to stakeholders. One stakeholder from Bangladesh acknowledged that

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“some find their unmarried children are an economic burden and forced marriage... happened. This is related with the hazard of [climate change]”  
– Stakeholder Interview 26

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In the Indian Sundarbans similar issues were noted although there was more emphasis on fraudulent claims and a lack of knowledge on the potential risks of human trafficking. For example:

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“Marriage is mostly decided and done by [a] guardian, sometimes a stranger comes and takes the girl to a different place (state) after marrying only to traffic[k] her. These traps are very common and agents play the role of convincing the family to get the girl married into a wealthy family... lack of resources, awareness and money often convince the people to marry their daughters off to such predators unknowingly.”  
– Stakeholder Interview 2

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## 7. Household survey

To gather insights from the populations most impacted by migratory practices, risks associated with human trafficking, and the effects of climate change, a household survey was developed and implemented with communities across the Sundarbans in Bangladesh and India. The aim of the survey was to gather data regarding demographics and population details, livelihoods and pressures, climate change hazards directly faced by communities, human trafficking and related labour exploitation perceptions and experiences, and understand gender-based violence (specifically targeting female-identifying participants). The survey covered key intersectional issues being faced by communities to produce informed recommendations for support and intervention development.

### 7.1 Method

A series of household surveys were planned following ethical approval of both consent, questions, and methodology. The household survey design was co-produced with partners, and questions were based on the initial findings gathered from partner expertise and the evidence review (**Section 5**). Prior to the surveys commencing, the project was explained to the participant and full informed consent was recorded via the survey – no identifying details were collected. Secondary consent was gained from female-identifying participants in the household in some cases to gather additional data on gender-focused questions. For those that did not consent they were noted, and the survey did not proceed.

Questions included in the survey contained a series of closed and open-ended queries aligned to the research scope, as well as enabling participants to expand upon important points that they wished to make during the response phase. Surveys were accessed via Qualtrics (licensed by University of Nottingham). Due to the remote study area, access to surveys was via an online link shared with partner organisations and their enumerators and gathered via smartphones and tablets, which enabled the centralised collection of data securely and anonymously for analysis by the lead researcher. Each organisation was provided with multiple survey links (three each) to limit potential data losses in the software – none of which were reported. Whilst the links were operational in most areas via mobile data, there were some connectivity issues. As a result, paper versions of the survey were used in these areas and responses were subsequently uploaded upon return to the organisational bases before being destroyed.

All surveys were provided in English, Bengali and Hindi with respondents able to choose the language they preferred. Local enumerators were on-boarded by partner organisations and provided with training to collect data for the project (see **Box 1**).

The survey was designed to include several skip logic sequences for those who either did not respond to a particular question, or the topic was not relevant to them to reduce the time participants had to undertake the survey if unnecessary. There were five main sections on the survey that captured data on intersecting issues, these included: demographic and livelihood data; climate change data; gender-focused issues; human trafficking awareness; and support experiences and needs.

#### Sampling

Overall, the survey was determined to be distributed to more than 1,200 households across the two countries, with a split of approximately 1:2 for India and Bangladesh respectively. Partner organisations established their survey analysis capabilities and sample populations sizes to determine the total number of households they would individually survey as organisations.

Target sizes were defined by the partner organisations following training by the lead researcher and used local data on household numbers to apply a probability random sample (Caritas India and Caritas Bangladesh) to identify the households for survey (McCombes 2022; Smith 2022; Royal Geographic Society n.d.). OKUP enumerators additionally applied a random stratified sampling strategy within the areas of interest to collect their portion of the surveys. Overall, data on the number of surveys and their dissemination for data collection is contained in **Table 2**. Data were collected in the following districts: Satkhira and Bagherhat districts (Bangladesh); West Bengal State (India).

Table 2: Data collection details

Partner organisation	Country	No. of households sampled and included in analysis	Start date	End date
Caritas Bangladesh	Bangladesh	371	14.10.2022	03.11.2022
Caritas India	India	425	20.10.2022	04.11.2022
OKUP	Bangladesh	421	15.10.2022	25.10.2022

Overall, more male respondents were the leads in the household survey (638 compared to 563 female respondents, with an additional 16 non-disclosing participants or non-responders). An additional 727 female-identifying participants consented to answer questions regarding their experiences because of their gender identity, with 64 female participants engaging with the survey from the outset alongside their male household member (with all having provided consent initially – this was mainly an issue that arose with those surveyed by Caritas India's enumerators and was clarified during the data cleaning process). All those identified in this section answered questions that were assessed in **Box 2**. Overall, ten additional female-identifying participants did not provide consent and thus did not engage with this section of the survey.

Upon completion of the surveys, data were anonymously downloaded from Qualtrics and cleaned – with the removal of any test data and enumerator training surveys excluded from the final analysis, alongside any surveys that were incomplete. This left a total of **1,217** responses from households across the two countries that would be included in the overarching analysis.

Data were subsequently analysed by the lead researcher through both excel (for the quantitative answers) and NVivo12 for those that were more expansive in scope (qualitative responses).





### Box 1. Enumerator training and experience

Local community members engaged with partners, some on a voluntary basis whilst others were employed, and all were provided with orientation and training around the project including on the objectives, methodology, tools (in this case Qualtrics), and processes that were to be put in place for participant and enumerator safety. Additional contextual information was provided to enumerators to advise them on data collection and the meaning of the questions being asked so they could explain to respondents in the field.

A series of demonstration survey data were collected by enumerators as part of their training (see **Figure 4**), enabling them to practice asking questions, using the technology to record responses and how to engage with household members.

When in the field, enumerators had to adapt to some sensitive situations including mistrust from the local community, with Caritas India enumerators reporting that leading male community members were distrustful at first and insisted on attending some of the surveys. Additionally, others adapted the survey to build rapport with the participant as one enumerator noted that

“the questionnaire contained a few sensitive questions which meant that the respondent had to be comfortable with us. This required time and therefore initially we would just go and talk to them [off the record]... and when we saw that now they were comfortable and opening up a bit, only then would we go ahead and begin with the survey questions.” – Caritas India Enumerator 1



**Figure 4: Demonstration surveys being undertaken by enumerators in Bangladesh as part of the OKUP partner organisation training.**

Many enumerators noted issues with accessibility due to the remote nature of the Sundarbans, and they also experienced the impacts of climate change themselves, with Caritas Bangladesh enumerators being hindered for a time during their data collection due to Cyclone Sitrang (25-26 October 2022).

Finally, enumerators employed by OKUP began to reflect on the content of the surveys themselves and the value they had for communities, and their own households. For example, one person noted that

“The questionnaire... was so realistic that it often forced me to think what I am going to do if any cyclone or flood outbreaks. If anything happens, maybe I will have to look for jobs outside my village... All I just want is some stable source of income, so that I can manage my household even if there is any big disaster.” – OKUP Enumerator 5

### Box 1. Continued

Others noted how the livelihoods of communities have often been side lined in previous research and that the survey gave them a forum in which to voice their concerns:

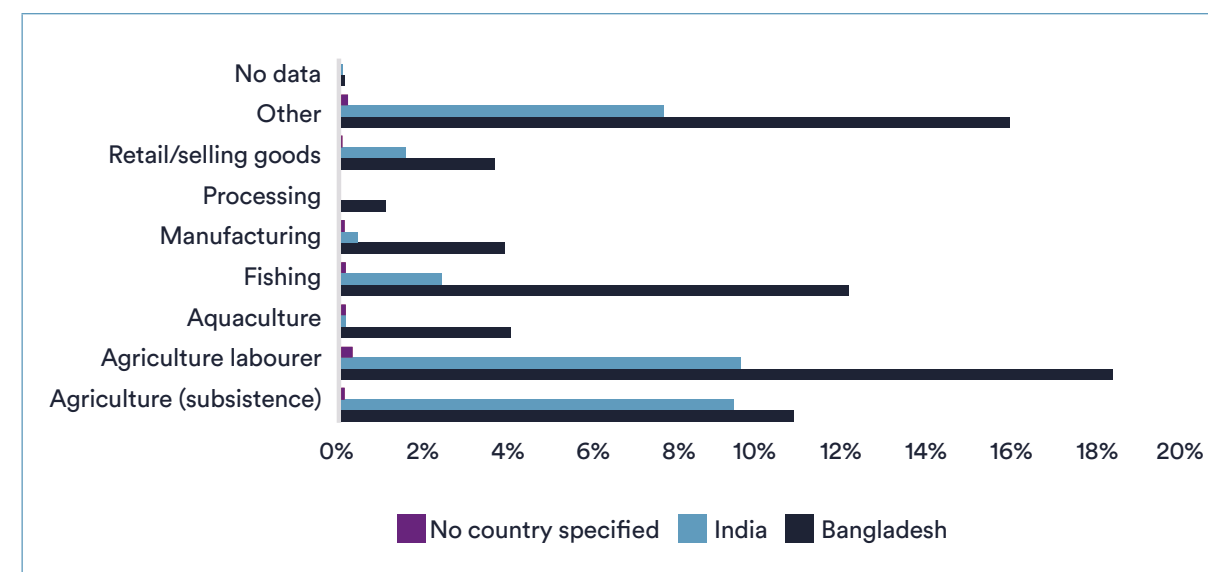
“I find it really overwhelming when people used to tell me that they haven’t got any chance to discuss these issues earlier. Because the other surveys conducted by microcredit or NGOs in our village rarely focus on our livelihood or climate issues. They just focused on how much land or cattle we have. But this survey of OKUP was so impactful. We asked them about their perception of safe places in terms of climate change and possible rights violation issues. This was really interesting for me to learn from these people.” – OKUP Enumerator 3

## 7.2 Findings

Due to the depth of the survey questions, the results have been divided into several themed topics which are priority areas aligned with the research questions, aims and objectives. These topics included: livelihoods, migration, labour risks and climate change hazards. In addition, support needs were assessed.

### Livelihoods assessment

Many households on both sides of the border reported that they engaged in multiple forms of livelihood for their income. For India more single households responded that they had one income stream compared to Bangladesh, but many households engaged in two-four income types. Agricultural activities, both for subsistence and as labouring work (**Figure 5**) were identified as the primary forms of work across both areas in the Sundarbans. Fishing was identified in the Bangladesh Sundarbans as an income for more than 300 households. Many households also reported that they engaged in other forms of economic livelihood activities, but the survey did not ask at this point for further details from participants. One interesting insight is that processing as an income activity was identified in 27 cases within Bangladesh and was not reported at all on the India side of the border. This suggests that there are a few households engaged in activities such as those previously identified in research around fish-processing activities in the Sundarbans Reserve Forest (Jackson et al. 2020; Jensen 2013; Bales 2016).



**Figure 5: Overall percentage of reported cases of livelihood income for households in all areas of the Sundarbans that were surveyed.**



Incomes were similar on average between households on the Bangladesh and India sides of the border, with the former reporting an average of 6668.74 taka, and 6234.54 rupee for the latter.

One interesting finding is that the number of livelihood activities does not appear to be correlated with the proportion of income a household possesses. This is noteworthy as one would presume that the more work streams available, the more income may be raised, but this is clearly not the case.

In addition, more than 50% of respondents from Bangladesh reported that they had noted a decrease in their overall incomes as households, with the same being said for 32% of Indian households surveyed. A similar proportion from India noted how they had experienced economic pressure specifically, but more participants reported feeling this way in Bangladesh (65% of respondents). The majority of those who had reported economic pressures stated that they had experienced “a lot” when asked to state so on a Likert scale as part of the survey.

Pressures were most associated with the key livelihoods noted in **Figure 5** (above). For example, across both sides of the Sundarbans, communities identified a loss in their livelihoods as the main pressure (829 cases reported), followed by depletion of agricultural land (559 reports) – the main form of economic livelihood and work for households; fewer overall job opportunities (482) and a depletion in fisheries stocks (377). There were reports in 344 responses of pressures being noted by participants in other aspects of their household incomes. What is clear to recognise is that multiple pressures are faced simultaneously by households, with the majority reporting at least two or three issues compared to one pressure alone.

## Migration trends

Migratory patterns were questioned over the last five years to assess the scale of migration, both internally and across border, to identify trends around reasoning and choices that could or could not be made by households.

Overall, 459 households (344 from Bangladesh, 112 from India, and three from a non-specified country) reported at least one member of the household had migrated during the previous five years. In many cases – from those who reported migration of household members – only one household member had migrated (totalling 353 individuals). A further 90 households noted multiple members (between two and four people) had migrated. There were also an additional number of instances where larger numbers of people had moved. For example, in India, 12 members of a household (likely the whole family) had migrated. This was also the case in Bangladesh, where one household responded that the whole family had migrated, however the total number of people was not specified in this case.

As would be expected in predominantly patriarchal societies, men made up 96% of the total migrants from the Sundarbans region; totalling 330 from Bangladesh (in an additional 10 cases both men and women migrated) and 112 from India (as well as three cases of both male and female migrants). The percentage breakdown per country was almost directly comparable (96% male for Bangladesh, 97% for India), despite there being double the number of surveys undertaken in Bangladesh. This suggests that migration occurs at a similar rate overall in this demographic. Such a divide can lead to additional pressures and issues for female household members – particularly those left behind (see **Box 2**).

## Typology of migration

Seasonality was the major form of migration, with only 22 households reporting permanent migration had occurred (17 from Bangladesh, five from India). Across the Sundarbans 94% of those included in the migration analysis indicated that seasonal migration occurred. This aligned with the livelihood analysis which indicated that multiple income streams were usual for households, and the movement of some household members seasonally for work would

indicate that this typology of migration helps to support the household through additional work and economic opportunities. The survey responses also indicated that in all forms of migration it is those over 18 years of age (adults) that have migrated, with three cases from the Bangladesh Sundarbans noting that children alone migrated seasonally, and an additional case of a child who also migrated permanently – this was beyond cases where both adults and children migrated simultaneously. Although representing only 1% of migration cases reported in the survey from those in Bangladesh responding, the potential risks to those children should be noted for the risks around labour and potential exploitation vulnerabilities outside of their communities.

Seasonal migrants predominantly moved to one location for work during a single period; however, in some cases multiple locations were migrated to and totalled a slightly higher rate (221:215). When participants indicated which geographic regions they migrated to (both permanently and seasonally) (**Figure 9**), it was clear for those in Bangladesh that urban cities within the country – particularly Dhaka – as well as other areas of the Sundarbans were the main destinations. 29 responses indicated movement the border into India from Bangladesh with two-thirds indicating seasonal movement only. In India seasonal trends saw higher numbers travelling greater distances, whether to cities in-country (such as Delhi) or overseas.<sup>1</sup>



<sup>1</sup> It is important to note that there was one case within the data associated with India that appears to be an error as the participant stated a member of their household (identified as being in India) had moved across the border into the country in which they were already located (also India).

## Box 2. Focus on: Gender-based issues

Women and girls face pressures that are exclusive to them as part of being female-identifying. These gendered factors can be exacerbated within a patriarchal society. Here female-identifying participants were asked a series of gender-focused questions to elucidated trends experienced by those may require more tailored forms of support.

### Household responsibilities

As a result of 727 gender focused responses, 99 responses reported that they had not experienced a change in the responsibilities that they faced because of male household members migrating for working opportunities. This is starkly contrasted with the 496 female-identifying respondents who did report that their roles within the household had altered as a result. A further 63 women declined to respond to this question. Despite noting that their household responsibilities had not altered, 74 did indicate in subsequent questions that they had experienced some variation in the roles that they had to undertake within the home. Most women indicated that where responsibilities had changed, they were focused upon general household activities and picking up the unpaid work of caring for family members – particularly children and the elderly (Figure 6).

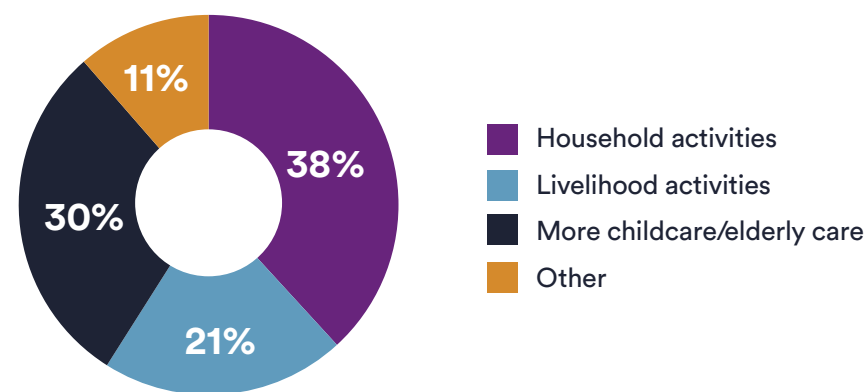


Figure 6: Proportion of responsibilities that women felt had changed within the household; some reported multiple cases of change.

### Hazard perception

Participants were asked about their perceptions of hazards because of male family members having migrated (Figure 7). They also reported experiencing several vulnerabilities. The majority noted the hazards were a high-risk factor for households during periods where male members were away (607 references), followed by a lack of income (465), the pressure to balance household jobs with work for income (168) and violence and threats were noted as a concern in 94 households. There were a further 121 responses that suggested other vulnerabilities, but these were not probed further in this initial study. 42 declined to answer.

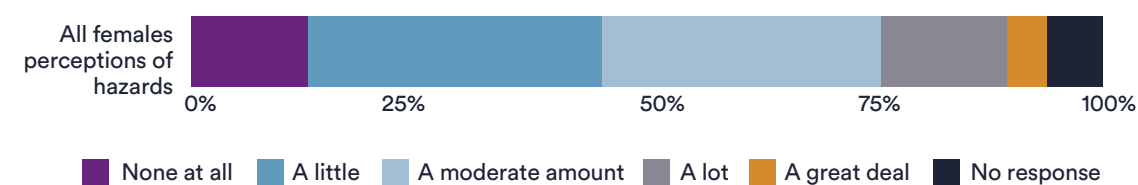


Figure 7: Proportion of female-identifying respondents and their perceptions of whether they feel more vulnerable toward hazards when male household members have migrated.

## Box 2. Continued

When further details on the vulnerabilities female respondents experience were probed further, 118 participants answered, one respondent in particular stated that

“There is a different fear to be had when the male members of the family are not at home during natural [hazards]” – Household Survey Respondent 1085

Another noted that

“When [natural hazards] occur due to climate change, dire situations are created when male members are not at home, various problems arise”. – Household Survey Respondent 1207

The majority of additional details on vulnerabilities provide by the female respondents referred to hazards such as cyclones, flooding, and river bank breaks. There were also a couple of instances where human trafficking and child marriage risks were identified. Others reported financial constraints, a lack of security, and political instability, were factors they viewed as leading to additional vulnerabilities for them and their family whilst male household members had migrated. One participant in particular commented that during crises there is

“no one near to help... [they are] alone and isolated” – Household Survey Respondent 484

which could intersect with some of the issues raised by other women around hazard adaptation, ability to react and the risks that they have identified economically and socially.

### Response measures

Participants were asked to provide details regarding the actions that they would take as a result of male family members migrating and the household income being impacted (it was not specified if positively or negatively to enable neutral responses without biases by the respondent) (Figure 8). These considered whether they would send their children to work – potentially impacting upon educational attainment and future opportunities – if they would consider marrying their children to relieve economic burdens (for additional details on marriage see Box 3) and if they would consider migrating themselves.

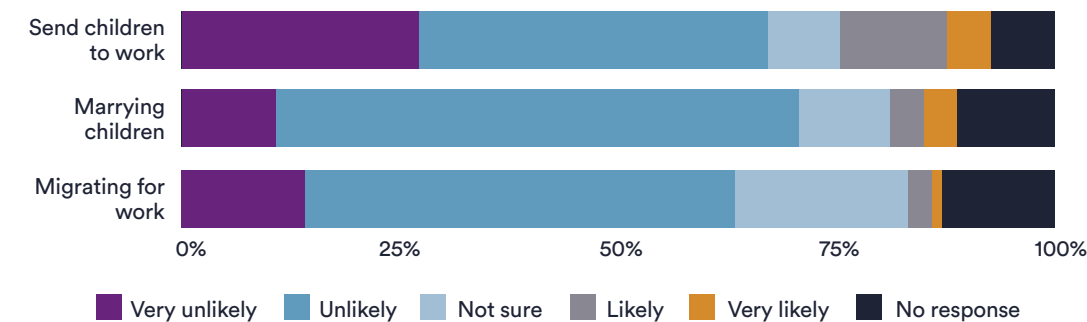


Figure 8: Proportion of response consideration to changing household circumstances as indicated by female household respondents.

Most reported that they would not consider the three response options put towards them, suggesting that female household members either value the protections of children and women/girls in the household meaning they would not send them for work or marry them into other households. Equally the women themselves were also less inclined to indicate that they would consider migrating for work too.

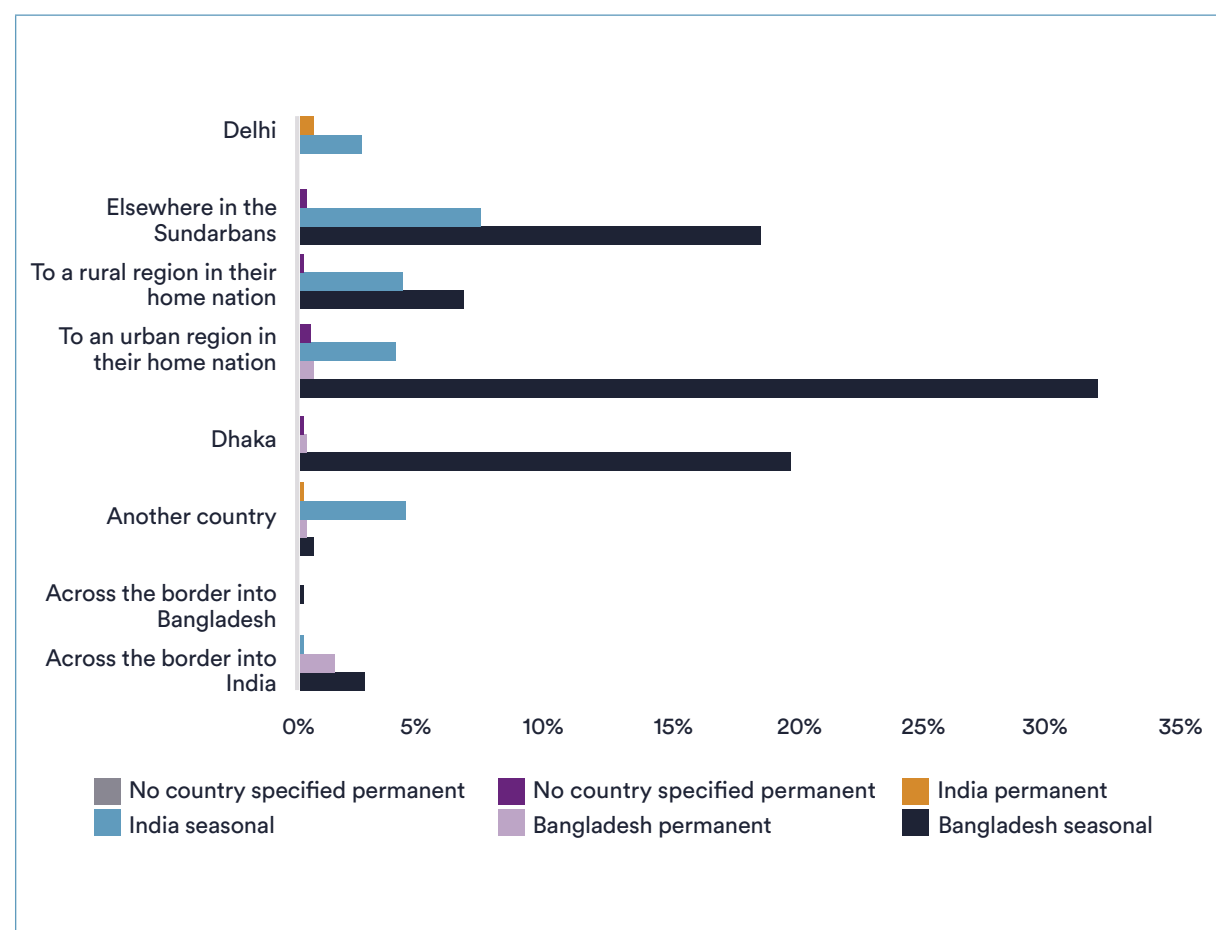


**Box 2. Continued**

**Gender-based violence**

Finally, respondents were asked to indicate whether they had experienced gender-based violence (GBV) as a result of their changing role within the household following male member migration. This was highlighted in previous queries as a risk (violence/threats) so the question aimed to delve into the scale of the issue. Almost 80% of respondents indicated that they had not been exposed to GBV in the household, with a further 14% preferring not to say.

There were 26 no responses for the question. But 21 women (3% of respondents) did indicate that they had faced issues of GBV within the household because of their changing roles and responsibilities.



**Figure 9: Locations reported by household survey as those where migration (both permanent and seasonal) occurred by geographic breakdown. Total number of references per country shown.**

The evidence shows there is variation in the estimated average duration of migration (Table 3), from three days to a period of 10 years. Most common was a period of 6 months which reflects the seasonality of agricultural and fishing work, as well as access to the Sundarbans Reserve Forest (SRF) via the permit system. The second highest number of households responded that a month-long migration period was undertaken. The inclusion of migration for only a few days in this context suggests that seasonal migration (to which these participants were responding only) has several connotations for communities across the Sundarbans.

**Table 3: Estimated average duration of migratory work for those indicating seasonal migration within the household.**

Days		Months		Years	
Duration	Total	Duration	Total	Duration	Total
3	1	1	77	1	14
7	1	2	23	1.5	2
10	5	3	31	2	15
12	3	4	8	3	7
15	11	5	13	4	1
18	1	6	138	5	1
20	15	7	18	8	1
21	1	8	7	9	1
22	2	9	1	10	1
25	6				

Similar trends could be seen in those that migrated within India, with more households responding that migration had occurred in the Sundarbans region, or to Delhi and other rural and urban areas. One clear difference was that seasonal migrants in India indicated that they had moved abroad (to another country other than those in the study) in more cases – 31 for seasonal migrants and one for permanent migrants – than occurred in Bangladesh (four seasonal, two permanent). This finding suggests there is either willingness to travel greater distances for economic opportunities, or there are greater means for households available to make this a possibility for Indian households in the Sundarbans compared to those in Bangladesh.

**Return migration**

Responses indicated that for those who had initially migrated in some form or another that return rates were particularly high for Bangladesh households compared to those in India. Overall, the return of migrants to the household was 83% in the Sundarbans as whole region. In 90% of reported cases members of the household in Bangladesh had returned in the last five years, compared to only 64% of Indian household members despite seasonal migration being the preferred form of migratory pattern in both regions.

When gathering data on the reasoning for return migration, it was clear that the completion of work was the dominant factor with 247 references in the open-ended responses from across both countries. One insight that can be gleaned were the responses which indicated that leave or the completion of a day’s work was the reasons for returning – suggesting that migration and potentially commuting for work were seen as a similar process by some participants. Family was the second most populous response; caring for members including the ill, women, children and elders were all indicated across the 49 answers that references these responsibilities. There were three participants that indicated that migration ended because of their being a lack of labour rights and considerations as they were working. For example, one respondent noted how household members had returned

“ due to not getting fair rights” – Household Survey Respondent 1187

with another respondent linking this directly to incomes as they

“ did not get a good salary”. – Household Survey Respondent 1204

These factors are key to note as they suggest poor working conditions are present for those undertaking work following migration but not all may have the tools or ability to walk away as

those indicated in the responses. A further response noted how the Covid-19 pandemic was a reason for one migrant worker returning – this is a trend particularly in India that was cause for a mass-movement of workers who were told to return to their villages of origin by the Modi administration and led to several issues toward the beginning of the pandemic in India (Iyengar and Jain 2021).

### Migration limitations

There was a divide in the ability and willingness of household members to migrate between the India and Bangladesh sides of the Sundarbans. For communities in Bangladesh, 70% would consider migration if the opportunity arose and the barriers they face were reduced, compared to only 31% within India. Households reported across the board that multiple factors presented themselves as barriers preventing those that may seek to migrate from doing so (Figure 10). Most households faced between two and five barriers, mainly citing economic pressures and family/community responsibilities. However, there was one case where the household member undertaking the survey identified eight barriers to their ability to potentially migrate.

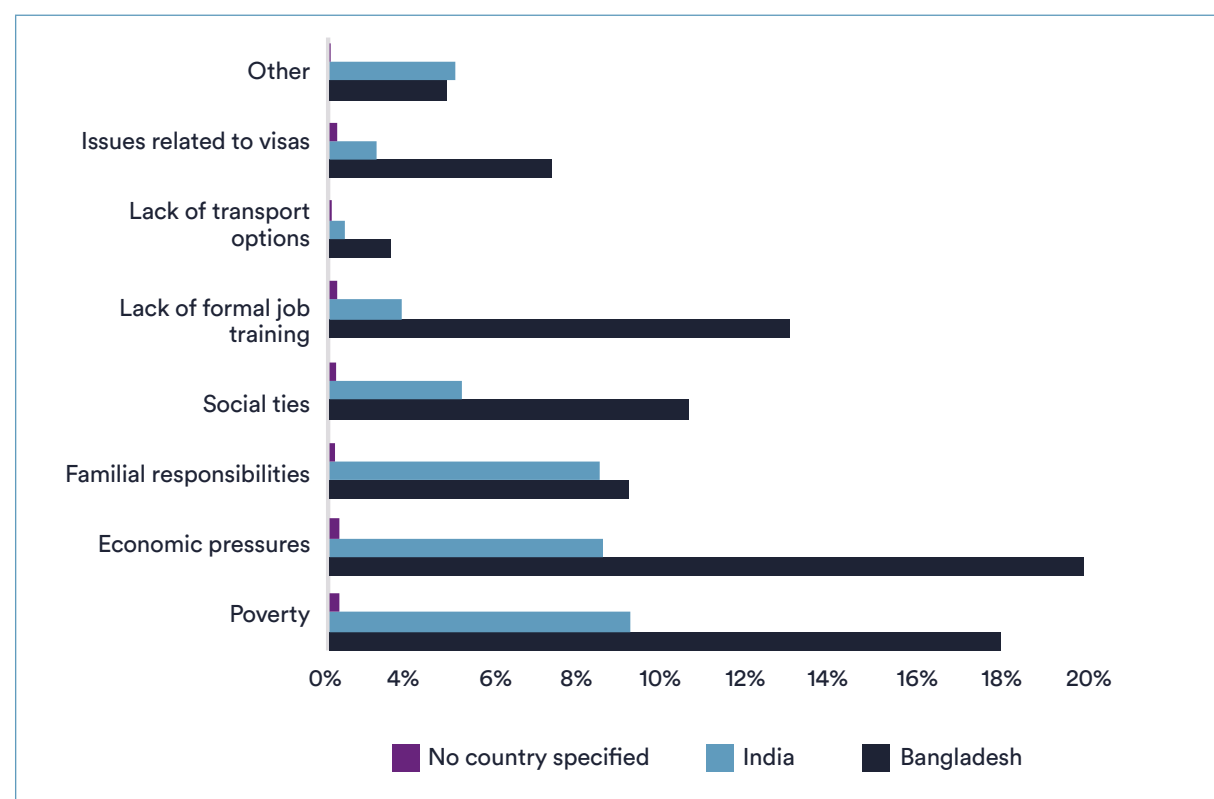


Figure 10: Pressures faced by households that were identified as barriers to potential migration opportunities. Proportional totals provided for the concerns noted for references per country.

When probed further participants reported a range of reasons why migration did not occur. Some of these were focused upon current activities within agriculture, or their already being employment or employment opportunities within the local area so migration was simply not required. Some respondents detailed that they had businesses – particularly associated with the selling of produce and fish which support the family. Beyond the responses noted above, migration appeared to not be necessary for some households (mentioned in 236 responses thematically coded in NVivo12). In fact, 156 responses specifically mentioned the fact that household members did not want to leave. There were two trends that were the main drivers for the limitations on migration which tie in with those reported in Figure 10. References to family including the notion that they would not be able to take their children

were communicated in 171 responses. Further, financial issues – linked to the above notions of economic pressures and poverty (although the latter is a multifaceted issue with many dimensions, economic issues being one of many) were noted in 174 household responses, with scarcity of financial resources additionally noted by two participants. These suggest that not only do social factors weight heavily on the choices that are being made within households around migration, but economic factors are also a driving force. Moreover, there were additional factors: for example, some responses included prior experiences and perceptions of areas that may be considered ‘risky’ by populations as a reason for migration limitations, with others noting a lack of opportunities (84 references), the inability of a household member to migration or a lack of place to migrate to (63), and illness (49) were also described as barriers that prevented migration from occurring. Whilst some noted human trafficking and visa issues as concerns that may be considered as risks for migrants and those seeking to work across borders in the Sundarbans, these were only mentioned in one and three responses respectively.

### Labour patterns

As a result of the survey, a few trends in the patterns of labour and opportunities available to households were identified. However, there were several concerns that were highlighted by participants indicating risks to migrant workers both for in-country citizens and those who may have migrated from Bangladesh to India, and vice versa.

### Opportunities

There were a variety of livelihoods and economic labour opportunities for workers who chose to migrate. A total of 18 overarching working sectors were identified with some linked to additional sub-categories. Overall, those migrating across the Bangladesh and India Sundarbans were most likely to engage in brick kiln work (94 responses) or general day labouring that was not tied to a specific sector (90 cases identified). The top ten jobs undertaken by migrant workers specified from the findings of the household survey are shown in Figure 11. However, there are several additional sectors in which work occurred that were only found in a very small number of cases, these included in the electronics industry, graphic design, infrastructural/engineering work, working in religious settings and working in the financial services industry.

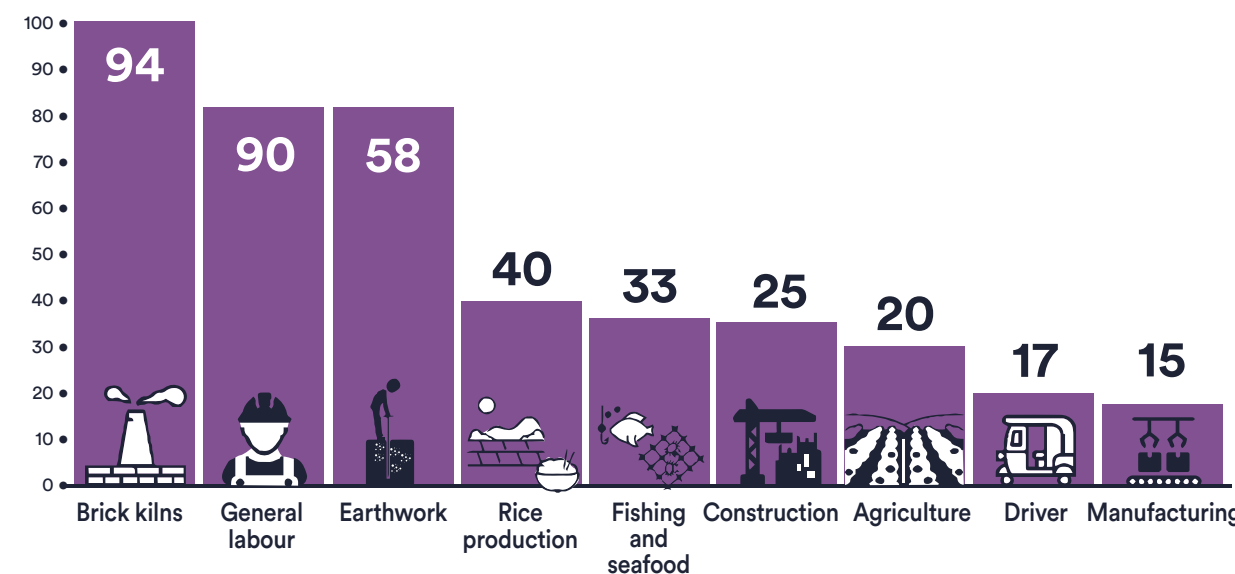


Figure 11: Top 10 jobs completed by migrant workers.



Opportunities tended to be arranged prior to the arrival at the destination for work; only 113 households from Bangladesh, and 59 from India indicated that they did not have work arranged prior to migration. The 287 who did have work arranged create an interesting dynamic to explore. Those with work already arranged are less likely to be vulnerable to the risks associated with labour exploitation and potential human trafficking risk as they are already engaged with the employer and are aware of the job role – from others or personal experience – thus they are not reliant on more ad hoc forms of employment following migration which could be considered ‘riskier’. Additionally, most households reported that recruitment agencies or recruiters (commonly associated with human trafficking risks; see UNODC 2015; Polaris 2021) were not used, and payments were generally not made to any form of body or employer prior to work commencing (Figure 12).

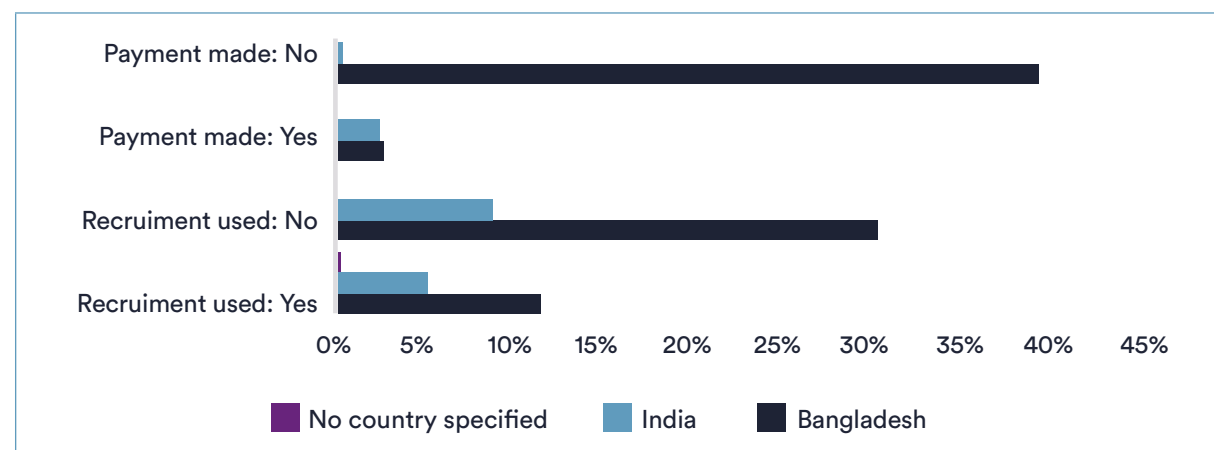


Figure 12: Recruitment and payment patterns for those that indicated migration from a household in the last 5 years. Proportion of references per country shown.

## Risks

Due to the survey structure, only those who indicated payments were made as part of the household member(s) securing employment were included in the assessment of debt bondage risks. Debt bondage – or bonded labour – is illegal in India yet such legislation does not seem to be present in Bangladesh (Antislavery in Domestic Legislation n.d.). This series of questions in the survey focused on the responses of 42 households (22 from Bangladesh, 20 from India) which referenced payments being made prior to employment that potentially exposed household members to exploitative work.

Of the 42 household respondents that identified a payment was made, 36 commented that the migrant had ended up in a situation of debt. However, in four of those cases participants responded that

“there was no loan” – Direct quote from Household Survey Respondents 653 and 775, with variations on the quotation mentioned by Respondents 715 and 718.

suggesting that the responses provided may have been given due to a lack of understanding in the question, or that payment was easily obtained for the individual and so risks were limited – all these cases were concentrated in India.

For those that expressed debt risks, estimates of the total were enquired about. There was a large difference in the debt experienced across borders, with around a 16,000 taka difference accounting for an exchange rate of around 1 taka to 0.8 rupee (November 2022). Average debt for the respondents in Bangladesh was 81,072 taka, whereas in India it was around 33,636 rupee. Of those with debt, 30 household respondents indicated that labour was used

in exchange for the repayment of the debt (19 cases in Bangladesh, compared to 11 in India). There were a series of varied durations over which people were made to work to repay the debt they had accumulated. All cases were at least one month in length (Table 4), with 11 individuals indicating at least one year had been the duration they were exposed to debt bondage. Most concerning was one household leader responded to the survey by indicating that they

“still could not repay the loan. The burden of debt still has to be carried.” – Household Survey Respondent 1060

Furthermore, most households indicated that there had been additional assistance – from the immediate and wider family – to help pay back these debts, which places further economic pressures on households.

Table 4: Estimated average duration of the period of work required for the repayment of debts. This does not include the household response that indicated that the debt bondage was still ongoing.

Months		Years	
Duration	Total	Duration	Total
1	4	1	11
2	1		
3	2		
4	1		
5	1		
6	4		

To repay accumulated debts, many sectors were noted for employment – and thus associated with modern slavery risks. Many cases referred to work generally and did not tie these activities to a particular sector (12 reports), with some being unclear within the analysis (six cases). There were, however, multiple reports of debt bondage associated with construction work, the fishing sector, and groundwork for agriculture and other purposes in the responses. Additional sectors with risk of debt bondage found in the primary data include brick kilns, driving jobs, and the seafood sector.

The risks associated with such debts indicate that there is a level of awareness of exploitative operations within the Sundarbans and the surrounding locality. However, when participants were asked directly whether they were aware of human trafficking risks the results varied. A slight majority in Bangladesh indicated that they were aware of human trafficking risks (432 out of 780 recorded question responses), whereas there was a slight minority on the Indian side of the Sundarbans (165 indicating they were aware, compared to 260 who reported they were not aware or were not sure). When asked to specify the risks of human trafficking that they were aware of there was a mix of responses which indicated three key themes: 1) typologies of exploitation; 2) environmental and ecological impacts; and 3) economic and social risks.

Some respondents directly specified typologies that sit within the spectrum of labour exploitation (Schwarz *forthcoming*), several noted the risks of child labour (18 references), human trafficking more broadly (305), organ trafficking (4) and bonded labour (1). There were also references to the risk of forced marriage or the persuasion of women and girls into marriage only to be exploited (see Box 2). In terms of environmental factors, many hazards were identified including cyclones, drought, flooding, storms, and salt-water intrusion amongst others, suggesting that the awareness of human trafficking risks may be tied directly to hazards that have been personally experienced. Finally, in terms of the social and economic indicators identified as being associated with human trafficking risks by participants in

India and Bangladesh, specific employment opportunities were identified, with the garment industry being named in three cases and agriculture being identified 55 times. The risks of strangers both for engaging with them for employment and other means was identified by 34 households. The impacts upon women in the form of gender-based violence was also noted (10 references) alongside other social issues such as health (five), financial concerns (seven), and education (three). This suggests communities are identifying potential social vulnerability factors that may increase their risk of human trafficking, as well as sectors which may see them exposed to more harm. Many of the vulnerabilities identified by participants align somewhat with the social determinants of risk designed to identify community indicators linked to modern slavery potential within communities (Gardner et al. 2021).

Only a small proportion of participants reported that they directly knew migrants who had been exposed to human trafficking during their period of migration – 33 reports from Bangladeshi household surveys, and four from Indian households. When those who responded “yes” were further probed around the topic there was an inverse trend. Most in Bangladesh reported that someone outside the family that had been subjected to human trafficking (31 outside the family, four reports from within), compared with India where more family members were reportedly exposed to human trafficking.

For those originally from Bangladesh the risks of human trafficking were found both in-country and internationally, with the highest numbers of human trafficking risks being reported to have taken place across the border in India (11 references), and in other countries (five cases). The risks in urban settlements were also considerable with Delhi (two cases) and Dhaka (six cases) both specifically noted, and other urban regions also being identified in four household surveys. There were an additional five cases where human trafficking risks were associated with rural areas or the Sundarbans. Cases in India where human trafficking was linked to migration were mainly concentrated within the Sundarbans itself, with one reference noting risks in an unspecified urban city within India.

“For those originally from Bangladesh the risks of human trafficking were found both in-country and internationally, with the highest numbers of human trafficking risks being reported to have taken place across the border in India.”



The typologies of exploitation reported in such cases varied and included debt bondage (as noted in specific identified cases above), domestic servitude, forced labour and forced marriage, labour exploitation, and sex trafficking. Such exploitative operations were identified in a series of sectors by the household member(s) including work within the brick kiln sector, the commercial sex industry, construction, domestic work and being forced into criminal activities. The risks associated with marriages and labour in other sectors that were not specified or linked specifically to day wages were also noted as having been directly linked by participant respondents to human trafficking in the area. In stark contrast to the periods of time labour was experienced by those held in debt bondage (Table 4) and those work as part of seasonal migration (Table 3), there were many more cases identified where human trafficking had occurred for individuals over prolonged periods of time (see Table 5).

Table 5: Estimated average length of time individuals were subjected to human trafficking and exploitation according to household survey responses.

Days		Months		Years	
Duration	Total	Duration	Total	Duration	Total
1	1	3	3	1	5
2	2	6	1	1.5	2
4	2			2	1
7	3			3	1
10	1			6	1
15	1			7	2
20	1			8	1

Furthermore, when directly asked which locations they considered as being potentially ‘risky’ for labour exploitation: urban cities, the Sundarbans, or other; there was a marked divide across the border between India and Bangladesh (Figure 13). Whilst there were comparable references to the Sundarbans being perceived as ‘risky’ in both countries, the split in the proportion of responses in each country was marked, with the perception risk of labour exploitation being demarcated as highest in the urban cities for those in the Bangladeshi Sundarbans (482 counted reports) compared to India where the Sundarbans was seen as riskier (236 responses). Such variations suggest alternative measures may be necessary on either side of the border to protect vulnerable communities at risk of human trafficking and exploitation, but the view of Indian households does align somewhat with the experiences being reported by Bangladeshi citizens who have reported knowledge of someone being subjected to human trafficking across the border in India.

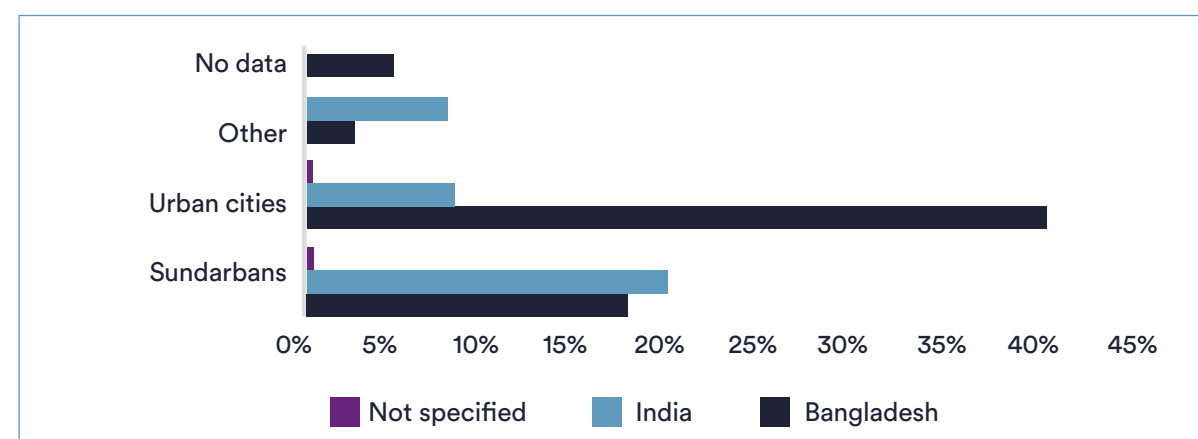
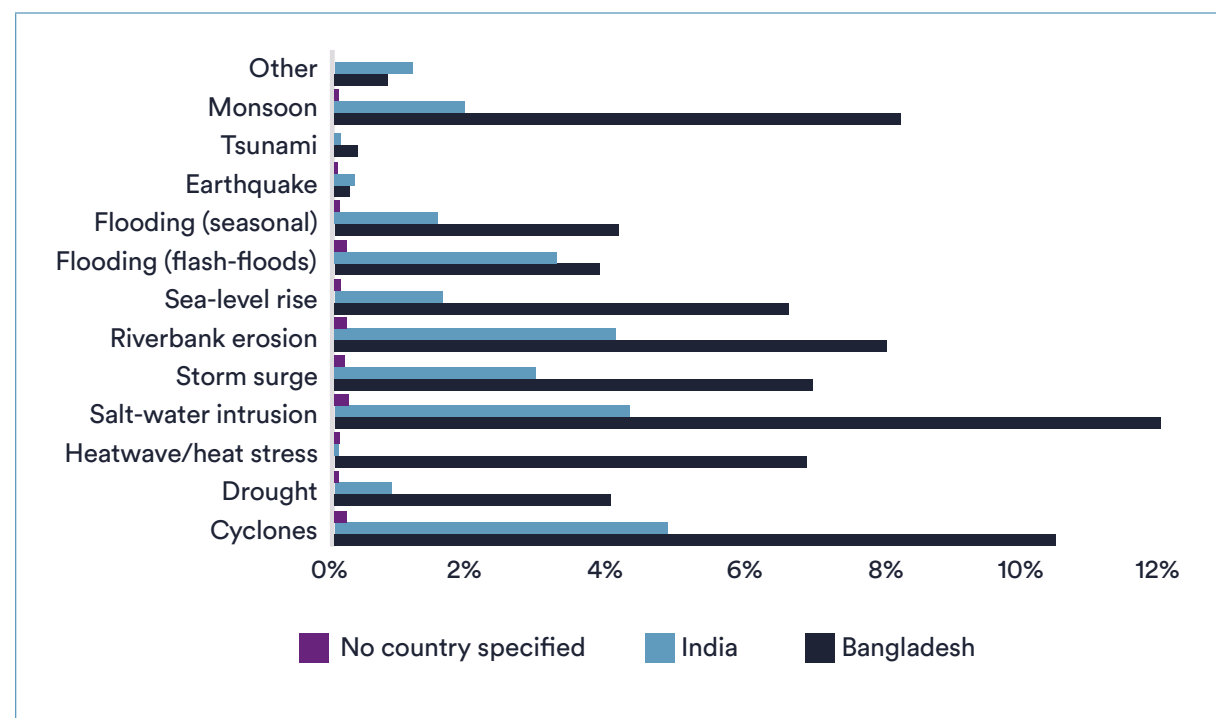


Figure 13: Perceptions of risk from labour exploitation, proportion of references per country shown. An additional 5 cases were reported where no data were provided and thus they were excluded from the analysis.



### Climate change hazards

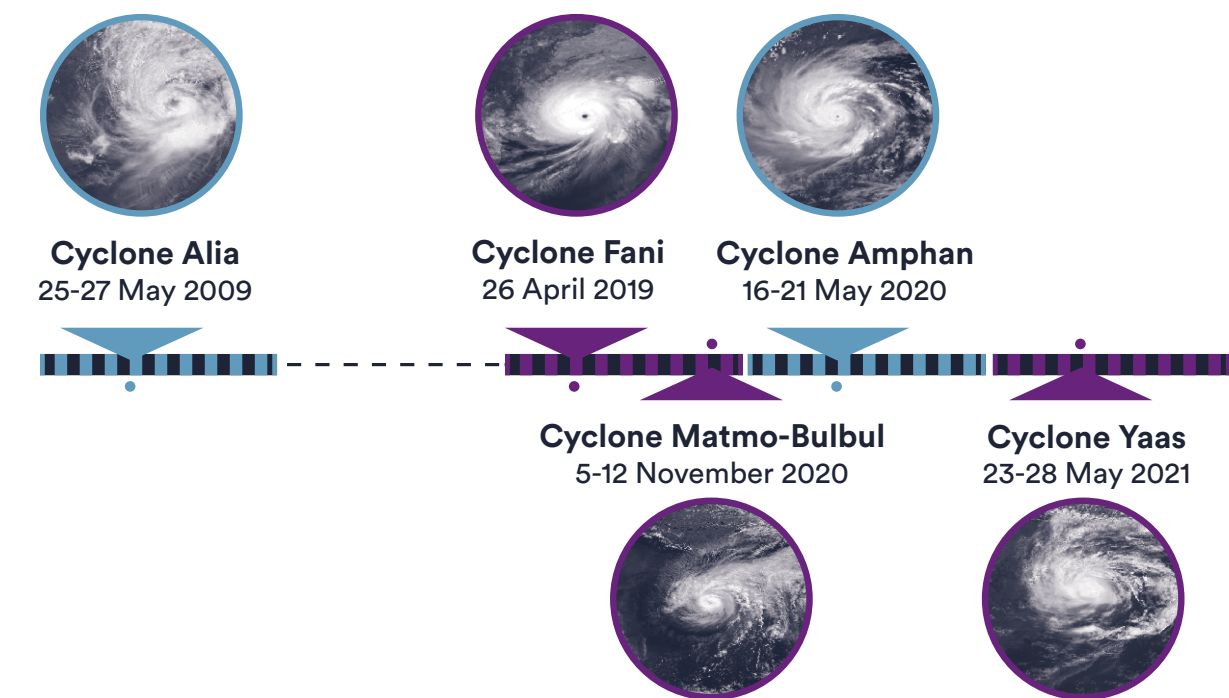
The experience of communities in the Sundarbans is one that regularly intersects with hazards. For example, **Figure 14** shows a high number of households reported experiences of cyclones, salt-water intrusion, storm surges, river-bank erosion, flash floods and monsoon as common hazards for households. Many of these are to be expected due to the Sundarbans lying in the coastal fringe and being exposed to extreme rain-associated hazards. In contrast however, 239 cases of drought as a hazard were reported in Bangladesh compared to only 49 on the Indian Sundarbans side, suggesting that even in adjacent regions, the experiences of hazards can vary. Additionally, respondents in Bangladesh reported experiencing high levels of sea-level rise which corresponds to Bangladesh being one of the world’s most low-lying countries, and seasonal flooding posing greater perceptions of threat and experiences compared to households in India.



**Figure 14: Proportion of references to hazards made by household members as experienced in the last 5 years per country.**

When asked to provide additional details of the hazards that had been experienced for those living in all regions of the Sundarbans (both India and Bangladesh sides) common themes emerged that can be explored. As a coastal-fringe region, it may not be a surprise that salt-water intrusion as a risk was cited by respondents as a hazard they had directly experienced when asked to provide further detail, alongside flooding – where 81 responses directly referenced the fact that flooding was associated with the breaking of banks. Storms were also noted with rain and wind specifically mentioned in the responses, often being paired with flooding. The erosion of the riverbanks – a common issue in Bangladesh with several livelihood and wellbeing outcomes for households (Malak et al. 2021; Barua et al. 2019; Arobi et al. 2019) – were reported in 59 instances. Additional risks experienced by participants and referenced in this more detailed question included sea-level rise, tsunamis, earthquakes, tornados, monsoon, drought, and tidal effects. Where the most additional detail was provided by participants was in reference to cyclones. Throughout the Sundarbans, the mangrove forests provide protections from such hazards (Sarker et al. 2020; Akber et al. 2018; Titumir et al. 2022), however there were many references to such issues. Whilst 86 respondents simply referenced “cyclones” as a hazard without specificity, 540 references were made (sometimes multiple cyclones were mentioned by a single participant) to named specific cyclones that had occurred in the last five years (**Figure 15**) with the notable exception of Cyclone Aila

which occurred in the Spring of 2009 and was still considered as a key hazard that had lasting impacts. Aila was mentioned on 65 occasions with the most recent mentioned cyclone to occur (Yaas) being noted on 197 occasions by participants. Cyclones Fani, Matmo-Bulbul and Amphan were also noted in 17, 93 and 168 responses respectively.



**Figure 15: Timeline of the cyclones that were referenced by households as having had a large and direct impact on communities.**

As a result, 88% of Bangladesh Sundarbans households reported that their household livelihood had been impacted by hazards – increasing those economic and income pressures noted above in the section on **Livelihoods assessment**. Whilst households across the border in India faced similar hazards, there were only 61% reporting livelihood impacts because of them.





In response to this, livelihood adaptation and change has been seen as a response mechanism for households, which can go together with migration to other areas and sectors as mentioned previously. For example, 523 households reported that climate change had caused direct decisions to be made at the household level to change the livelihood of the household – in some cases this was a move to a different sector entirely, sometimes it led to a change in day labour from one sector to another, or one that is more generalised and not tied directly to a sector at all. Whereas in others (691 responses) no change may have been reported. For Bangladesh (Figure 16) there was much more movement across household livelihoods when compared with India. A larger variety of sectors were moved between with the share of previously key sectors for households such as fishing and agriculture declining by 11% and 10% respectively; and with more economic activity being funnelled into more general labour which are associated with day wages and economic instability (showing an increase of 10%).

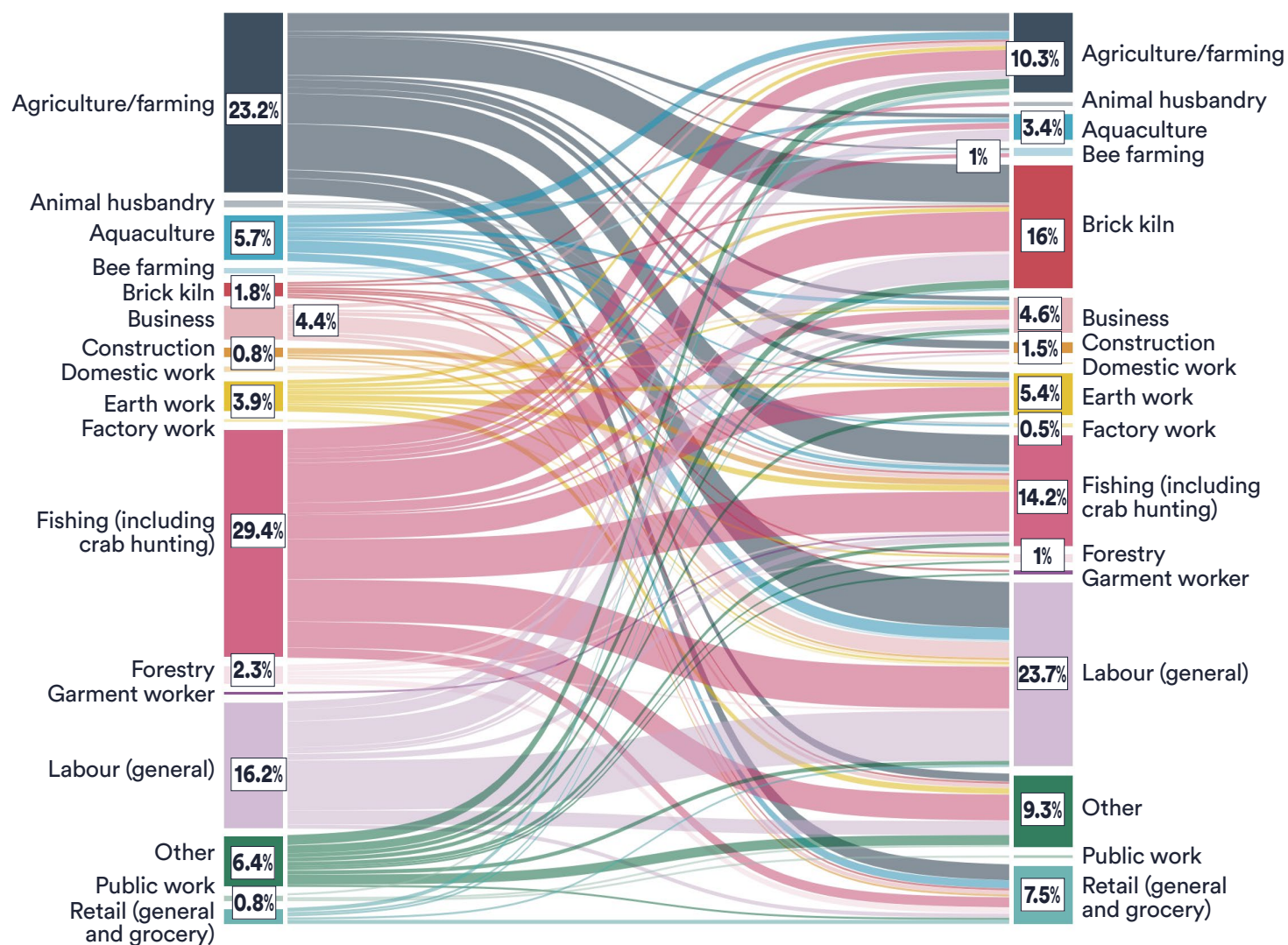


Figure 16: Sankey diagram displaying the previous and current livelihoods of households within the Sundarbans, Bangladesh.

For India (Figure 17), labour associated with day wages and daily labouring was by far the most common livelihood stream, and it continues to be so. There was some marginal movement but overall, the trends in income did not vary to the same extent for households in the Indian Sundarbans region.

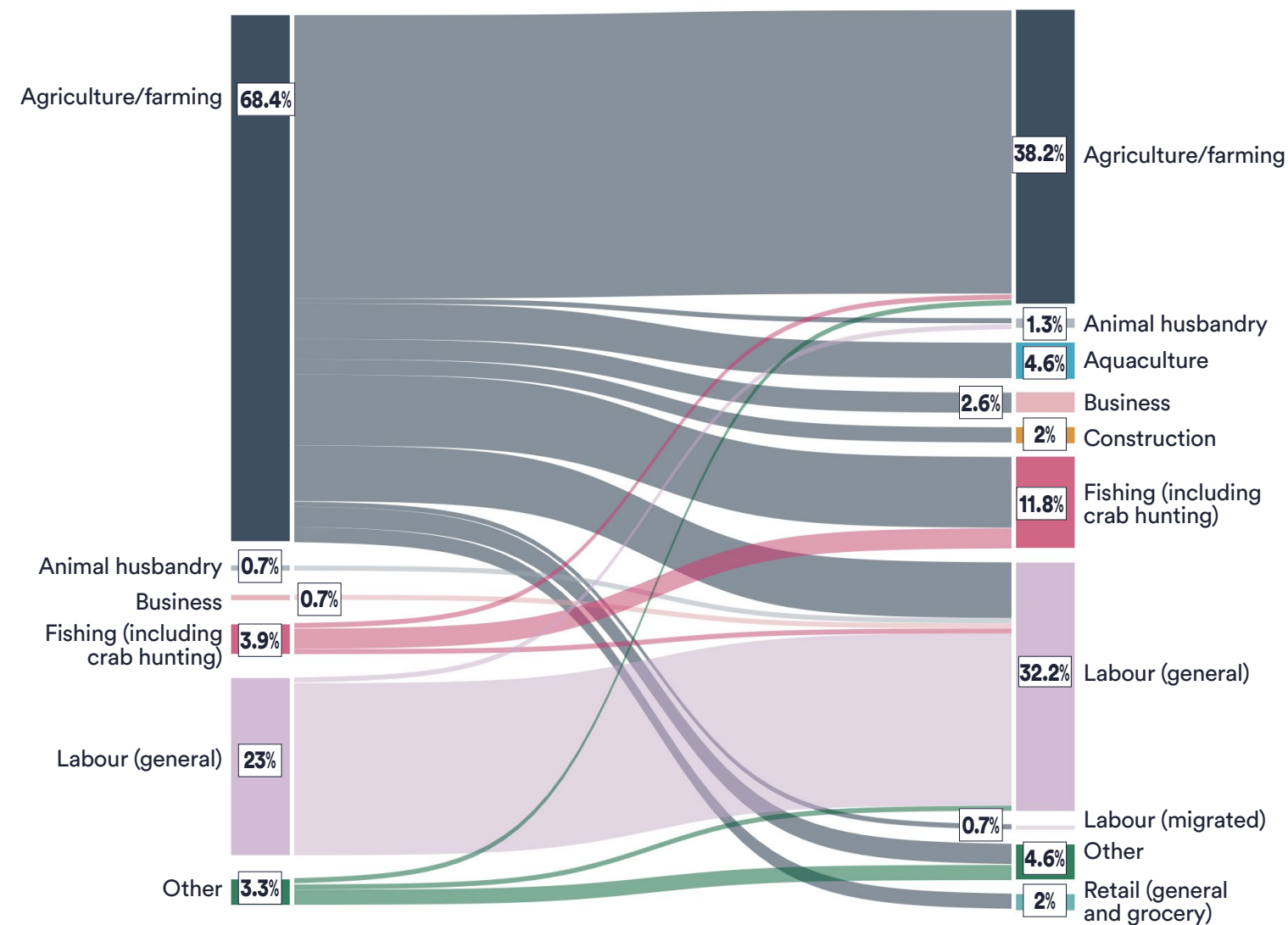


Figure 17: Sankey diagram displaying the previous and current livelihoods of households within the Sundarbans, India.

### Perceptions of hazards

For households there was an understanding that climate change is having an increasing impact on the scale and scopes of the hazards that are experienced by communities (Figure 18). Throughout all geographies, survey respondents articulated that they had both experienced more frequent and intense hazards. In addition, the perception that climate change was the primary driver of such risks was also noted. The concept of climate change being associated with such hazard changes was further explored with participants; most acknowledged that the act of climate change being associated with greater numbers and intensity of hazards was likely linked to climate change in either “a lot” or “a great deal” of cases. This represented nearly three-quarters of responses. 16% of respondents indicated that climate change may be having a slight effect on the hazards being experienced, with 9% believing climate change was having a moderate impact overall.



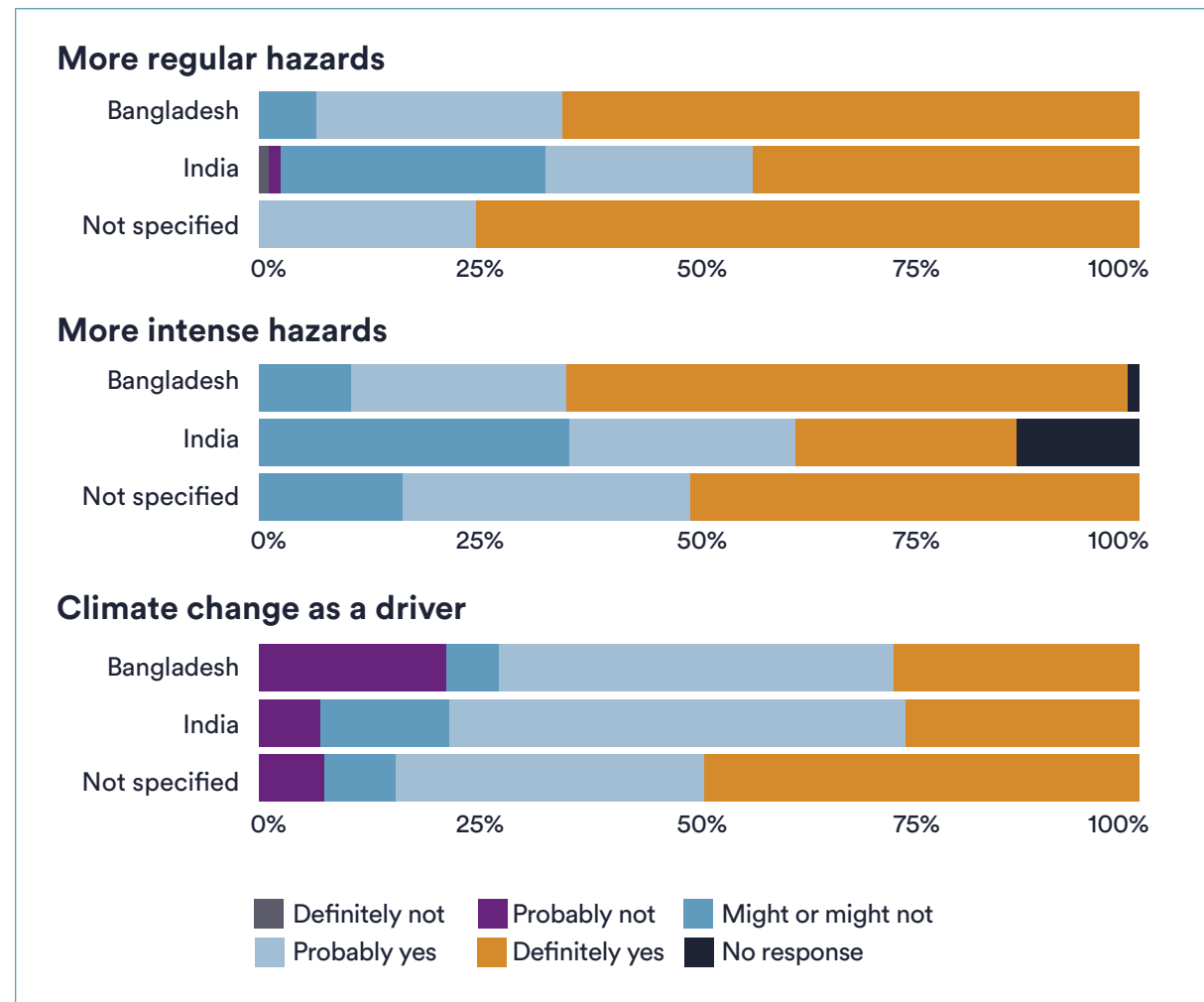


Figure 18: Perceptions of hazards from household participants within the Sundarbans and their association with climate change factors.

Moreover, when participants were asked directly which locations they considered as being 'safer' from the impacts of climate change – urban cities, the Sundarbans, or other – the majority responded that they considered the Sundarbans safer on both sides of the border (Figure 19).

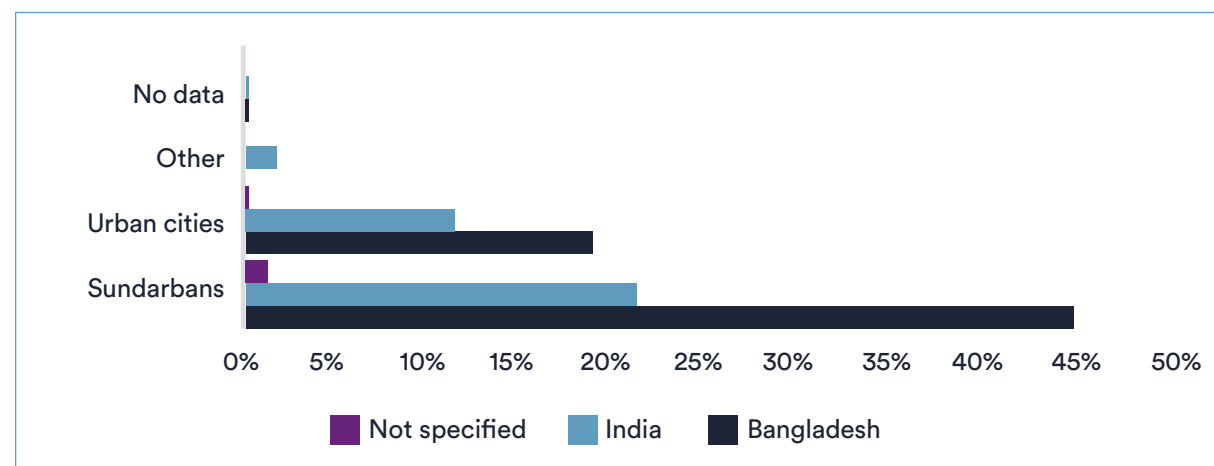


Figure 19: Perceptions of safety from climate change effects by proportion per country displayed. An additional 2 cases were reported where no data were provided and thus, they were excluded from the analysis.

### Experiences of displacement

Those households that have experienced the effects of climate change and associated hazards, are at risk of displacement. There were 646 households in Bangladesh, 164 in India, and a further 13 in a non-specified country, that had experienced some form of displacement associated with hazards in the past. Most households across all regions had only experienced one form of displacement, however, 317 respondents indicated that they had been party to multiple forms of displacement in various locations – this may occur in two forms: 1) through displacement because of hazards being experienced at different times; or 2) through multiple displacements during the same hazards event. The sway of which form was taking place was not asked specifically within this survey and thus cannot be fully determined.

The displacement experienced by household respondents suggested that the use of formal support centres was more commonly noted in Bangladesh. Displacement for those located in the Indian Sundarbans was more evenly distributed amongst family households, formal camps, and informal settlements, alongside other regions (not specified) (Figure 20).

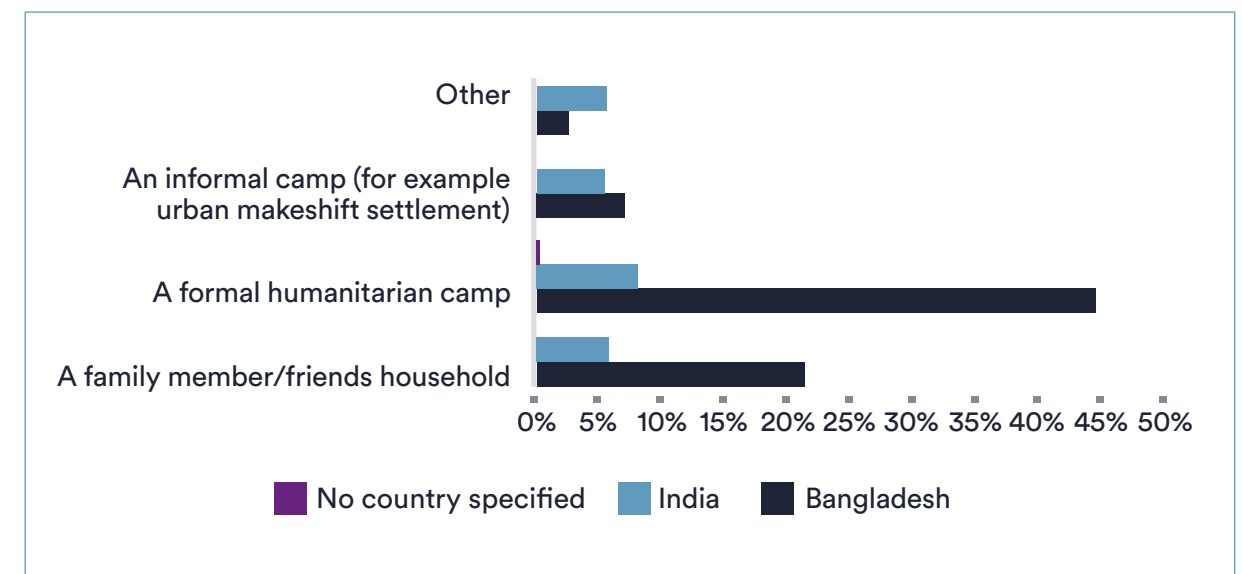
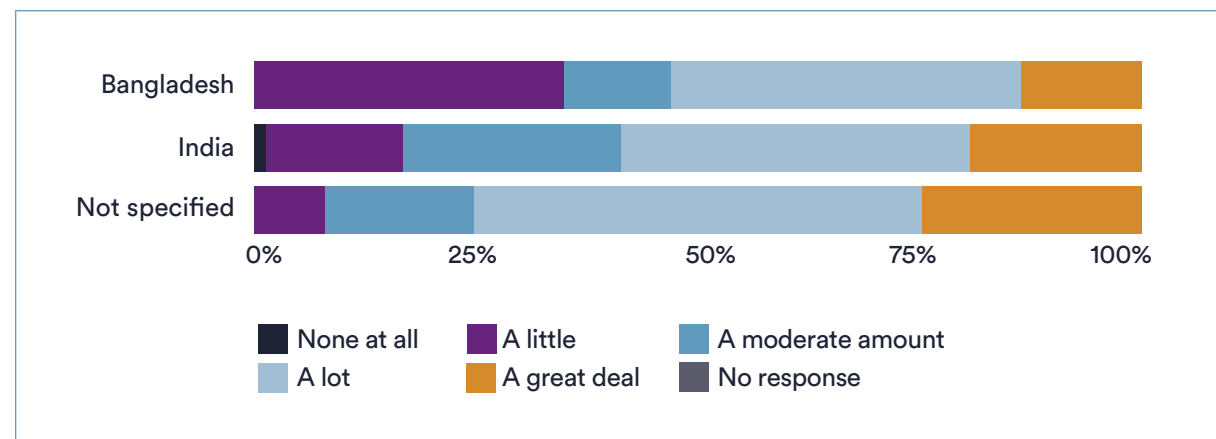


Figure 20: Percentage of responses indicating locations of settlement during displacement from hazards.

### Household decision making

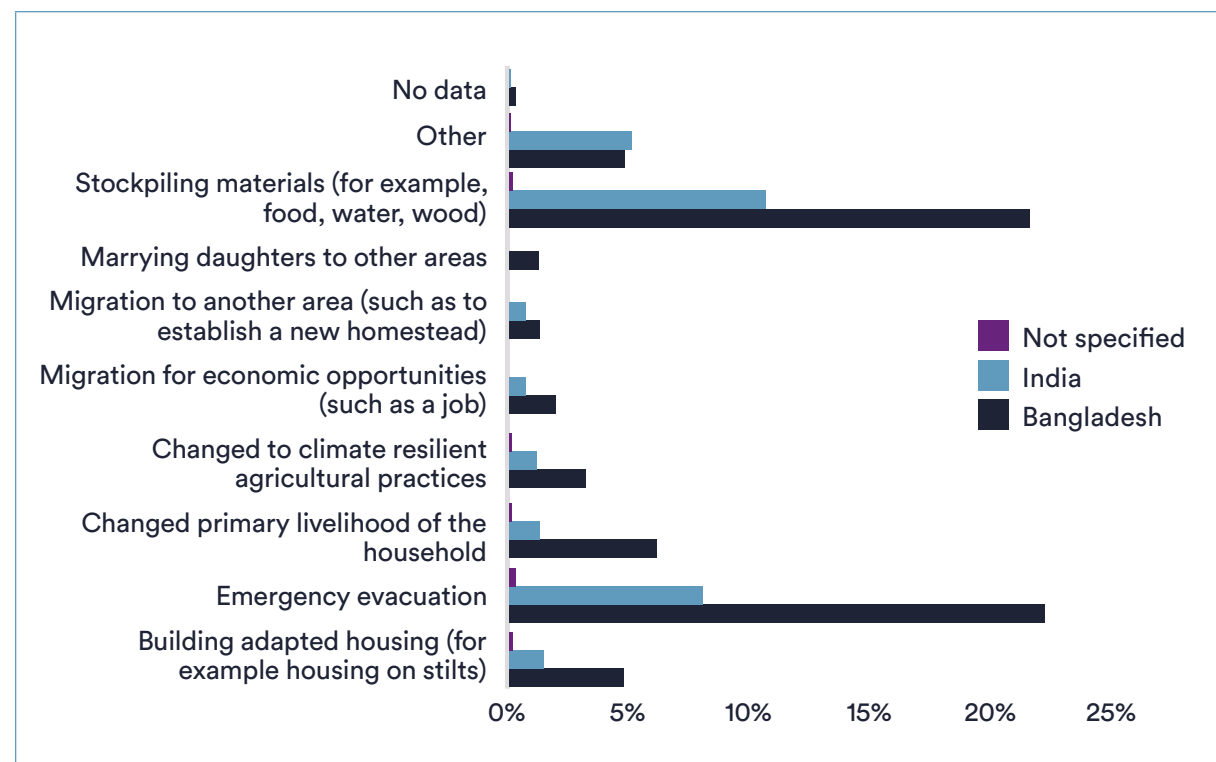
As a result of these perceptions and experiences of hazards and climate change impacts by households, many respondents indicated that climate change was beginning to have a substantive role in the decision-making of households (Figure 21). The proportion of those households explicitly in the India and Bangladesh side of the Sundarbans that are considering climate change on household decision making "a lot" of the time is the exact same (39% on each side of the border). Yet despite households in Bangladesh indicating that they were experiencing more frequent and intense hazards, there is a greater number of households indicating that climate change is only considered "a little" in decisions made on behalf of household members (274 households).

None in the Bangladesh Sundarbans indicated that they were not considering the effects of climate change at all, whereas six Indian households did express this view. A higher proportion of households in the Indian Sundarbans expressed that climate change was being considered "a great deal" in decision making (19.82% compared to 12.69% from households expressly in Bangladesh).



**Figure 21: Proportion of households and their accounting of climate change within current household decision making.**

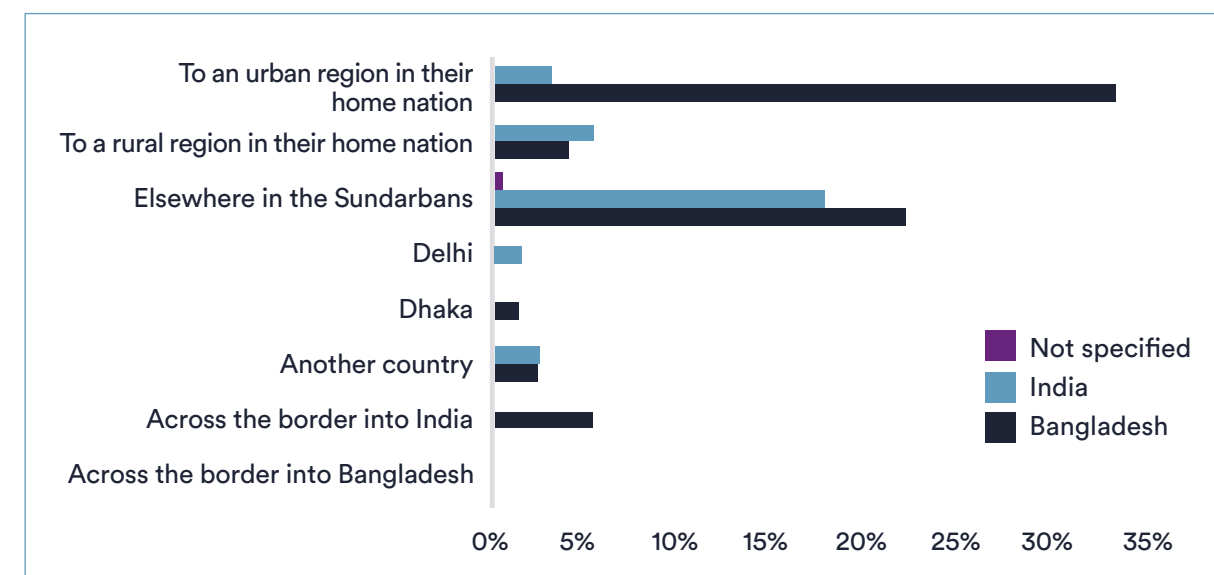
Deeply associated with the consideration and inclusion of climate change within households' decisions, are the adaptive responses communities undertake. Some are associated with economic activities, with others linked to location and household stability, and preparations for potential hazard events. Most commonly across the Sundarbans, respondents reported that they were undertaking multiple forms of adaptive responses with between two and four adaptations being the most cited (reported by 923 households). 242 households reported a single adaptive response being undertaken, with 13 participants reporting their household was engaged with six or seven different adaptations to combat the effects of climate change and hazards. The responses themselves varied across borders (Figure 22). One obvious commonality across the Sundarbans was that the use of emergency evacuation and the stockpiling of materials (including food, water, wood) were almost always conducted simultaneously by households with a slightly higher proportion in Bangladesh (666:648 in Bangladesh and 243:321 in India).



**Figure 22: Proportion of adaptation responses available and being used by households according to reported responses.**

There are several interesting points to note in the adaptive responses. The first is the use of migration. For those who indicated initially that they may migrate as form of adaptation they were asked an additional series of questions. For starters, those from the Bangladesh side of the Sundarbans were more likely to consider migration (both economic and social) as a form of response in light of hazards increasing – with 378 households reporting that they would do so. This is in stark contrast to the Indian communities surveyed where only 41 households reported such a definite response to hazards and climate change associated with migration. For those that did not want to migrate or were not sure, the responses were almost directly comparable on both sides of the border with Bangladeshi households reporting such values on 141 and 260 occasions, and Indian households in 144 and 240 respectively.

For those that reported they would consider migrating (a total of 924 – those responding “yes” and “maybe” included) the migration of the family unit was more likely to be considered than simply individuals migrating. These trends indicate that additional factors due to climate change may lead to more permanence in the typology of migration that is occurring and what we may see in the forthcoming years is a shift away from the dominance of seasonal migration often for economic and livelihoods support for households, to more permanent migration of household overall for both economic and stability reasons. When considering the locations of migration, most households reported they would prefer to migrate to elsewhere in the Sundarbans, with respondents from Bangladesh also reporting high numbers stating they would consider moving to urban city locations (Figure 23).



**Figure 23: Locations where households who would consider migration as an adaptive response to climate change related hazards would consider moving to (proportional figures displayed, more than one response could be selected).**

As noted in Figures 18 and 21 there is a marked difference in the perceptions and actions of communities on both sides of the border in the Sundarbans. When respondents were asked what they were more likely to consider when potentially choosing to migrate as a part of adaptive responses, being safer from the effects of climate change was much more important for households on the Bangladesh side with 93% of responses leaning this way. Contrast this with Indian households, where there was a less dramatic but still clear split between being safer from the impacts of climate change (59.76%) and those concerns of labour exploitation and human trafficking (39.29%).

Household management may come in many forms but one interesting development is the use of marrying daughters to other areas (Figure 22). This has been seen in previous research as a way of reducing the economic burdens placed upon families during a time of climatic instability (Ferdous and Mallick 2019; Human Rights Watch 2015), but also decline due to



economic pressures (Tsaneva 2020) or be used more as a protective strategy (Melnikas et al. 2020). A deeper dive into these concerns around marriage can be found in **Box 3**.

Overall household management tends to come from an economic standpoint and focuses on the livelihood opportunities available to households. Through open ended questions, participants indicated that they would seek to engage in several economic opportunities to support the management and income of the household. There were a series of households who indicated that the availability of livestock would enable them to farm; bees (for honey), cows, goats and poultry were mentioned by on 75 occasions, with 115 further references made to agriculture and animal husbandry more generally. Alongside this, the fishing and aquaculture sectors were also mentioned repeatedly with fish and shrimp farming both noted by respondents as management opportunities (on 35 occasions), and fishing for both fish, crabs and processing noted 45 times. 31 references were made to the development of business opportunities directly associated with fish production. Only two participants noted that they saw brick kilns as being a source of income for management of the household in the future – this is a trend that is interesting and denotes a shift in attitudes from current livelihood practices.

As reported in the interviews, the appeal of migrating for seasonal operations of the brick kilns is declining due to a series of factors, and it is not being viewed as a way of securing future security for households to the extent that it is currently being interacted with for income support through seasonal migration (**Figure 11**). Some of the largest management references related to day labouring and day wages (131 references), with only 26 remarks made to the increasing of income – some included suggests of how this would be achieved, for example through the development of businesses or increased opportunities such as those noted in agriculture and fishing above. However, a major concern is that there were 111 responses that indicated that a household had no coping mechanisms that they had either currently thought about or had available to them.

“...the fishing and aquaculture sectors were also mentioned repeatedly with fish and shrimp farming both noted by respondents as management opportunities...”



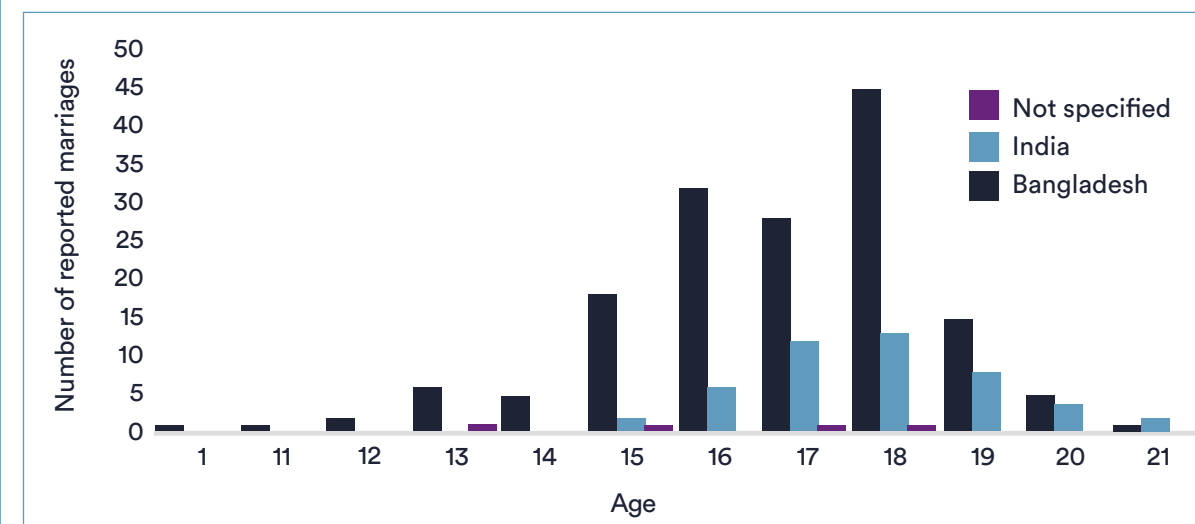
### Box 3. Focus on: Marriage

Marriage has been viewed by households – particularly in the Bangladesh Sundarbans – as a potential adaptive strategy to support both the household and, often daughters, during times of climatic and economic stress (Ferdous and Mallick 2019; Human Rights Watch 2015; Tsaneva 2020). As part of the survey respondents were asked specifically about the marriage of women and girls in relation to the practice as an economic response. Only women and girls were referenced in these questions due to the societal structures of the geographies being assessed that mean it is far more likely for females to be at a greater risk of such cases. Of the total survey responses (1217), 183 cases were noted of marriage for the purpose of economic alleviation both India (47) and Bangladesh (128) – an additional 4 cases were noted where the country in which they were located was not directly specified. In some households, multiple female members of the household had been married for such reasons, but it was most common in only a single case (**Table 6**).

**Table 6: Number of marriages of women and girls from households associated with the alleviation of economic pressures.**

	Number of women and girls married per household					
	One	Two	Three	Four	Five	No data
<b>Bangladesh</b>	89	37	5		2	
<b>India</b>	40	5				2
<b>No country specified</b>	2	1				1

The average age for which women and girls were married because of economic pressures were all similar. For Bangladesh the average age was 17 years, for India it was 18 years, and for those where a country was not specified it was slightly lower at 16 years of age. The distribution of ages therefore tend to fall in the mid-late teenage years (**Figure 24**), however there was one outlier that was particularly concerning from Bangladesh that indicated some as young as 11 or 12 had been married and in one case it was indicated that a one year old was married – this may have been an outlier in the data as a result of the data entry, but if not this is extremely concerning and raises questions of child marriage and safety risks for the wellbeing of said child.



**Figure 24: Ages of women and girls and the total figure based on marriages for economic purposes as indicated by households.**

Respondents reported they had previously accessed support from several groups. The majority had accessed support from organisations specialising in climate change and humanitarian action (during times of hazard response) (Figure 25). A much smaller proportion had obtained support from human trafficking and migration organisations. Within Bangladesh there was enthusiasm for additional support to be provided to households, whereas in India those responses were more muted. For the former, 71% were in favour of more support compared to 22% wanting no extra support, and around 4% who were unsure. For India, only 16% were sure that they wanted more support whereas 58% were certain that they did not, a further 26% were unsure at the time of the survey.

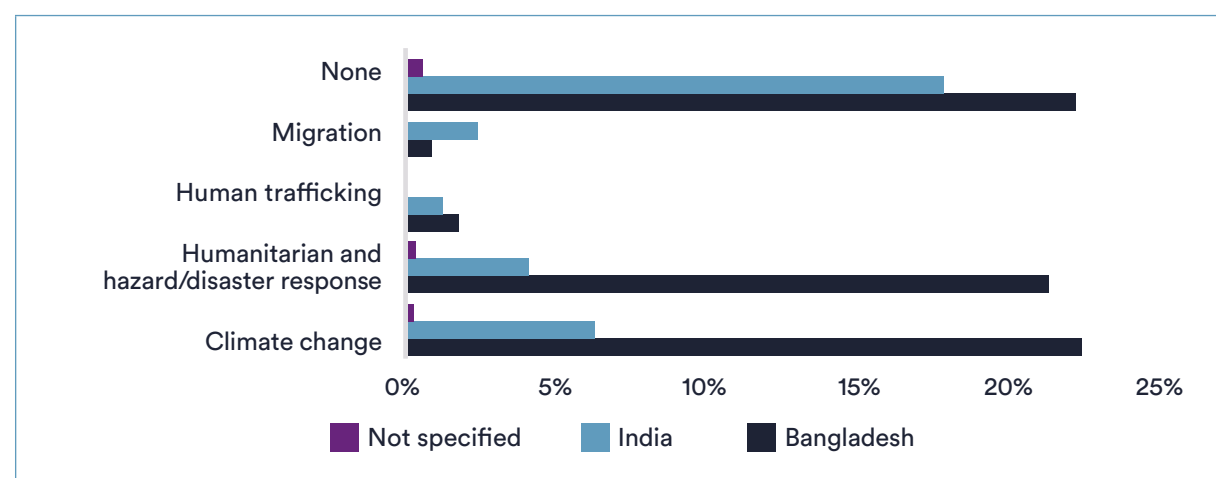


Figure 25: The proportion of households reporting support provisions and interactions with key organisations associated with topics identified in the research questions.

The timeframe within which these support needs would like to be met for households does not show as much variation as was reflected in whether additional support was required (Figure 26). Many households across both countries responded that support would be needed “soon” (245 households from Bangladesh, and 222 from India) with fewer indicating an “urgent” need (373 total). Only three households – all in India – reported that support was not needed; a small proportion noted that they were “not sure” or that support would be needed “in a while” across both regions of the Sundarbans.

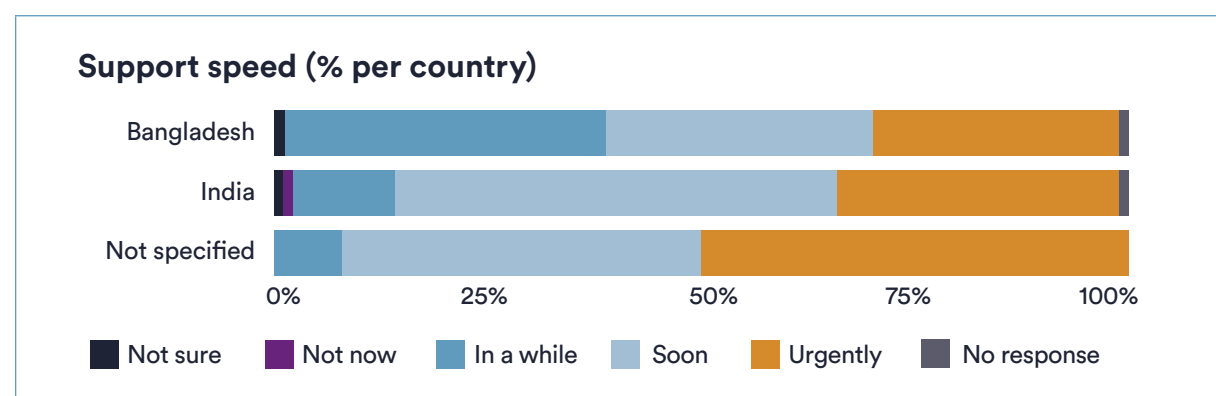


Figure 26: Support need requirements and the temporal frame in which they may be required according to participant responses. Percentage per country.

Needs requested from households who indicated that additional support was required for them, were asked to identify the type of support. Most households that responded indicated that they would prefer between two and four forms of support (435 households). Some identified up to nine different support needs (three households), whereas others (24 households) only indicated one. 166 households requested between five and eight differing

forms of support across the Sundarbans. Proportionally, much more support was requested in Bangladesh, with financial support and education and training opportunities being the more important requests by community members (Figure 27).

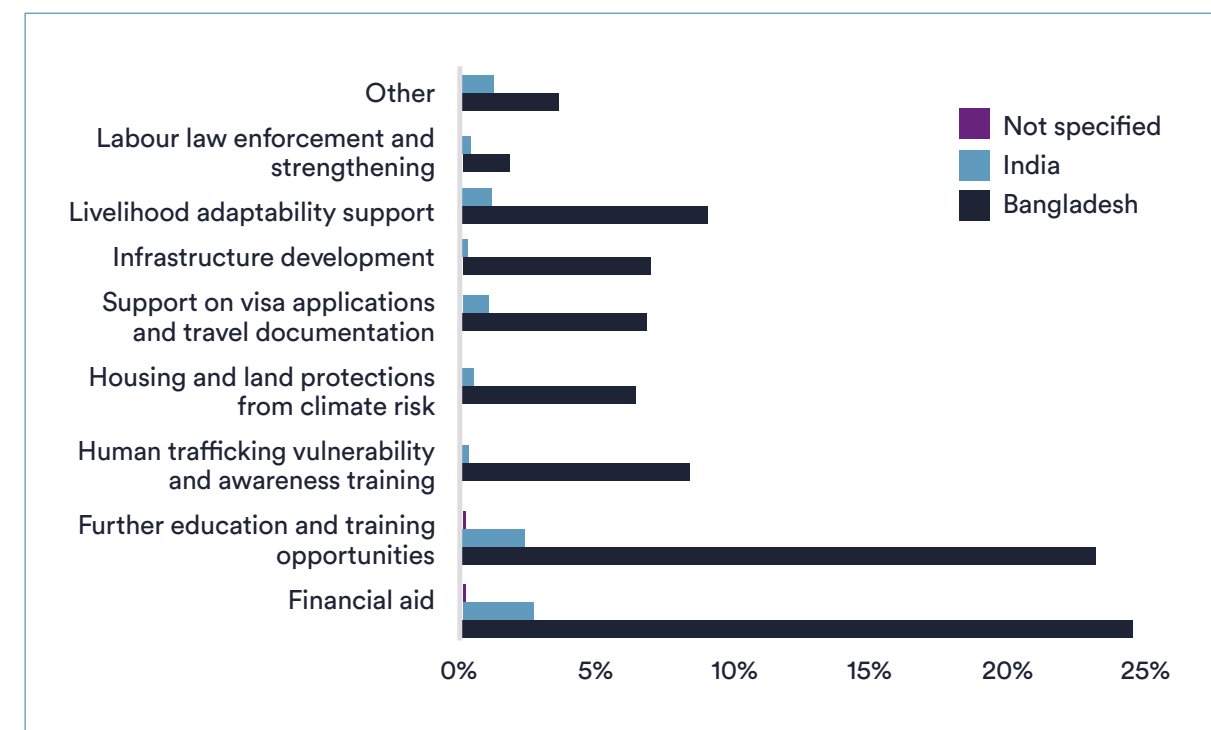


Figure 27: Requested support needs as identified by households in the India and Bangladesh Sundarbans shown by the proportion of requests.

When household members were asked to elaborate on how such support needs would be necessary, most (332 references in the responses) mentioned economic or financial strengthening for the household, with an additional 67 specifically reported that additional support would enable the household to fulfil their needs – applying to a range of cases such as economic, health and food. Some participants also reported how support would mean that they had the opportunity to establish a better quality of life for themselves and their families, with family development also mentioned as a benefit of receiving support. Quality of life also aligns with the improvement of mental health and wellbeing mentioned by responses from 37 households – this again was often linked to the potential of reducing economic pressures through support and thus alleviating some of the burdens felt by household members that would see a positive effect upon their health.

In addition, security was a common theme; there were 55 references to improved security, often alongside economic and financial benefits requests. One additional area where security would have benefits are through the awareness of risks. General awareness improvement was mentioned by 77 households, but more specifically 40 responses cited human trafficking awareness specifically. This suggests households felt that the more support that would be received by households, the more likely they were to be aware of the risks to look out for and could thus take precautions to protect themselves and family members from potential vulnerabilities to exploitation.

Interestingly, when assessing community support needs, most in Bangladesh would no longer consider migrating from the Sundarbans region, there were only 48 (24 each) that would not want to migrate or are unsure. The figures for India are much lower, with only 35 indicating

“One additional area where security would have benefits are through the awareness of risks.”



that better support would mean they would not migrate, 12 reporting that they still would and a further 23 who were unsure. There was a high proportion of no responses to this question which may account for some of the lower levels of responses noted – particularly for India.

What is visible in the support assessment for households were the more positive perceptions respondents had towards NGOs and CSOs, as well as local government which is in contrast to the way that national governments and the wider international community are perceived (Figure 28).

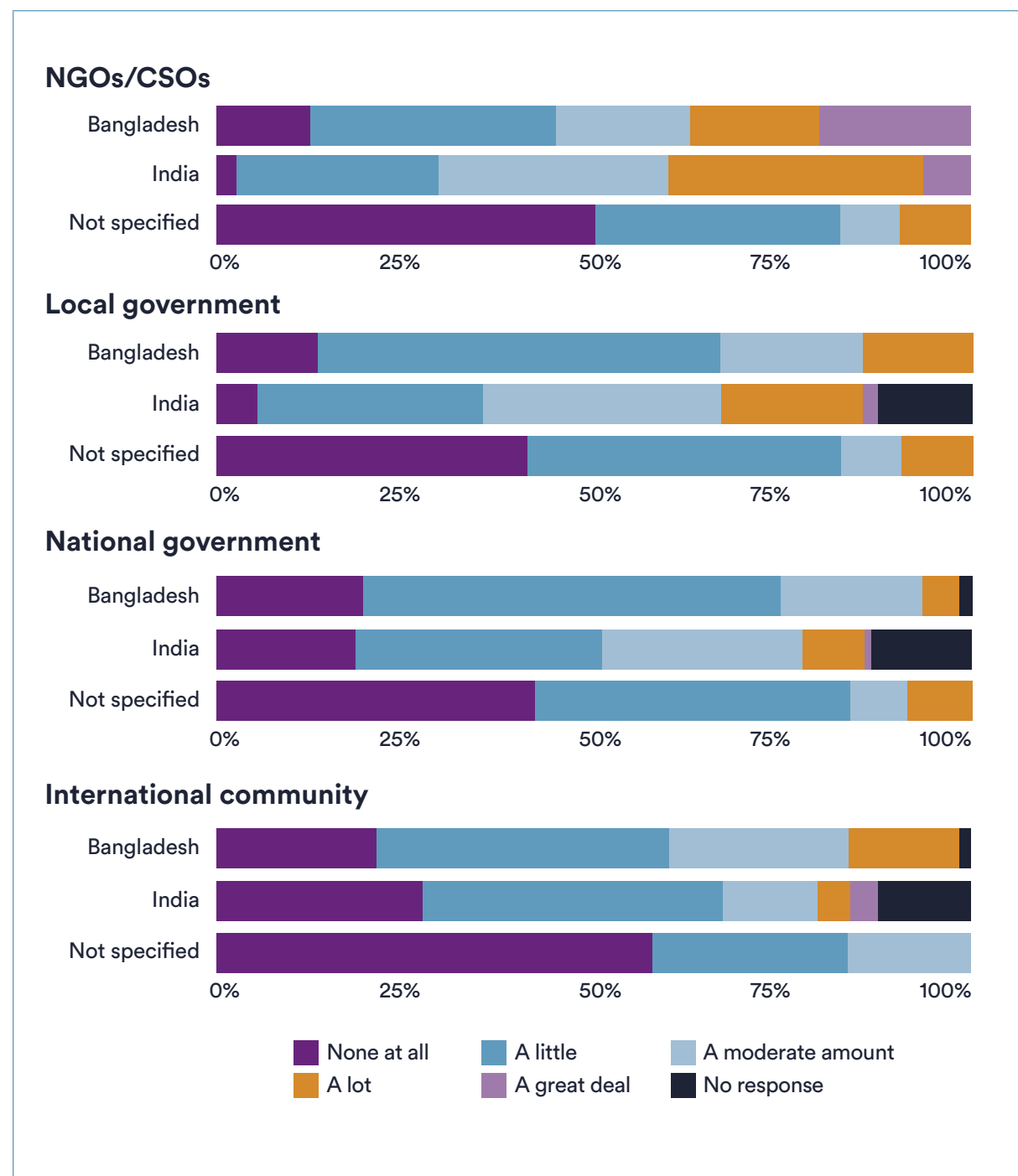


Figure 28: Perceptions of support by various local to international groups around action on climate change and the impacts of this upon local communities according to household survey data.



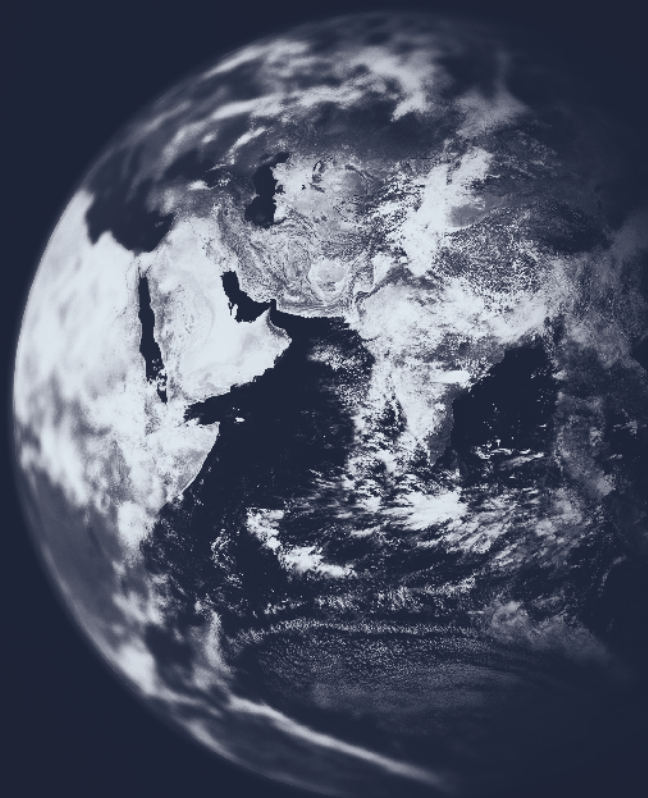


# 8. What do these findings mean in context?

Within the context of the theory of change (TOC) (Section 2)<sup>2</sup> the findings noted throughout the three main areas of the report indicate potential evidence-based strategies to be put in place by organisations via interventions. Figure 29 shows an updated version of the TOC (for the former see Figure 2), which now shows – outlined in blue – the areas in which the findings or the research process has helped to validate.

Across the various research methods and findings, we have been able to confirm some of the evidence-based assumptions and beliefs included in the TOC. For example, the surveys and their exploration of migration reasoning and the choices that households make are often linked to conditions faced because of climate change hazards. Contrary to the notion put forward more than a decade ago by Panda (2010), climate change and hazard impacts have increasingly been a consideration in migration decision-making within households. Further, whilst there were many references to households being impacted by acute-onset hazards there were also a large number who identified the risks faced by slower-onset hazards such as drought, riverbank erosion and salt-water intrusion. One thing that was less clear was the extent to which acute- vs slow-onset hazards greatly increased trafficking as migration which could be associated with increased human trafficking vulnerability; this contrasted with other studies that have addressed similar topics (for example Bharadwaj et al. 2021; Terre de Hommes 2022).

<sup>2</sup> Designed by CAFOD, Caritas' India and Bangladesh, and OKUP.



Assumptions: Belief ■ Weak evidence ■ Evidence-based ■ Contribution made ■

## Impact

Reduced prevalence of unsafe migration, modern slavery and trafficking and increase in flourishing livelihoods of the most vulnerable in the climate-vulnerable Sundarbans region.

Risky migration reduces if the full set of needs of potential migrants are met.

## Long-term outcomes

Community voice and agency against unsafe migration, modern slavery and trafficking are strengthened and viable sustainable livelihoods promoted through evidence-based and effective approaches.

Key stakeholders in Bangladesh and India take concerted action to safeguard against trafficking and modern slavery in the climate-vulnerable Sundarbans region.

Efficient, effective sustainable livelihood options and community mobilisation approaches can be scaled up.

## Outcomes

The links between climate change, environmental degradation, migration and modern slavery in the Sundarbans are better understood and evidenced.

Communities and individuals are united and more resilient to avoid modern slavery traps including forced labour, prostitution and trafficking.

Policy makers and key stakeholders in Bangladesh and India understand the need to safeguard against trafficking and modern slavery and support the promotion of climate resilient livelihoods.

Availability of employment and livelihood opportunities.

Vocational skills training and livelihood support is effective and sustainable.

Government is willing to support potential climate migrants.

## Outputs

Action research strengthens the understanding of the links between climate change and modern slavery, the gender dynamics of risky decision making, and vulnerability issues.

Vulnerable individuals and households have the skills and funds to develop sustainable livelihoods.

Community structures raising awareness of modern slavery and unsafe migration are established/strengthened.

Key stakeholders are aware of the links between climate change and modern slavery.

Communities recognise the links between climate change and migration.

Government is open to consider programmes supporting potential climate migrants.

## Activities

- Detailed assessment of the links between climate change, environmental degradation, migration and modern slavery (CAFOD).
- Longitudinal research into links between climate change and modern slavery (OKUP).

- Information campaigns on climate change and modern slavery (CB and OKUP).
- Development of community-level climate and safe migration actions plans (CI).
- Training on agroecological and climate resilient techniques (CB and CI).
- Life skills training and careers counselling (OKUP).
- Entrepreneurship development training and follow up (CB).
- Vocational skills training (MAWTS –technical schools) (CB).
- Seed funding for small businesses (CB).

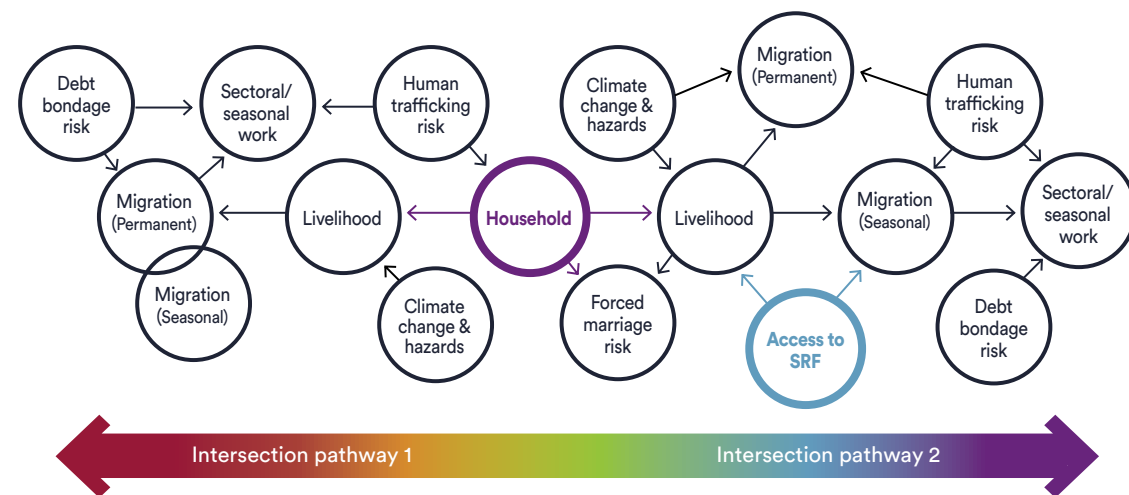
- National-level advocacy on links between climate change and modern slavery (OKUP).
- Form/activate Counter Trafficking Committees (CB and OKUP).
- Disseminate evidence through action research on links between climate change and modern slavery (CB, OKUP & CI).
- Advocacy events with Government (OKUP).

Figure 29: Update of the theory of change with the contributions from the research project highlighted in blue.



Since many of the partner organisations have not previously worked within the geographic regions in which the research took place, the stakeholder interview process enabled insight into the opinions of key stakeholders and to better understand the evidence previously obtained around governmental willingness to support programmatic support to migrant workers impacted by climate change. It also provided connections to develop those support mechanisms called for by communities vulnerable to migration, human trafficking and climate change effects noted in the survey.

Data on employment and livelihood opportunities for households have shown that there are factors which frequently prevent households from achieving economic stability and push them towards migration as an alternative means to source financial support. This is not without its risks as both human trafficking across borders from Bangladesh to India were noted in the data, as well as the risk of debt bondage built-up through seasonal migratory work opportunities which left some households with an increased lack of security). Such variations are explored within the context of the migration-human trafficking-climate change nexus (**Figure 30**). One means to tackle such issues and increase safety and opportunities for communities across the Sundarbans is that of livelihood training which has a strong evidence-based for continued application. However, there were also several other support needs that were identified, ranging from visa application and information on travelling outside of the country for work, through to access to financial support packages (not only straight after a climate hazard has occurred, but also in the longer-term).



**Figure 30:** Exploration of the varied pathways (these were the most identified through the research undertaken in this context, but they are likely to vary because of circumstances and individual choices). Intersection Pathway 1 refers much more to the identified pathways of Indian Sundarbans residents that were surveyed, where there is much more risk perceived and experienced within the Sundarbans region itself, including elevated vulnerability levels for those who are left within the household. Intersection Pathway 2 references the experiences of Bangladesh Sundarbans residents more greatly, with much more risk of human trafficking being associated with migratory practices and the risks are linked to the sectors communities are engaging in work with, rather than the geographical landscape itself.

Finally, the research, alongside establishing a baseline understanding over a short time-period in the region, has been able to provide clear evidence of the links between climate change, environmental degradation, migration practices and the risks of modern slavery and human trafficking. A longitudinal study would strengthen the ideas noted around acute- and slow-onset hazards noted above, but the scale of the data collection within such a small geographic area (more than 1200 surveys) provides a wealth of data that were previously unavailable and can support the development of active interventions for community development in the Sundarbans in both India and Bangladesh. Further, it provides a valuable starting point from

which the long-term outcomes and impact in the TOC can be achieved. With regards to the connections made between stakeholders and participants from households, there were some clear commonalities, but also there were some stark contrasts in the views of those working in organisations and those experiencing issues on the ground.

There was a consensus on the experiences of climate change related hazards for communities across the Sundarbans, but there was a difference in the support mechanisms that each proposed. Communities often sought financial support as being key to more stability. By contrast one stakeholder who disagreed with financial support programming, stated that

“ just giving money or things for free kills the willingness of people to work. It absolutely discourages them to make their own living independently and they are constantly dependent on these sort of aids”.  
– Stakeholder Interview 32

Whilst this concern may exist, it perhaps lacks understanding of the huge impacts households are facing, including economic instability. Where seeking alternative livelihoods and development in some cases may work, some households identified lacking the financial ability to do so. Including financial support provisions to assist communities is something that should be considered as they are expressed repeatedly by those on the frontlines of climate change, migration, and human trafficking concerns.

A further area of contrast was the way in which risks were portrayed by stakeholders and household respondents. The former often cited instances of risks, particularly to women, regarding sexual exploitation, forced marriage, and human trafficking within these groups. Occasionally risks to children (both girls and boys) were noted. However, in the survey it was identified that adult males were the group that had largely migrated and therefore could be viewed as at more risk of human trafficking in this area. In the antislavery sector it can be common to find a focus on women and children, potentially meaning that the conditions faced by men (often linked to debt bondage and forced labour) are overlooked. This is despite the recent ILO Global Estimates of Modern Slavery indicating that men account for 22.8million of those subjected to modern slavery on any given day (women represent 26.7million); with global male migrant workers accounting for 16% of all cases of forced labour exploitation globally (compared to 10.6% of female migrant workers) (ILO 2022). Acknowledging this gap in risk-perception in specific areas such as the Sundarbans is an important step, not only in providing practical support for communities, but also when engaging with stakeholders for advocacy purposes. The survey data clearly shows that the risks (for example of human trafficking) around male migrant workers must also be considered in the Sundarbans.

In addition to the above, there were numerous references by stakeholders to the cross-border migration, yet within the locally collected data there were only a very small number of instances where migratory choices had left people exposed to risks and subjected to cross-border human trafficking. There were instances of trafficking noted, along with debt

“ Finally, the research, alongside establishing a baseline understanding over a short time-period in the region, has been able to provide clear evidence of the links between climate change, environmental degradation, migration practices and the risks of modern slavery and human trafficking.”



bondage, but cross-border instances were limited in number. The primary data suggests that it is not as large a concern as previous assumed before the collection of data. However, a couple of things are worth noting, based on expert analysis of the findings by partners in-country. First, is the impact of the Covid-19 pandemic has made some seasonal work sectors less appealing due to a decline in wages; for example, brick kilns because of a lower demand for construction materials and the loss in profits causing a squeeze on wages. Furthermore, the policies around sending internal migrant workers back to their home communities by the Modi administration, alongside tensions around citizenship which impacted citizens in the India-Bangladesh border region, may have played a role in reducing the appeal of migrating across from Bangladesh into India for work. Additionally, as Bangladesh has continued to develop economically the appeal of travelling to India for work has begun to decline as the exchange rate between the taka and rupee has reduced, meaning people may be more likely to consider internal migration which is often easier than international movement. Nonetheless, the surveying team in India noted how some respondents were disinclined to disclose they were originally from Bangladesh and that therefore the observable low rate of cross-border activity could be because of participants choosing to omit this information. The reasons for non-disclosure, the team inferred, could well be due to a sense of insecurity and fear of revealing their nationality.

One final topic to address are the access needs and permitted usage of the Sundarbans Reserve Forest (SRF) by local communities. Many rely on the mangrove forest to support their livelihood and to generate income for the household. However, the permit systems in place currently were explicitly identified by some stakeholders as a barrier to economic stability for communities. The environmental benefits and protections (from restricting use of the forest) are undeniable and must continue. What may be needed is more local consultation and support during the six-month closure period, as it is clear the current permit and access system does lead to some choosing to migrate for work in the six months when the SRF is not open to use. Support solutions need to be found that provide safe alternatives to the local community during the SRF protectionary closure in order to avoid them needing to migrate for work.

“...the access needs and permitted usage of the Sundarbans Reserve Forest (SRF) by local communities. Many rely on the mangrove forest to support their livelihood and to generate income for the household.”

## 9. Recommendations for support

There are several support needs that have been identified, that require additional attention for communities around the topics of migration, human trafficking risk, and climate change factors. Here we outline key recommendations, coming out of the research, to support communities across the India and Bangladesh Sundarbans regions.

### In-country support providers

- 1. Cross-border collaboration:** Whilst only a small number of disclosed cases noted exploitation across the India-Bangladesh border, there are still those who are migrating across the border and can be exposed to the associated risks. Collaboration between organisations seeking to support migrant workers and potential survivors of human trafficking should be encouraged to identify source and destination communities within the Sundarbans and in their wider countries and support them with awareness training and advice on assistance available in both countries (where and how to access services).
- 2. Enhanced action on migration and human trafficking:** Many households reported that whilst they engaged with humanitarian organisations and those providing support on climate change there is less engagement with migration and human trafficking support organisations. Increased presence and support from organisations working to support migrant workers and raise awareness of human trafficking risk awareness and the survivor support available to them will be important for the communities in the Sundarbans. Continued support and community monitoring in the region will enable the tracking of impacts related to climate change hazards and better provision of support to communities where gaps have been identified and requested by those communities.
- 3. Education and training opportunities:** Education and training were largely identified as a key support need for households. There are two key avenues of training support needs; livelihood training, and awareness raising around human trafficking. The first includes training to build climate resilience within agriculture (for example, how to tend crops in a changing climate, how to diversify production and yields). It also needs to include training on alternative primary livelihood activities or alternative income streams to support the primary livelihood. Such training could enable household members to access employment or build the skills needed to be able to stay within their communities – identified as a key wish of participants – rather than having to diversify through seasonal migration. The second arm of training needed is awareness raising around, and identification of, human trafficking risks for communities which see high levels of migration. This would enable exploitation risks to be identified and prevented earlier, and support could be provided for those subjected to human trafficking.
- 4. Gender-specific activities:** Women and girls face additional vulnerabilities placing them at risk from climate change impacts. The evidence has shown women and girls are exposed to risks due to the migration of male household members, as well as marriage, in some cases, being used as a form of economic pressure alleviation. Programmes should be put in place to provide women and girls with the tools to engage in livelihood support and ensure adaptation tools are attainable for these groups.





## Local and national government

5. **Generating intersectional climate action plans:** The development of national action plans and programming against climatic factors should include details on the support needs that will be provided to communities who are exposed to the impacts of hazards and are at risk of socio-economic risk factors that may lead to increased exploitation along migration pathways. Including such social outcomes within the national action plans of both India and Bangladesh would demonstrate clear support for organisations working in 'risky' areas such as the Sundarbans and would elevate the vulnerabilities faced by communities (of climate change and human trafficking), encouraging collaborative action rather than siloed responses. Such inclusions can follow the roadmap outlined in Jackson et al. (2021) for environment and antislavery cooperation and be applied to other organisational groups.
6. **Financial support:** Communities strongly indicated that they require financial support within the Sundarbans. Packages should be advertised and made easily accessible for communities following climate-related events to ensure the swift recovery of livelihoods and homesteads, thus reducing the need for migration for communities. Alongside this, long-term support packages (such as social safety nets) and investment in communities within the Sundarbans would help to increase the financial wellbeing of households and improve their quality of life.
7. **Improving international migration avenues:** One form of support identified by households that would require governmental assistance is improved support on visa applications and other travel documents where household members are choosing to migrate across border for work. International cooperation should be made accessible. Furthermore, support for accessing decent work without the fear of debt upon arrival should be a key target for supporting workers by the Indian and Bangladeshi governments.
8. **Criminalising debt bondage:** Ensuring the protection of workers is vital and, as has been shown in the evidence gathered here, debt bondage is allowed to continue within some sectors placing a financial strain on households. Whilst debt bondage is illegal in India it is not well enforced – the structures for investigating and acting need to be fully invested in within state and local governments to ensure laws are being properly implemented. For Bangladesh, the development of such a law to criminalise the practices of debt bondage would begin to help workers who may be subjected to such forms of exploitation. This would also require investment but would ensure that the practice is no longer viewed as acceptable.



## International community

9. **Loss and damage support:** Engagement with the loss and damage programming through access to support funds from the international community was noted in the latest COP27 Climate Change Summit (Egypt, November 2022). Such funds could be used to strengthen national and NGO/CSO programming to alleviate risks faced by communities. Funding for mitigation and adaptation programming, as noted above, could be linked to such funds should they become available, and the case has been made that the cumulative impacts of climate change hazards and the resulting need for migration for livelihoods show that the Sundarbans region is a prime location for the support of alleviation from losses and damages in the long term.
10. **Tackling data gaps for SDGs:** There are currently a lack of indicators for the measurement and understanding of tackling modern slavery and human trafficking on a global, national, and local scale; and even more when considering the connections made between SDGs. The data provided can fill some of the evidence gaps and can be used as an example of the in-country research that should be supported to strengthen intervention mechanisms. Such support that this research and follow-on activities can underpin include: SDG 5 (focusing on the gendered-dimensions of migration); human trafficking and climate change through the achievement of SDG 8.7 (ending modern slavery, forced labour and human trafficking); identify areas where intersectional issues such as climate change (SDG 13 Climate Action) and justice SDG 16 (which references human trafficking) to achieve the UN targets set for 2030.





## 10. Conclusion

The research provided here is a start in the development of our understanding of the relationship between migration and its intersection with the ‘human trafficking-environmental degradation-climate change nexus’. Here we have presented a survey of more than 1200 households across the Bangladesh and India Sundarbans. This, to our knowledge, is one of the more extensive data collection processes that have provided information for an area that is highly vulnerable to climate change effects.

Whilst the content of the report can present a concerning picture at times, there are positives to take, the main being the ability to centre the experiences of hundreds of households in the development of practical and necessary support mechanisms and interventions on a local scale for those communities to directly benefit from. There is also a clear call to action for the national government to engage with communities experiencing multifaceted and intersectional issues related to climate change and hazards including migration responses and human trafficking risks.

Finally, there can be no doubt that these data can encourage and support the work of the valuable in-county organisations who strive to gain momentum in their advocacy at national and international levels, to encourage increased protection of the Sundarbans region – not only of the mangrove forest and its benefits for climate change mitigation, but also for the protection of people who reside in the region on both sides of the border. Their experiences will only continue to be negative if global action to achieve both the limiting of global warming, and the Sustainable Development Goals, are not met.

## 11. References

- Ahsan, R., Kellett, J., and Karuppanan, S. (2014). Climate Induced Migration: Lessons from Bangladesh. *The International Journal of Climate Change: Impacts and Responses*, 5, 1-14.
- Akber, M.A., Patwary, M.M., Islam, M.A., and Rahman, M.R. (2018). Storm protection service of the Sundarbans mangrove forest, Bangladesh. *Natural Hazards*, 94, 405-418.
- Antislavery in Domestic Legislation (n.d.).  
 Bangladesh see: <https://antislaverylaw.ac.uk/country/bangladesh/>  
 India see: <https://antislaverylaw.ac.uk/country/india/>
- Arabi, A., Naher, J., and Soron, T.R. (2019). Impact of River Bank Erosion on Mental Health and Coping Capacity in Bangladesh. *Sciendo*, 2(2), 195-200.
- Bales, K. (2016). *Blood and Earth: Modern Slavery, Ecocide, and the Secret to Saving the World*. Spiegel & Grau, New York NY.
- Barua, P., and Rahman, S.H. (2019). Impact of river erosion on livelihood and coping strategies of displaced people in South-Eastern Bangladesh. *International Journal of Migration and Residential Mobility*, 2(1), 34-55.
- Bharadwaj, R., Bishop, D., Hazra, S., Pufaa, E., and Kofi Annan, J. (2021). Climate-induced migration and modern slavery: A toolkit for policy makers. Anti-Slavery International and IIED, London.
- Bharadwaj, R., Chakravarti, D., Karthikeyan, N., Hazra, S., Daniel, U., Topno, J., and Abhilashi, R. (2022). Climate change, migration and vulnerability to trafficking. IIED, London.
- Bhatta, G.D., Aggarwal, P.K., Poudel, S., and Belgrave, D.A. (2015). Climate-induced Migration in South Asia: Migration Decisions and the Gender Dimensions of Adverse Climatic Events. *Journal of Rural and Community Development*, 10(4), 1-23.
- Boyd, D.S., Perrat, B., Li, X., Jackson, B., Landman, T., Ling, F., Bales, K., Choi-Fitzpatrick, A., Goulding, J., Marsh, S., and Foody, G.M. (2021). Informing action for United Nations SDG target 8.7 and interdependent SDGs: Examining modern slavery from space. *Humanities and Social Sciences Communications*, 8(1), 1-14.
- Brickell, K., Parsons, L., Natarajan, N., and Chann, S. (2018). *Blood Bricks: Untold Stories of Modern Slavery and Climate Change from Cambodia*. Royal Holloway University of London, London.
- Brown, D., Boyd, D.S., Brickell, K., Ives, C.D., Natarajan, N., and Parsons, L. (2019). Modern slavery, environmental degradation and climate change: Fisheries, field, forests and factories. *Environment and Planning E: Nature and Space*. <https://doi.org/10.1177/2514848619887156>
- Burnard, P., Gill, P., Stewart, K., Treasure, E., and Chadwick, B. (2008). Analysing and presenting qualitative data. *British Dental Journal*, 204, 429-432.
- Chmutina, K., Von Meding, J., Gaillard, J.C., and Bosher, L. (2017). Why natural disasters aren't all that natural. OpenDemocracy. Retrieved 30 November, 2022, from <https://www.opendemocracy.net/en/why-natural-disasters-arent-all-that-natural/>
- Coelho, S. (2016). *The Climate Change-Human Trafficking Nexus*. IOM, Bangkok.



Decker Sparks, J.L., Boyd, D.S., Jackson, B., Ives, C.D., and Bales, K. (2021). Growing evidence of the interconnections between modern slavery, environmental degradation, and climate change. *One Earth*, 4(2), 181-191.

Ferdous, J., and Mallick, D. (2019). Norms, practices, and gendered vulnerabilities in the lower Teesta basin, Bangladesh. *Environmental Development*, 31, 88-96.

Gardner, A., Northall, P., and Brewster, B. (2021). Building Slavery-free Communities: A Resilience Framework. *Journal of Human Trafficking*, 7(3), 338-353.

Gill, P., Stewart, K., Treasure, E., and Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British Dental Journal*, 204, 291-295.

Human Rights Watch. (2015). *Marry before your house is swept away: Child marriage in Bangladesh*. Washington DC.

ILO. (2022). *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage*. ILO, Walk Free and IOM, Geneva.

IPCC. (2022). *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge UK and New York NY.

Iyengar, K.P., and Jain, V.K. (2021). COVID-19 and the plight of migrants in India. *Postgraduate Medical Journal*, 97(1149), 471-472.

Jackson, B., Boyd, D.S., Ives, C.D., Decker Sparks, J.L., Foody, G.M., Marsh, S., and Bales, K. (2020). Remote sensing of fish-processing in the Sundarbans Reserve Forest, Bangladesh: an insight into the modern slavery-environment nexus in the coastal fringe. *Maritime Studies*, 19(4), 429-444.

Jackson, B., Brotherton, V., Blackstone, N.T., and Decker Sparks, J.L. (2021). Modern slavery, environmental degradation and climate change: Present and future pathways for addressing the nexus. Rights Lab, University of Nottingham.

Jensen, K.B. (2013). Child slavery and the fish processing industry in Bangladesh. *Focus on Geography*, 56(2), 54-65.

Malak, M.A., Hossain, N.J., Quader, M.A., Akter, T., and Islam, M.N. (2021). Climate Change-Induced Natural Hazard: Population Displacement, Settlement Relocation, and Livelihood Change Due to Riverbank Erosion in Bangladesh (p. 193-210). In Islam, M.N., and van Amstel, A. (Eds.) *Bangladesh II: Climate Change Impacts, Mitigation and Adaptation in Developing Countries*. Springer Nature, Switzerland.

McCombes, S. (2022). Sampling Methods | Types, Techniques, & Examples. Retrieved 27 June, 2022, from <https://www.scribbr.co.uk/research-methods/sampling/>

Melnikas, A.J., Ainul, S., Ehsan, I., Haque, E., and Amin, S. (2020). Child marriage practices among the Rohingya in Bangladesh. *Conflict and Health*, 14, 28.

Ministry of Environment. (2005). *National Adaptation Programme of Action (NAPA)*. Ministry of Environment and Forest, Government of the People's Republic of Bangladesh, Dhaka.

Mistri, A. (2013). Migration and Sustainable Livelihoods: A Study from Sundarban Biosphere Reserve. *Asia-Pacific Journal of Social Sciences*, 2, 76-102.

O'Connell, C. (2021). *From a vicious to a virtuous circle. Addressing climate change, environmental destruction and contemporary slavery*. Anti-Slavery International, London.

Panda, A. (2010). *Climate Induced Migration from Bangladesh to India: Issues and Challenges*.

Polaris. (2021). *Recruitment, Human Trafficking, and Temporary Visa Workers*. Available from: <https://polarisproject.org/wp-content/uploads/2021/09/Recruitment-Human-Trafficking-and-Temporary-Visa-Workers.pdf>

Research Network on the Legal Parameters of Slavery. (2012). *The Bellagio-Harvard Guidelines on the Legal Parameters of Slavery*. Yale University, New Haven CT.

Royal Geographical Society. (n.d.). *Sampling Techniques*. Retrieved 27 June, 2022, from <https://www.rgs.org/schools/teaching-resources/sampling-techniques/>

Sarker, A.H.M.R., Nobui, M.N., Røskoft, E., Chivers, D.J., and Suza, M. (2020). Value of the Storm-Protection Function of Sundarban Mangroves in Bangladesh. *Journal of Sustainable Development*, 13(3), 128-137.

Schwarz, K. (forthcoming). *Defining Modern Slavery*. Rights Lab, University of Nottingham.

Shi, P. (2019). Hazards, Disasters, and Risks. *Disaster Risk Science*, 1-48. [https://doi.org/10.1007/978-981-13-6689-5\\_1](https://doi.org/10.1007/978-981-13-6689-5_1)

Smith, S.M. (2020). *Determining Sample Size: How to ensure you get the correct sample size*. Qualtrics.

Terre de Hommes. (2022). *Impact of climate change on health, migration and child protection in the Sundarbans region of India*.

Titumir, R.A.M., Paran, M.S., Pasha, M.W., and Meem, M.H. (2022). *Climate Change and Its Impact: Sundarbans as a Natural Wall* (p. 137-157). In Titumir, R.A.M. (Ed.) *Sundarbans and its Ecosystem Services: Traditional Knowledge, Customary Sustainable Use and Community Based Innovation*. Palgrave Macmillan, Springer Nature Singapore.

Tsaneva, M. (2020). The Effect of Weather Variability on Child Marriage in Bangladesh. *Journal of International Development*, 32(8), 1346-1359.

UN. (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*. United Nations General Assembly, New York NY.

UNEP. (2022). *COP27 ends with announcement of historic loss and damage fund*. UN Environment Programme. Retrieved 28 November, 2022, from <https://www.unep.org/news-and-stories/story/cop27-ends-announcement-historic-loss-and-damage-fund>

UN-ICSU. 2012. *Integrated Research on Disaster Risk. Peril Classification and Hazard Glossary (IRDR DATA Publication No. 1)*. Beijing: Integrated Research on Disaster Risk.

UNODC. (2015). *The role of recruitment fees and abusive and fraudulent recruitment practices of recruitment agencies in trafficking in persons*. Vienna.

US Department of Justice. (2022). *What is human trafficking?* Retrieved 30 November, 2022, from <https://www.justice.gov/humantrafficking/what-is-human-trafficking>

Walk Free. (2018). *The Global Slavery Index 2018*. Minderoo Foundation, Perth WA.

## 12. Annexes

A series of annexes follow that present the data gathered and tools used for data collection by researchers within this study.

### Annex A: List of resources used in the evidence review

Author(s)	Year	Title	Publication	Type	Relevance score
Afsar, R.	2003	Internal migration and the development nexus: the case of Bangladesh	Regional Conference on Migration, Development and Pro-Poor Policy Choices in Asia	Conference paper	3
Ahsan, R.	2014	Climate Induced Migration: Lessons from Bangladesh	The International Journal of Climate Change: Impacts and Responses	Journal article	1
Ahsan et al.	2016	Climate Migration and Urban Changes in Bangladesh	Urban Disasters and Resilience in Asia	Book chapter	2
Ahsan, R.	2019	Climate-Induced Migration: Impacts on Social Structures and Justice in Bangladesh	South Asia Research	Journal article	2
Alam, J.	2022	For Climate Migrants, Bangladesh Offers Promising Alternatives	The Diplomat	News	1
Amin and Ainul	2022	Child Marriage, Climate Change, and Local Level Variability	Population Council	Blog	2
Anderson et al.	2016	Climate Change Knows No Borders: An analysis of climate induced migration, protection gaps and need for solidarity in South Asia	ActionAid	Report	2
Asadullah et al.	2020	Child marriage, climate vulnerability and natural disasters in coastal Bangladesh	Journal of Biosocial Science	Journal article	1
Atkinson and Bruce	2015	Adolescent Girls, Human Rights and the Expanding Climate Emergency	Annals of Global Health	Journal article	1
Baird et al.	2007	Human Tide: The real migration crisis	Christian Aid	Report	3
Bhatta et al.	2015	Climate-induced Migration in South Asia: Migration Decisions and the Gender Dimensions of Adverse Climatic Events	Journal of Rural and Community Development	Journal article	1
Bharadwaj et al.	2021	Climate-induced migration and modern slavery: A toolkit for policy-makers	Anti-Slavery International; IEED	Report	1

Author(s)	Year	Title	Publication	Type	Relevance score
Bharadwaj et al.	2022	Climate Change, Migration and Vulnerability to Trafficking	IEED	White paper	1
Bilak and Kälin	2022	Climate crisis and displacement – from commitment to action	Forced Migration Review	Journal article	2
Bose, S.	2014	Illegal migration in the Indian Sunderbans	Forced Migration Review	Policy brief	3
Bose and Satapathy	2021	The Crisis of Climate and Immigration in Amitav Ghosh's Gun Island	Litera: Journal of Language, Literature and Cultural Studies	Commentary	2
Brown et al.	2019	Modern slavery, environmental degradation and climate change: Fisheries, field, forests and factories	EPE: Nature and Space	Journal article	2.5
Chandran, R.	2016	Trafficking risk rises as villagers flee India's worst drought in decades	Reuters	News	2
Chatterjee, D.	2011	Understanding the linkages between climate change and migration from Bangladesh to India	Jadavpur Journal of International Relations	Journal article	1
Chatterjee et al.	2020	Stressors of disaster-induced displacement and migration in India	Urban Ecology: Emerging Patterns and Social-Ecological Systems	Book chapter	1
Coleho, S.	2016	The Climate Change-Human Trafficking Nexus	IOM	Report	1
David et al.	2018	Migrants and their vulnerability to human trafficking, modern slavery and forced labour	Walk Free, IOM, UKAID, Alliance 8.7	Report	1
Decker Sparks et al.	2021	Growing evidence of the interconnections between modern slavery, environmental degradation, and climate change	One Earth	Journal article	3
Gerrard, M.B.	2018	Climate Change and Human Trafficking After the Paris Agreement	University of Miami Law Review	Journal article	2.5
Ghosh, B.	2009	Trafficking in women and children in India: nature, dimensions and strategies for prevention	The International Journal of Human Rights	Journal article	1
Glennon, R.	2017	The Unfolding Tragedy of Climate Change in Bangladesh	Scientific American	Blog	3
Hamid, H.	2022	Sex Traffickers: Friend of Foe?	Anti-Trafficking Review	Journal article	1
Haq et al.	2015	Evaluations of Adaptation Policies in GBM Delta of Bangladesh (Work Package 6)	DECCMA (Deltas, Vulnerability and Climate Change: Migration and Adaptation)	Work package	2
Hasan and MacDonald	2021	How Climate Change Deepens Bangladesh's Fragility	United States Institute of Peace	Blog	1



Author(s)	Year	Title	Publication	Type	Relevance score
Hossain, M.B.	2021	The Mapping of the Climate Change Related Vulnerabilities and Child Marriage in Bangladesh	Share net Bangladesh	Report	3
Islam et al.	2005	National Adaptation Programme of Action (NAPA)	Climate Change Adaptation Actions in Bangladesh	Book chapter	1
Islam et al.	2021	Insights on Migration and Climate Change: Action Research on Conducted in the Southwest Coastal Belt of Bangladesh	Helvetas, OKUP	Report	1
Islamic Relief Worldwide	2020	Hidden in Plain Sight: A study of child labour and human trafficking in Rautahat, Nepal	Islamic Relief Worldwide	Report	2
Jackson et al.	2021	Modern slavery, environmental degradation and climate change: present and future pathways for addressing the nexus	Rights Lab, University of Nottingham	Report	1
Jasparro and Taylor	2008	Climate Change and Regional Vulnerability to Transnational Security Threats in Southeast Asia	Geopolitics	Journal article	3
Javed, M.I.	2013	Climate Change and Migration Impact on Bangladesh's Coastal Inhabitants	Lund University	Thesis	1
Jensen, K.B.	2013	Child Slavery and the Fish Processing Industry in Bangladesh	Focus on Geography	Journal article	1
Jolly and Ahmad	2019	Climate Refugees: The Role of South Asian Judiciaries in Protecting the Climate Refugees	Climate Refugees in South Asia	Book chapter	1
Karmakar, S.	2021	Gender and Climate Change: The Condition of Women in the Indian Sundarbans	Scholars Journal of Arts, Humanities and Social Sciences	Journal article	2
Khatun, M.	2013	Climate Change and Migration in Bangladesh: Golden Bengal to Land of Disasters	Bangladesh e-Journal of Sociology	Journal article	1
Laczko and Aghazarm	2009	Migration, Environment and Climate Change: Assessing the Evidence	IOM	Report	2
Martinez, E.	2020	Understanding the Connections: An analysis of climate change and human security	The University of Texas El Paso	Thesis	2
McDonnell, T.	2019	Climate change creates a new migration crisis for Bangladesh	National Geographic	News	1
McLeman, R.	2011	Climate change, migration and critical international security considerations	IOM	Report	2
Milán-García et al.	2021	Climate change-induced migration: a bibliometric review	Globalization and Health	Journal article	2

Author(s)	Year	Title	Publication	Type	Relevance score
Mistri, A.	2013	Migration and Sustainable Livelihoods: A Study from Sundarban Biosphere Reserve	Asia-Pacific Journal of Social Science	Journal article	1
Mistri, A.	2019	Is the Migration from Indian Sundarban an Environmental Migration? Investigating through Sustainable Livelihood Approach (SLA)	Asian Profile	Journal article	1
Mitra, R.	2022	In the Sundarban, climate change has an unlikely effect — on child sex-trafficking	Fuller Project	Blog	1
Molinari, N.	2017	Intensifying Insecurities: The Impact of climate change on vulnerability to human trafficking in the Indian Sundarbans	Anti-Trafficking Review	Journal article	1
Montes, S.R.		The Climate Crisis: Climate Induced Migration in the Asia-Pacific Region	The University of Texas El Paso	Thesis	3
Mullick, B.	2019	The Nexus between Socio-Ecological System, Livelihood Resilience, and Migration Decisions: Empirical Evidence from Bangladesh	Sustainability	Journal article	1
Nyers, P.	2015	Migrant Citizenships and Autonomous Mobilities	Migration, Mobility, & Displacement	Journal article	2
O'Connell, C.	2021	From a vicious to a virtuous circle: Addressing climate change, environmental destruction and contemporary slavery	Anti-Slavery International	Report	2
Panda, A.	2010	Climate Induced Migration from Bangladesh to India: Issues and Challenges	London School of Economics and Political Science	White paper	1
Poncelet et al.	2010	A Country Made for Disasters: Environmental Vulnerability and Forced Migration in Bangladesh	Environment, Forced Migration and Social Vulnerability	Book chapter	1
Rabbani et al.	2015	Climate Change and Migration in Bangladesh: Gender Perspective	UN Women	Report	1
Rana and Ilina	2021	Climate change and migration impacts on cities: Lessons from Bangladesh	Environmental Challenges	Journal article	3
Rashid, S.R.	2020	The Intersection of Climate Change Migration and Changing Economy	Solidarity Center, USAID	Report	1.5
Sabuj Sangha	2020	Sabuj Sangha Annual Report	Sabuj Sangha	Report	1
Saha, S.	2012	Security Implications of Climate Refugees in Urban Slums: A Case Study from Dhaka, Bangladesh	Climate Change, Human Security and Violent Conflict	Book chapter	2
Sajibur		One in three children in Bangladesh victims of climate change impact	The Financial Express	News	1



Author(s)	Year	Title	Publication	Type	Relevance score
Sen, N.C.	2015	Gender, Migration and Human Trafficking: The Untold Story of the Gurgaon Maids' Migration from the Sunderbans	The Oriental Anthropologist	Journal article	2
Sheu et al.	2021	Potential Impact of Climate Change on Human Trafficking: A Narrative Review	The Journal of Nervous and Mental Disease	Journal article	3
Smith, M.V.	2021	Applying the United Nations Trafficking Protocol in the Context of Climate Change	Chicago Journal of International Law	Journal article	2
Shahabuddin, Lieutenant Colonel A.R.M.	2015	Climate Change and Internal Migration: An Analysis on security challenge for Bangladesh	NDC Journal	Journal article	2
Stephens, A.	2019	Climate Change and Human Trafficking: An investigation into how climate change and natural disasters increase the risk of human trafficking and how it can be intercepted in the future	LUCSUS	Thesis	2
Sun, Y.	2022	Climate Migration Pushes Bangladesh's Megacity to the Brink	Bloomberg	News	1
Tomkins et al.	2018	The Impact of Environmental Stressors on Human Trafficking	IEEE International Conference on Data Mining (ICDM)	Conference paper	1
Trajano, J.C.	2018	Combatting Human Trafficking in East Asia: Mind the Gaps	NTS Insight	Journal article	3
UNFPA	2022	Preventing child marriages through climate action	Relief Web, UNFPA	Blog	
UNHCR et al.	2015	Human Mobility in the Context of Climate Change: Elements for the UNFCCC Paris Agreement		White paper	3
van Scheltinga, C.T.	2015	Bangladesh Delta Plan (BDP) 2100 and the Baseline Study on Climate Change		Report	2
Waheduzzaman and Mizanuzzaman	2021	Impact of Salinity on the Livelihoods of the Coastal People in Bangladesh: An Assessment on Post Amphan Situation	Journal of Global Ecology and Environment	Journal article	3
Warner et al.	2009	In Search of Shelter: Mapping the Effect of Climate Change on Human Migration and Displacement	CARE International, Columbia University, UNHCR, UNU-EHS, World Bank	Report	1





## Annex B: Stakeholder interview questions

1. In what areas of migration in Bangladesh/India do you have expertise?
  - a. Interviewer to provide respondent with options (can select multiple responses): internal migration, migration to India, migration to other countries internationally.
2. In what areas of human trafficking in Bangladesh/India do you have expertise?
  - a. Interviewer to provide respondent with options (can select multiple responses): human trafficking for sexual exploitation, human trafficking for forced labour.
3. In what area of climate change implications in Bangladesh/India do you have expertise?
  - a. Interviewer to provide respondent with options (can select multiple responses): natural hazards (for example cyclones), flooding, sea-level rise and salt-water intrusion, drought, responding/adaptation programmes to climate change.
4. What does migration look like for communities in the Sundarbans?
  - a. What age to people tend to migrate at from the Sundarbans?
    - i. Does this differ for men/boys and women/girls?
    - ii. Does this differ in different districts and/or in different communities?
  - b. Who tend to migrate most often: men/boys or women/girls?
    - i. What industries do they tend to traditionally work in?
    - ii. What industries do they tend to migrate to for work?
    - iii. What are the main drivers leading to migration of people? Are any of these associated with a changing climate (for example, crop failures, saltwater intrusion)?
    - iv. Who decides who should migrate for work?
    - v. What is the process of this decision-making?
    - vi. Does this process differ in different districts and/or in different communities?
5. What does human trafficking look like for communities in the Sundarbans?
  - a. What age to people tend to be most at risk from trafficking vulnerabilities?
  - b. Who tend to be most at risk of trafficking: men/boys, women/girls, both?
  - c. Where does the trafficking tend to occur?
    - i. Interviewer to provide respondent with options (can select multiple responses): from source community, via a recruiter, at the border-crossing (international migration), at the destination community.
    - ii. Is the exchange of money in the form of debt often connected to the process of trafficking?
    - iii. Which sector(s) are trafficking of persons most commonly found in Bangladesh/India?
    - iv. Is forced marriage a risk for women/girls in the community?
6. What climate change risks are most commonly considered for adaptation/response in the Sundarbans region?
7. What factors drive human trafficking for labour in the Sundarbans? Human trafficking for sexual exploitation? Forced marriage?
8. Who is vulnerable to human trafficking for labour in the Sundarbans? Human trafficking for sexual exploitation? Forced marriage?
9. What factors drive migration for labour in the Sundarbans?
10. How do age, race, gender, nationality, religious beliefs and immigration status influence migration opportunities?
11. How do age, race, gender, nationality, religious beliefs and immigration status influence vulnerability to human trafficking?
12. What effects of climate change do people worry about the most?
  - a. How does this vary by geography (district/country)?
  - b. What are their coping mechanisms?
13. What precautions do people take before an environmental hazard (for example, cyclone, sea-level rise, flooding, and drought)?
  - a. How do these vary by hazard?
  - b. Who is more likely to take or be able to take precautions? Who are the leaders in community responses?
  - c. How do they decide when/if to take precautions?
14. What populations are most vulnerable to the effects of a hazard or associated disaster?
  - a. How does this vulnerability manifest?
    - i. Interviewer to provide respondent with options (can select multiple responses): internal migration, migration to India, migration to other countries internationally, displacement without choice, marriage of family members, trafficking vulnerability.
15. What are the biggest economic impacts incurred from climate change impacts?
  - a. How do these impacts vary by race? Gender? Nationality? Immigration status? Religious beliefs? Socioeconomic status?
  - b. How to these impacts vary by livelihood or occupation?
  - c. How do people try to prevent household/family-level economic crises (before, during, and after climate change hazards)? (for example, migration, marriage of family members)
16. How does climate change contribute to vulnerability toward migration and human trafficking?
  - a. What conditions do you think influence vulnerability in the context of climate change?
  - b. What climatic changes push people toward choosing to migrate, or being trafficked?
  - c. Does vulnerability to migration/human trafficking in this context vary by whether the climate change hazard was acute (cyclones, flooding, storm surges) or slow onset (drought, sea-level rise)? If so, how?
    - i. What if it is a recurring hazard?
  - d. Does vulnerability to migration/human trafficking vary by whether the climate change event was localized (for example, flood, storm surge) or a national/international event (for example, drought, cyclone, sea-level rise)? If so, how?
  - e. Is the vulnerability generated by climate change impacts short-term or long-term?
  - f. How do you see populations vulnerable to migration/human trafficking are protected against climate change risks?



17. How would you describe the patterns in the way people are displaced by climate change related events?
  - a. How do these patterns vary by event?
  - b. How do these patterns vary by district/community in the Sundarbans?
18. How do people cope when they are displaced?
  - a. Why do some individuals choose to migrate, whilst others choose to stay?
  - b. Why do some individuals adopt measures that could expose them to human trafficking?
  - c. Who is most likely to adopt coping mechanisms that could expose them to human trafficking?
19. How does migration during or after a hazard effect vulnerability to human trafficking?
20. In general, do people find their unmarried children an economic burden? Does this change after a climate change hazard?
  - a. If so, at what sort of age?
  - b. Are they likely to see marriage as a means of relieving that economic burden?
21. How do you think environmental hazards influence marriage practices?
22. Do people who have experienced environmental hazards in the past behave differently than those that have not? If so, how?
  - a. Does this lead to more people choosing to migrate?
  - b. How is this difference in behaviour or behaviour change linked to vulnerability to human trafficking?
23. How does climate change contribute to vulnerability to human trafficking?
  - a. What conditions do you think influence vulnerability in the context of climate change?
  - b. Is the vulnerability created by climate change short-term or long-term?
24. What precautions are people taking to prepare for climate change?
  - a. Who is more likely to take or be able to take precautions?
  - b. What assistance does the government and others provide in preparing for the effects of climate change?
    - i. Who can/does access these services?
25. How are populations vulnerable to human trafficking protected against the effects of climate change?
26. How does protection against the effects of climate change affect persons' vulnerability to human trafficking?

## Annex C: Survey questions

Survey questions are available to view via: <http://bit.ly/3ATSfE4>

A downloadable version of the survey pdf can be accessed upon request.

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# About the Research Group

## Rights Lab, University of Nottingham

The Rights Lab is a University of Nottingham Beacon of Excellence focused on research to help end modern slavery by 2030. The largest group of modern slavery scholars in the world, and home to leading academic experts on slavery, the Rights Lab is helping to underpin anti-slavery with an advanced research agenda. Our Ecosystems and the Environment Programme asks: how is environmental change interconnected with modern slavery?

Our emergent research demonstrates that modern slavery activities create, exacerbate, and are preconditioned by climate change and environmental degradation. Better understanding of this nexus is imperative to advancing a more equitable and ecologically resilient and adaptive society in the context of a warming earth, altered ecosystems, and environmentally-induced migration.

Environmental scientists, geographers, development studies experts, and sustainable supply chain specialists are working across disciplines to identify, understand, and measure how modern slavery immediately and distally contribute to climate change and environmental degradation, and how climate change and environmental degradation, in turn, increase vulnerabilities to slavery. This includes mapping the ecological dimensions of human vulnerability to modern slavery and the synchronous occurrence of environmental degradation and modern slavery in agricultural, forest, marine, and freshwater ecosystems.

We collaborate with varied stakeholders to advance the narrative of the slavery-environmental degradation nexus from conceptual to empirical by moving beyond the use of extrapolated data and proxies to collect empirical qualitative and quantitative evidence to build models to aid in causal inferencing.

Find out more at: [nottingham.ac.uk/rights-lab](https://nottingham.ac.uk/rights-lab)

## Catholic Agency for Overseas Development (CAFOD)

CAFOD is the official development agency of the Catholic Church in England and Wales and has been working in Bangladesh since 1986 and with Caritas India since 2016. CAFOD has expertise in both accompanying and providing capacity strengthening to partners in areas including M&E, advocacy strategy development, and climate resilience programming; and conducting advocacy evidenced by partners' work with supporters, including UK decision-makers. CAFOD has secured funding from DFID, NORAD and the EU related to human trafficking or climate change resilience.

## Caritas Bangladesh:

Caritas Bangladesh (CB) is a national organization, established by the Catholic Bishops' Conference of Bangladesh (CBCB) to carry out activities promoting integrated social welfare and development. The Mission of Caritas Bangladesh tries to function in partnership with people- especially the poor and the marginalized, with equal respect for all- to attain integral development, to live a truly human life in dignity and to serve other responsively and with love.

CB has its central office in Dhaka. There are eight regional (or Diocesan) offices in Barisal, Chittagong, Dhaka, Dinajpur, Khulna, Mymensingh, Rajshahi and Sylhet. CB is currently in operational in 50 districts, 4 city corporations and 173 upazila (sub-districts) under the above

eight regional offices. CB has three trusts – Caritas Development Institute (CDI), Core the Jute Work (CJW) and Mipur Agricultural Workshop and Training School.

The strategic goals of CB's are: social welfare for vulnerable communities; ecological conservation and food security; education and child development; nutrition and health education; disaster management; and development of indigenous peoples.

There is well-established mechanism in CB management to maintain all rules and regulation from the general body (GB) and executive body (EB) as well as the government of Bangladesh. CB has the well-established and independent internal audit team to look after and provide feedback the financial matter on regular basis. CB has more than four decades in the field of disaster management, development, rural health, education, environment protection and conservation through sustainable agriculture, development indigenous people in Bangladesh.

CB has rich experience of delivering many high-quality projects and programs of UN, multilateral, bilateral, government and private donors on various themes across the country. CB has been working for a long time in the targeted working area since the early with both male and female groups. At present, more than 80% are female beneficiaries in most of the projects. CB has long standing partnership with research Institute for example Bangladesh Rice Research Institute (BRRI), Bangladesh Wheat and Maize Research Institute, some academic institutions, for example, Bangladesh Agriculture University (BAU), University of Chittagong, Patuakhali Science and Technology University, Bangladesh.

## Caritas India

Caritas India is the national official organization of the Catholic Bishops' Conference of India for social development with secular approach. It was established in 1962 to assist the Church in India in efforts to eradicate poverty, reach relief and rehabilitation in times of disasters while facilitating communities for self-advancement.

Caritas India has been unique in its strategic responsiveness to emerging social challenges in international and national levels by engaging with social researchers, proponents and the policy makers. Their vision is the formation of a just and sustaining social order by upholding values of love, equality and peace with a mission of restoration of human dignity of the poor and marginalized by partnering with intermediary organizations in extending support and facilitation and advocating for the rights of the people. They are a pan India organization with over 494 projects and programmes. The present interventions are in the areas of livelihood security, climate change adaptation through natural resource management and sustainable agricultural practices, disaster risk reduction and emergency response, good governance through political participation, anti-human trafficking, peace-building and health care with focus on HIV/AIDS, Malaria, Tuberculosis and other communicable diseases.

Caritas India plays a vital support and facilitation role working with her partners and reference communities at the grass roots facing poverty, deprivation, marginalisation and exclusion by capacitating them to improve their livelihood options, increase organic agriculture practices, better their health status and rebuild their lives facing natural disasters.

## OKUP

Ovibashi Karmi Unnayan Program (OKUP) is a community-based migrants' organization, which believes in the centrality of migrant workers, and flagging the migrants' voices for the promotion and protection of rights of the migrants at all stages of migration. Believing that the unity of migrant workers enhances their empowerment and contributes to the protection of their rights and dignity.

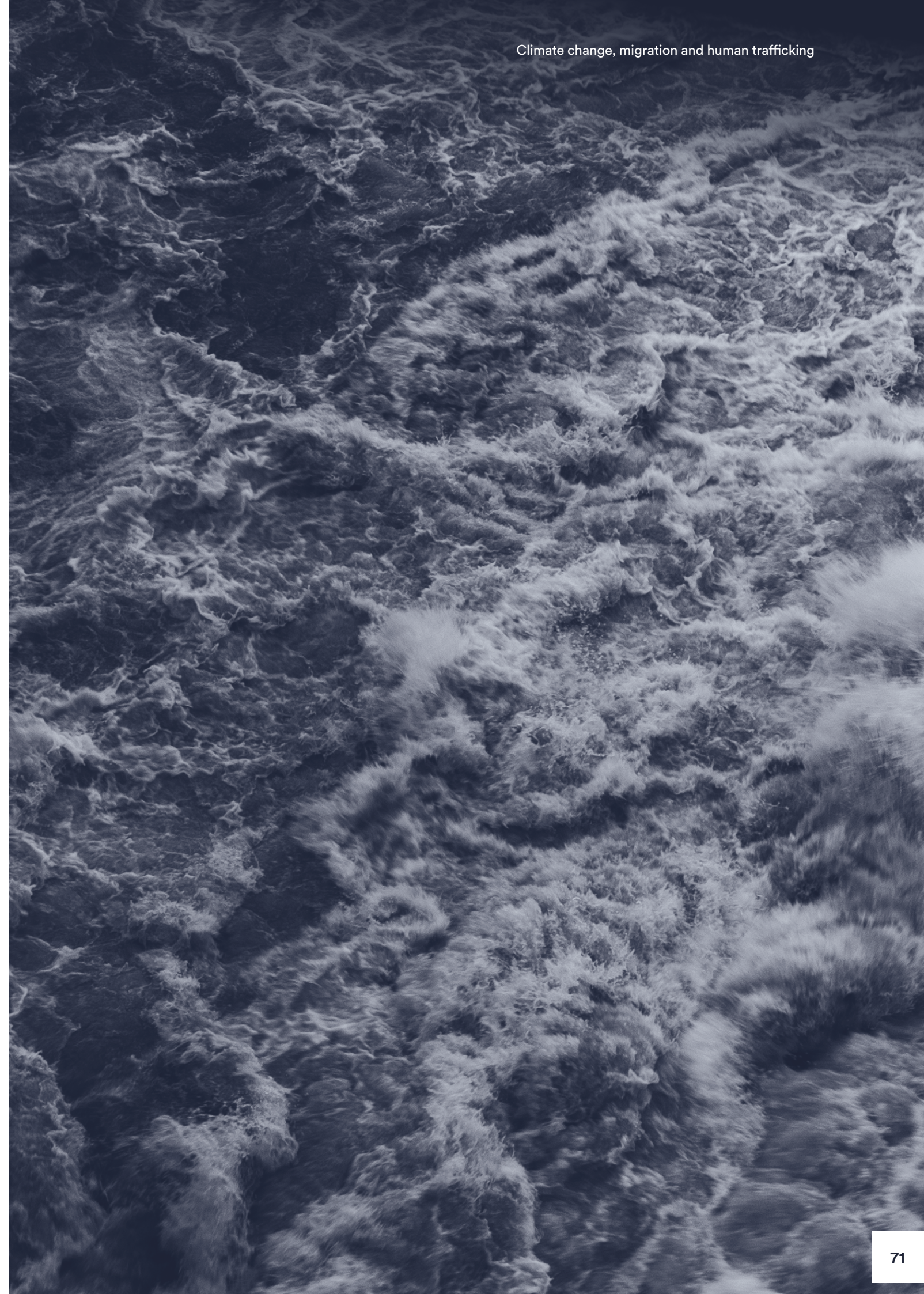


OKUP was set up in 2004 by former Bangladeshi migrants as a platform for returned migrants to Bangladesh. As OKUP gained experience working with returned migrants it quickly realised that support for migrants across the whole cycle of migration was needed not just support for returned migrants. OKUP then introduced work targeting to potential migrants including pre-departure and pre-decision orientation to help potential migrants make informed choices prior to deciding to migrate. In 2008, OKUP formally registered with the NGO Affairs Bureau allowing the organisation to receive international donor funding. Since 2008, OKUP has become a well-respected organisation at the regional, national and international level where it has established good relationships with government ministries, departments and regional and international organisations working on safe migrations/ anti-trafficking. Notably OKUP has established a good partnership with local organisations in Lebanon, Malaysia and Jordan as well as good working relations with Bangladeshi communities and embassies in these countries.

With strong experience gained at the national, regional and international level OKUP now focuses on five priority areas:

1. Access to pre-departure training
2. Return and reintegration assistance
3. Unity, empowerment and leadership of migrants and their communities
4. Migrants' health and HIV/Aids
5. Action research and evidence based advocacy

OKUP acts directly with migrant communities for informed safe migration and ending human trafficking within the context of labour movement through the provisions of information and services at the pre-departure stage; providing direct assistance to the vulnerable returnee migrants especially women for their social and economic reintegration back into society. OKUP has extended onsite supports to the Bangladeshi migrants through partnership and collaboration with local organizations in the destination countries. OKUP has established sound knowledge and expertise in action research and evidence-based advocacy to bring changes in safe labour migration and labour trafficking.







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