COX'S BAZAR
Upazila Profiles

acaps NPM
ANALYSIS HUB
Cox's Bazar, Bangladesh

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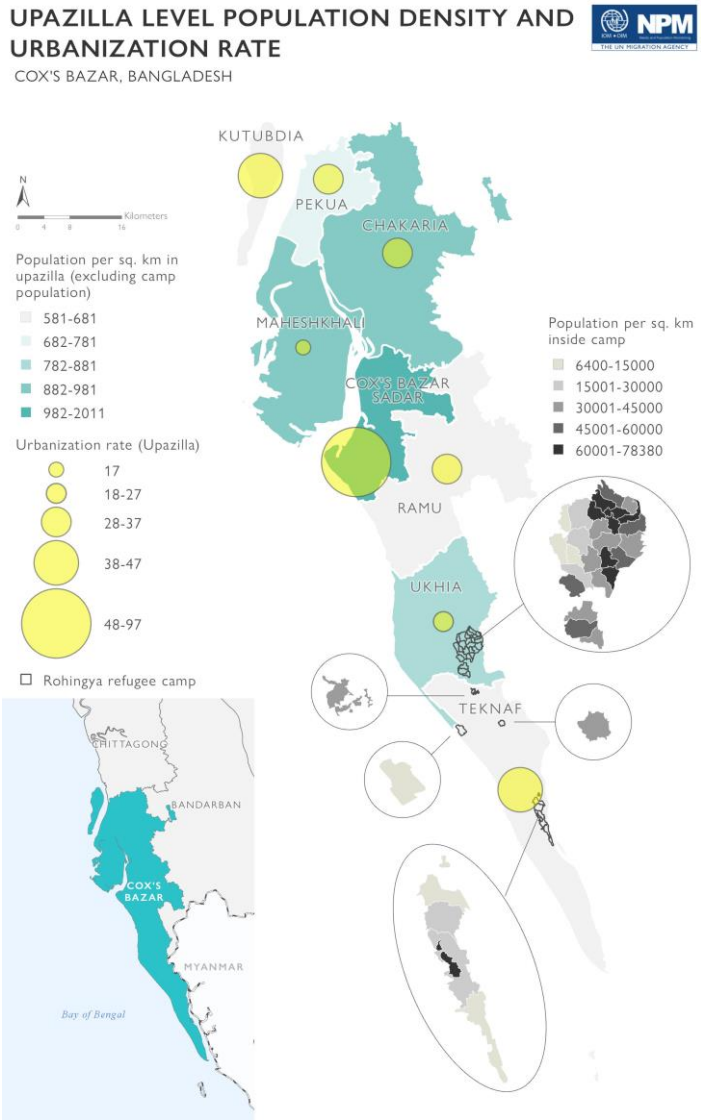
Purpose of report

Three years into the Rohingya response, there remains a lack of detailed information on the communities of Cox's Bazar district and their needs. Most information that does exist is limited to the communities bordering the Rohingya camps. The global spread of COVID-19 has expanded the definition of "host community" for humanitarians to include all upazilas in the district.

This review considers all eight upazilas of Cox's Bazar. There has been a longstanding lack of investment in the district, particularly in remote upazilas like Ramu, Maheshkhali, Pekua, and Kutubdia. 2011 census data indicates a presence of health, food security and livelihood needs in these areas.

These upazila profiles provide contextual background on the Bangladeshi population in Cox's Bazar district, in relation to the Rohingya population where appropriate, and highlight key information gaps. The profiles seek to provide a better understanding of the risks and vulnerabilities faced by Bangladeshi communities and to strengthen programming within Cox's Bazar. They are not intended to measure the level of response.



Key Considerations

- Development, humanitarian, and other operational actors **should avoid using the same criteria to compare crisis impacts between the Rohingya population and the host communities.** Both populations experience shocks differently and baseline information pre-COVID-19 is not comparable.
- **It should not be assumed that coping mechanisms used in Cox's Bazar are the same as those across the country.** Further research on how coping mechanisms differ to those used elsewhere in Bangladesh should be conducted.
- **Socio-economic research across the district is not widely accessible.** Dedicated research is recommended to further understand the coping mechanisms of vulnerable and/or remote populations, and to supplement existing evidence base to inform response from the government, humanitarian, and development partners in Cox's Bazar.
- **Sex, age, disability, and other diversity disaggregated data must be included** in all planning and strategy documents and situation reports to ensure the needs of different groups are analysed and addressed.

Methodology

This report is a review of secondary data on all eight upazilas of Cox's Bazar district. Sources include government census reports, humanitarian reports, academic papers, and articles.

Limitations

This document relies on publicly available sources and is intended to be used as a short guide for understanding the upazilas of Cox's Bazar district. Upazilas are sub-districts and are a key unit of local administration. For response planning and programme design, more research should be undertaken.

Any questions? Please contact us at info@acaps.org

COVID-19

The upazila profiles focus on data prior to COVID-19. As the pandemic is ongoing, its impact cannot yet be fully determined. The profiles focus on existing information and information gaps to help responders understand the potential impacts of COVID-19 and the accompanying containment measures on the host community in Cox's Bazar.

To slow the spread of COVID-19 in Bangladesh, Cox's Bazar district was classified as a red zone on 8 April as part of a national lockdown (WFP, 07/2020). Movement was limited to "critical"[1] services only and a curfew instituted. Restrictions were loosened on 31 May but reintroduced for parts of June and July.

Most of the district's population relies on daily wages from formal and informal work in the agricultural and service sectors, which came to a halt during the lockdown (Bangladesh Population Census, 2011; World Bank, 11/2016[2]). Restrictions on movement within and outside the district disrupted food supply chains and many producers temporarily shut down production (Dhaka Tribune, 04/06/2020). As a result, agricultural labourers, the majority of whom are landless and rely on daily wages, lost four months of income. Although restrictions on movement were loosened on at the end of May (Dhaka Tribune 28/05/2020), the initial loss of income will have a prolonged impact on access to health and food, especially for the most vulnerable. In 2017, prior to both the pandemic and the influx of Rohingya, the poverty rate in Cox's Bazar was already 32.7% (World Bank, 11/2016). In urban contexts, the poorer workforce is unable to find alternative livelihoods during lockdown, making them more vulnerable to economic loss than their rural counterparts. 58% of households in Cox's Bazar municipality reported not receiving any income from their primary sources between April and June (WFP, 07/2020). As of April, COVID-19 had pushed 77% of previously vulnerable non-poor households in Bangladesh below the poverty line (BRAC Institute of Governance and Development, 04/2020). Upazila-wide figures are unavailable, but the reduction in incomes combined with increased prices for staple food (WFP Market Monitor, 04/2020) can be assumed to have exacerbated poverty and vulnerability in each upazila. Livelihood disruptions in Cox's bazar municipality exacerbated household vulnerability, almost doubling the proportion of households with moderate to high vulnerability from 27% to 52% (WFP, 07/2020).

Restrictions on the movement of goods and people, supply chain disruptions, and heightened demand led to an increase in the price of staple food commodities (rice, lentils, oil, vegetables) by between 20% and 50% (WFP Market Monitor, 04/2020). This was aggravated by humanitarian organisations buying large quantities of food at higher prices for scaled-up relief efforts in Cox's Bazar district (WFP Market Monitor, 06/2020; ODI, 05/2015). Most of the host community are not recipients of this food aid. This has thus reduced the purchasing power of the most vulnerable households, negatively impacting the quantity and quality of their diets (WFP, 05/2020). A substantial reduction in household food expenditure in Cox's Bazar municipality of around 48% indicates the strain in food access during the lockdown period (WFP, 07/2020). This may have long-lasting impacts on individuals with already poor nutritional status.

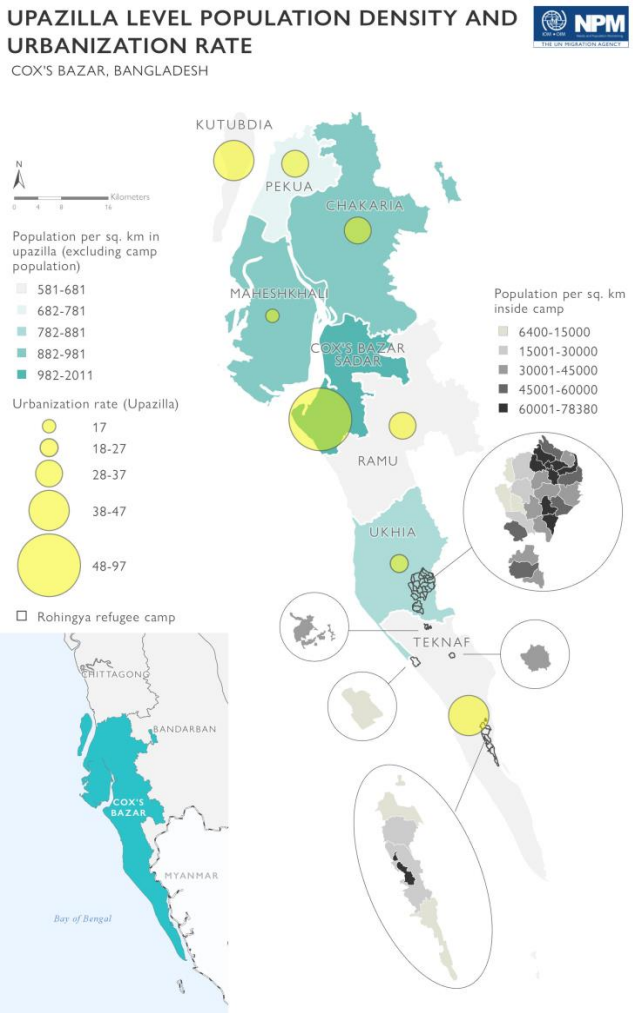
Even prior to COVID-19, lower income communities in Bangladesh were less likely to seek health treatment due to financial barriers (Khan et al., 01/2018; Kabir et al., 08/2003), and women are less likely to seek treatment than men (Kabir et al., 08/2003). Factors such as education status, family size, hygiene practices, and sources of drinking water have all been associated with healthcare seeking behaviour (Khan et al., 01/2018). Distance to healthcare facilities, cost of travel and treatment, and length of treatment also significantly affect the healthcare seeking behaviour of Bangladeshi rural communities. Lower income communities are less likely to approach health facilities because they do not trust community clinics or government hospitals and are unable to afford private hospitals (Hasan, 09/2014). The lack of people coming forward for testing or treatment for COVID-19 highlights these existing frustrations with, and mistrust towards, healthcare facilities, along with doubts about the capacity of healthcare providers to ensure adequate and dignified treatment. As a result, pharmacies, allopathic, and homeopathic doctors remain the preferred source of primary treatment for COVID-19 and other illnesses.

Schools were closed nationwide in March, with no clear directives as to when they might re-open. Some schools offer virtual learning through online classes or classes broadcast on TV. However, poorer families are unable to afford or prioritise materials for virtual learning, resulting in disruption of education for the community's poorest children. The longer children stay out of school, the less likely they are to return, resulting in a likely increase in child labour (UNICEF, 06/2020). The economic impacts of COVID-19 are also likely to exacerbate drivers of child marriage, such as poverty, low education levels, and dependency on dowry, combined with societal norms and pressures to marry young (UNWOMEN, 05/2020; Plan International, 01/2013). In Chittagong division, which incorporates Cox's Bazar district, 73% of girls are married under the age of 18[3] (BDHS, 2011). Child marriage rates for Cox's Bazar specifically are unavailable, but the prevalence of poverty, exacerbated by COVID-19 containment measures and the temporary suspension of schools, is likely to lead to an increase in child marriage.

[1] Services related to medical, water and food provisions (Worldaware, 2020).
[2] World Bank Development Indicators Dataset, 2016
[3] Data regarding girls married under the age of 15 in Chittagong is limited.

Cox's Bazar

District Overview



[1]*The Bangladesh Bureau of Statistics defines an urban centre with a population of 100,000 or more as a city, and an urban centre with a population of less than 100,000 as a town District Development Plan for Cox's Bazar - Phase 1, 12/2019).*

Area (Sq. Km)	2491.81
Urban Area (Sq. Km)	148.38
Population (Urban)	499,011
Population (Rural)	1,790,979
Population Total	2,289,990
Households	413,402
Growth Rate %	2.55
Urbanisation %	43.36
Sex Ratio[4] %	104
Population Density (Person per Sq. Km)	919
Literacy Rate %	39.30

Source: District Development Plan for Cox's Bazar - Phase 1, 12/2019

Cox's Bazar is one of 20 districts in Bangladesh considered to be 'lagging behind' the national average for development indicators, with approximately 33% of the population living below the poverty line compared to the national average of 31.5% (Care, 2018; World Bank, 11/2016). For example, only 32.2% of households in the district have access to electricity, compared to the national average of 56.5% (World Bank, 11/2016), and roughly 11.8% of households do not have access to toilets and practice open defecation, compared to the national average of 7.7% (World Bank, 11/2016). 78.5% of Cox's Bazar's is rural, and most communities live in remote areas (World Bank, 11/2016). The district also has poor food security and nutritional status, with most of the population relying on daily wages and government social safety nets are inadequate (District Development Plan for Cox's Bazar - Phase 1, 12/2019). Like other coastal districts in Bangladesh, the frequency of natural disasters and impact of climate change hinders significant development progress.

Cox's Bazar is diverse linguistically, ethnically, and religiously. In additional to Bangla, people in Cox's Bazar speak Chittagonian, which is slightly similar to Rohingya. More than 90% of Cox's Bazar is Muslim and the district is considered culturally and religiously conservative compared to the rest of Bangladesh (Rashid, 03/2011). The second most practiced religion is Hinduism (4% average), followed by Buddhism (2% average) (Bangladesh Population Census, 2011). The upazilas bordering the Chittagong Hill Tracts (CHT) are home to larger minority communities, most of whom are not Muslim.

4 Male to Female

Since the 1970s, Cox's Bazar district has received multiple waves of Rohingya refugees from Myanmar, with the largest influx arriving in 2017. Between August 2017 and December 2018, 745,000 Rohingya refugees entered Bangladesh through Cox's Bazar. By 31 December 2019, Teknaf and Ukhia hosted an estimated 860,000 Rohingya in densely populated camps (UNHCR, 07/2020). The rapid and massive increase in the refugee population has had an enormous impact on the host communities (JRP, 2020). The resulting population density, coupled with the lack of sustainable alternatives to meet the basic needs of refugees and the underlying poverty and vulnerability of the Bangladeshi population in the area, has put considerable pressure on the environment, such as deforestation, depleting water resources, and road congestion.

Food Security and Livelihoods

The district is predominantly engaged in the agriculture sector (49%), with fishing and salt production the biggest sub sectors; fisheries and salt production are classified as agriculture at the national level. This is closely followed by a significant service sector based on tourism (43%) (World Bank, 11/2016). Cox's Bazar lacks cultivatable land and is unable to address local demand for staple foods through local production systems (District Development Plan for Cox's Bazar - Phase 1, 12/2019). Agricultural production is both scarce and more expensive than in other regions of Bangladesh, leading to increased household expenditure on food and overall economic vulnerability (REVA 3, 12/2019). Livelihood activities differ across the district, with Cox's Bazar Sadar and Chakaria home to more diverse income opportunities due to urbanisation and the concentration of hotels and other tourism-related enterprises.

Sectors	Primary Employment CXB (among working population)	Primary Employment Nationally (among working population)
Agriculture	49%	47.3%
Service	42.7%	37.7%
Infrastructure	8.2%	14.9%

Source: Bangladesh Population Census 2011

Women are disproportionately engaged in low productivity livelihood activities (such as making fishing nets, gutting fish, homestead gardening, handicrafts, etc.) and therefore have lower earnings (District Development Plan for Cox's Bazar - Phase 1, 12/2019). This is partially due to religiously conservative distinctions between male and female roles in Cox's Bazar (Rashid, 03/2011) along with risks and fears that women and girls have regarding movement outside of their homes and cultural restrictions linked to *purdah*[5] (ACF, Save the Children and Oxfam, 08/2018). As a result, female-headed households tend to be engaged in the informal economy, which offers little to no social or employee protections. These households are thus more suspectable to economic shocks, such as the negative impacts of COVID-19 containment measures (RGA 05/2020).

	Population working in Agriculture sector	Landless Agricultural workers
Cox's Bazar Sadar	34%	68.32%
Chakaria	53%	65.7%
Kutubdia	63.27%	56%
Maheshkhali	61.92%	66.77%
Pekua	62%	62.29%
Ramu	56.2%	66.59%
Teknaf	45%	72.66%
Ukhia	54.4%	N/A

Source: Bangladesh Population Census 2011

Even prior to both the influx of Rohingya refugees and the COVID-19 pandemic, Cox's Bazar suffered from moderate food insecurity (IPC, 12/2015). Food insecurity and poor food consumption resulted in high malnutrition rates, with 27.8% of children severely stunted and 9.4% of children severely underweight. These proportions were much higher than the national averages of 23% and 7.9% respectively (World Bank, 11/2016). Approximately 86% of households have basic water supply, but only 12% have access to a safely managed water (District Development Plan for Cox's Bazar - Phase 1, 12/2019).

Although the Government of Bangladesh and humanitarian actors have made efforts to mitigate the negative impacts of the influx of refugees on the host population, most literature suggests it has exacerbated poverty (REVA 3, 12/2019; UNDP, 11/2018; NAHAB, 05/2018). Poverty is likely to worsen due to a combination of the impact of COVID-19 containment measures, depletion of assets, inflation for basic goods, labour competition, and cyclone and monsoon season (REVA 3, 12/2019; NAHAB, 05/2018). However, the influx has

[5] Purdah is a practice by which there is a separation of sexes and seclusion of women from public observation.

provided growth opportunities for some small and medium-sized vendors (JRP, 2020), but this is limited to businesses in areas such as Teknaf, Ukhia and Cox's Bazar Sadar.

Seasonal Risks

With a coastline along the Bay of Bengal, flat deltaic plains, and sandy hills, Cox's Bazar is vulnerable to natural hazards and extreme weather and temperatures that exacerbate factors that contribute to and create persistent pockets of poverty, especially within the districts of Kutubdia and Maheshkhali. While less susceptible to direct hits from cyclones than other parts of Bangladesh, Cox's Bazar is susceptible to landslides, river and sea-bed erosion, flash floods, and storm surges during the monsoon and cyclone seasons. Increased deforestation has exacerbated the impacts of natural disasters in the district.

There is a risk that shallow tube wells, which are a source of water for majority of the population, become non-functional during the peak of the dry season, exacerbating existing water scarcity in the district (District Development Plan for Cox's Bazar - Phase 1, 12/2019). Latrines commonly overflow due to flooding, which risks contaminating water sources and increases the risk of water-borne diseases. Disasters also often directly impact food security and indirectly affect the district's already poor nutritional status.

Information Gaps

The amount of information available differs between upazilas. This exercise highlighted gaps in information across the district and per upazila, including, but not limited to:

- Lack of recent population census data, limiting our understanding of the impact of the 2017 Rohingya influx on the district.
- Inconsistent baseline data across indicators, with numbers varying across sources.
- Limited secondary literature on the living and working conditions of host communities prior to the 2017 Rohingya influx. Insufficient, sporadic, and relatively outdated contextual information which does not allow for consistent comparisons across the district. Analysis of the host community post influx is mostly limited to areas adjacent to the camps and not indicative of all upazilas.
- Humanitarian and development actors are present in all upazilas, but only a small number work in Kutubdia, Maheshkhali, Ramu, Pekua, and Chakaria. Most are local and national NGOs implementing development activities. In-depth information on upazila-wise NGO presence and ongoing activities is not widely available.
- The host communities in Teknaf and Ukhia are often reported on together, resulting in literature that does not provide a clear delineation of the socio-economic situation in each upazila.
- Information on remittances at the upazila level is difficult to find despite the significant proportion of people work as international or domestic labour migrants.
- There is a lack of accessible upazila-wide data on fisherfolk despite reportedly high impact of the fishing ban on the Naf river.
- Severe Acute Malnutrition and Global Acute Malnutrition rates are not available for all upazilas.
- Local and national microcredit institutions are present in Cox's Bazar. However, data on the presence of microcredit institutions and other lending organisations at the upazila level is not available.
- Some microcredit institutions and NGOs provide loans at high interest rates. However, there is limited literature on how this practice is regulated.
- Upazila-specific information on adequate drinking water is difficult to find.
- Upazila-specific data on child marriage, child labour, and child protection is not available or unavailable.
- Upazila specific information on gender norms, roles, relations, and GBV is difficult to find or unavailable.
- Migration to Cox's Bazar Sadar is documented. However, the conditions in which these individuals and households live and work are not further explored.

Area (Sq. Km)	228.23
Urban Area (Sq. Km)	24.45
Population (Urban)	223,522
Population (Rural)	235,560
Population Total	459,082
Households	82,683
Growth Rate %	2.76
Urbanisation %	96.89
Sex Ratio[6] %	111
Population Density (Person per Sq. Km)	2,011
Literacy Rate %	49.20

Source: District Development Plan for Cox's Bazar - Phase 1, 12/2019

Cox's Bazar Sadar is the most prominent urban municipality in the district and a popular domestic tourism destination. It has the lowest poverty and extreme poverty headcount ratios in the district, at 26.2% and 12.2% respectively. These are also lower than the national averages of 31.5% and 17.6% respectively. It has an electrification rate of 53.8%, up from 40% in 2001 (Bangladesh Population Census, 2011; World Bank, 11/2016).

The tourism industry is one of the biggest income-driving industries in Cox's Bazar Sadar. Mass tourism has significantly changed the upazila's urban structure, positively impacting infrastructural investment and highlighting the need for further improvement. The tourism industry supports a diverse labour market, offering a wide range of opportunities for both unskilled and skilled workers. Consequently, migration from nearby areas to Cox's Bazar Sadar has resulted in increased labour competition and has increased pressure on existing resources, particularly housing. To meet housing demand, unplanned urbanization has increased. The city hosts a large floating[7] population (UNDP accessed 08/2020) and is home to around 330 urban poor settlements, a significant increase from nine in 1997 (UNDP, accessed 08/2020; Integrated Coastal Zone Management Plan, 2003). This growth in urban poor settlements is likely to have increased due to on-going migration into Cox's Bazar Sadar by people in search of livelihood opportunities and/or to escape the extreme impacts of climate change on surrounding coastal areas and islands.

6 Male to Female

7 People who reside in the municipality for a certain period, usually for economic opportunities, but are not generally considered as part of the official census count.

There are a significant number of development and humanitarian actors in Cox's Bazar Sadar responding to the Rohingya crisis. This has been largely beneficial for the upazila's local economy as it has increased the customer base for vendors and tourism outlets (Al Jazeera, 10/08/2018). However, both mass tourism and the presence of international aid workers has also had negative impacts, such as excessive crowds and poor waste management, leading to significant environmental pollution (Hossin, 01/2020). There have also been reports of increased security risks, such as petty theft, burglary, and assault. The local population also perceives the increased presence of alcohol, gambling, and prostitution as a cause of degradation to their society (Hossin, 01/2020).

Food Security and Livelihoods

70% of Cox's Bazar Sadar's economy is based on service and trade-based activities (i.e. hospitality, fisheries related labour and trading, small and medium sized enterprises (SMEs), and street vendors), followed by industrial and manufacturing jobs such as construction (REVA 3, 12/2019; WFP, 07/2020). Most work is informal, consisting of moderate to low skilled jobs and petty trade for low wages (WFP, 07/2020). Daily-wage labourers earn a higher total monthly income than monthly wage-based workers. However, daily-wage labour is more unstable and is most vulnerable to external risks such as disasters, strikes, conflicts, and, more recently, the COVID-19 pandemic (WFP, 07/2020). Tourism-related daily wage labour in Cox's Bazar is both prominent and seasonal.

Female headed households are less likely to be educated, with an average primary school attainment (REVA 3, 12/2019). Their primary source of income is thus more likely to be unskilled daily labour and therefore more susceptible to income shocks. Men also have more employment opportunities than women (skilled or unskilled) due to the district's conservative nature.

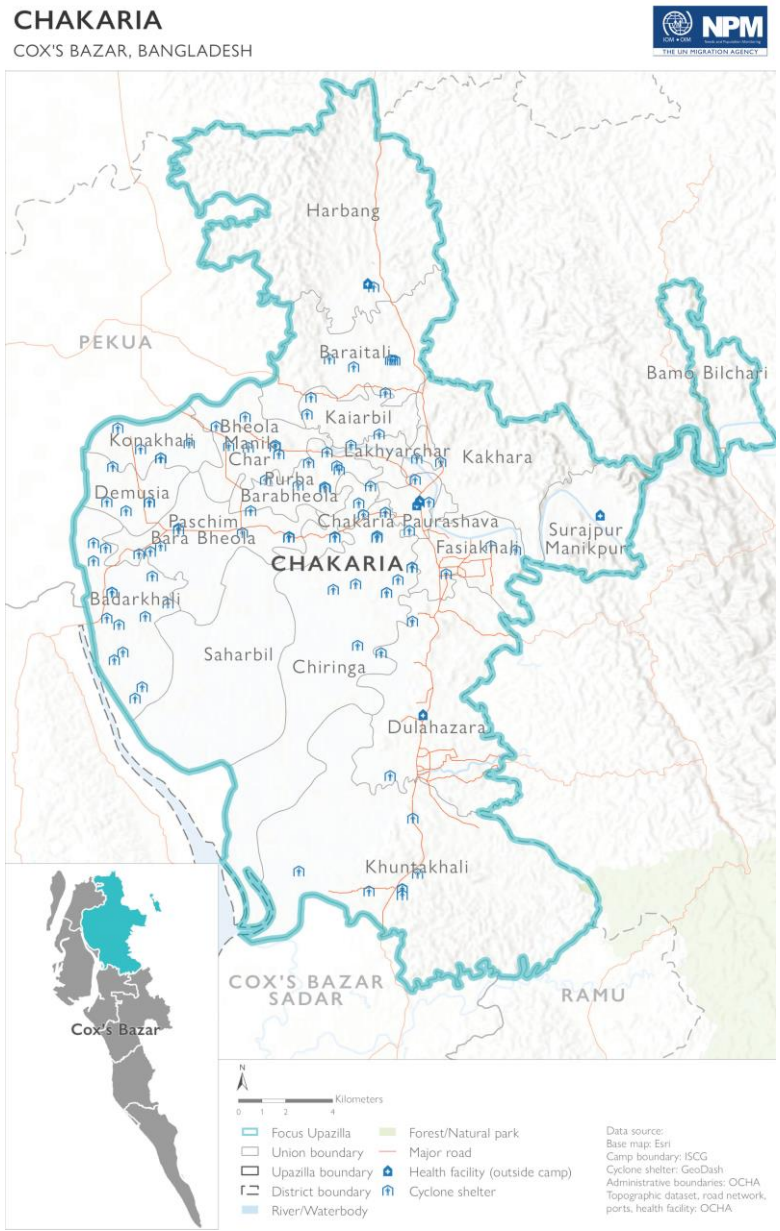
When struggling financially, most vulnerable households adopt consumption-based coping mechanisms, such as switching to less preferred and cheaper foods, reducing the number of daily meals, borrowing food, limiting portion sizes, and restricting adult consumption (REVA 3, 12/2019). 10% of children in Cox's Bazar Sadar are severely underweight and 27.7% severely stunted, higher than the national averages of 7.9% and 23.1% respectively (World Bank, 11/2016). Lack of access to food and healthcare are the main reasons households resort to negative coping mechanisms.

Seasonal Risks

Cox's Bazar Sadar is susceptible to flash flooding during the monsoon. Due to poor drainage, areas in the municipality often become waterlogged, further deteriorating already poor roads (The Business Standard 15/09/2019). Although Cox's Bazar Sadar is unlikely to be directly hit by cyclones, it is vulnerable to the adverse effects of heavy wind, storm surges, and flooding (Alam., 11/2019).

Information Gaps

- Approximately 8% of Cox's Bazar Sadar's population has left as international labour migrants (BBS, 11/2015), but the direct impact on their households is unknown.
- More information on urban poverty in Cox's Bazar Sadar is needed given that climate change will accelerate urbanisation and deepen the scale and severity of urban poverty.
- Literature on seasonal risks in Cox's Bazar Sadar is very limited.
- There is a lack of in-depth economic, social, and political contributions of tourism in Cox's Bazar Sadar.
- Cox's Bazar Sadar has a large floating population that commutes into the city for work. There is a lack of information about where this population comes from and what the nature of their work and living conditions are.
- The social and political impact of the humanitarian influx into Cox's Bazar has not been widely researched or documented.



Area (Sq. Km)	503.83
Urban Area (Sq. Km)	15.76
Population (Urban)	72,669
Population (Rural)	401,796
Population Total	474,465
Households	88,391
Growth Rate %	-0.58
Urbanisation %	30.48
Sex Ratio[8] %	102
Population Density (Person per Sq. Km)	942
Literacy Rate %	47.60

Source: District Development Plan for Cox's Bazar - Phase 1, 12/2019

Chakaria is the biggest upazila in the district with the second most prominent urban municipality and the highest population density. It has the second lowest poverty headcount and extreme poverty headcount ratios in the district, at 28.5% and 13.2% respectively, which is lower than the national averages of 31.5% and 17.6% (World Bank, 11/2016). Although all Chakaria's unions are under the rural electrification network,[9] only 37.6% of households have access to electricity, an improvement from 12% in 2001 (Bangladesh Population Census, 2011). This may be due to the lack of development investment across Cox's Bazar district. As Chakaria is the first point of entry by road into Cox's Bazar district from the rest of the country, and the connecting upazila to other areas of Cox's Bazar, it has the largest transportation network in the district (UNDP, 11/2018).

Households in low-lying areas are reportedly more deprived than those in hilly areas, with 22% of households in the lowest socio-economic quantile compared to 17.8% in the hills (Sakamoto, 06/2017). This can be attributed to more frequent seasonal disasters and lack of time or resources to repair damages between each crisis, as well as population density and precarious livelihood opportunities. River erosion is also an ongoing risk for these households, assets, and livelihoods.

Communities in Chakaria, like most populations in Bangladesh, are more likely to seek primary healthcare from pharmacies, allopathic, and homeopathic doctors (Das et al.,

8 Male to female

9 The rural electrification network is the extension of the electricity grid from the Bangladesh Power Development Board to rural electricity cooperatives called Palli Bidyuit Samity (PBS). The role of PBS is to

02/2017). This is largely cultural but may also be due to financial constraints. Chakaria's health and development indicators have consistently lagged behind those of the rest of the country (Choudhury et. al., 12/2007; Bhuiya, 08/1996). In 2016, the mortality rate of children under 5 was 51.2%, compared to the national rate of 33.9% (Hanifi et al., 11/2016; World Bank, accessed 08/2020). Pulmonary tuberculosis, Acute Respiratory Infections (ARI), strokes, and diabetes have been the leading causes of death in all age groups in the upazila (Hanifi et. el., 10/2014). As a result, mainly WASH and health actors are present in Chakaria (ISCG, 05/2017).

Chakaria is one of the most conservative upazilas in terms of religious beliefs (Bhuiya, 03/2003). Additionally, it has a very low level of secular education, with Madrasahs[1] the preferred educational institution (Mia et. al., 01/2017). In 2011, Chakaria had the highest number of Madrasahs in Cox's Bazar (Cox's Bazar Zila Statistics, 2011).

Food Security and Livelihoods

Chakaria is one of the few upazilas in Cox's Bazar district, along with Pekua and Cox's Bazar Sadar, that engages primarily in rice cultivation in the flatlands (UNDP, 11/2018). However, salt water from the sea continues to destroy soil quality, resulting in more common shrimp farming. The methods required for shrimp farming, however, contribute to the further deterioration of soil and water quality as shrimp ponds are saline and cause salt to accumulate in the soil and leach into the groundwater supply and adjacent farmland (The Guardian, 17/02/2016). Large-scale commercial shrimp farmers have been documented coercing small and independent farmers to convert the limited available freshwater fields into shrimp farms, which has had a devastating environmental impact (The Guardian, 17/02/2016).

Vegetable cultivation along the fertile Matamuhuri River has become increasingly popular (The Daily Sun, 02/02/2019). However, water salinity in the soil prevents farmers from large-scale vegetable farming and households continue to rely on access to markets for their own food consumption. The land along the river is also highly susceptible to erosion, putting livelihoods at risk (Observer BD, 12/08/2016). Tobacco farming in the hills of Chakaria is another prominent source of income that poses an environmental threat due to deforestation in the hills (BD News 24, 14/08/2016).

A combination of poverty and lack of stable livelihood options prevents households from accessing diversified diets. 25.2% of children in Chakaria are severely stunted, compared to the national average of 23.1% (Bangladesh Population Census, 2011). Children also face permanent vitamin deficiencies, demonstrated by a high prevalence of rickets (Ahmed et al., 07/2020).

Seasonal Risks

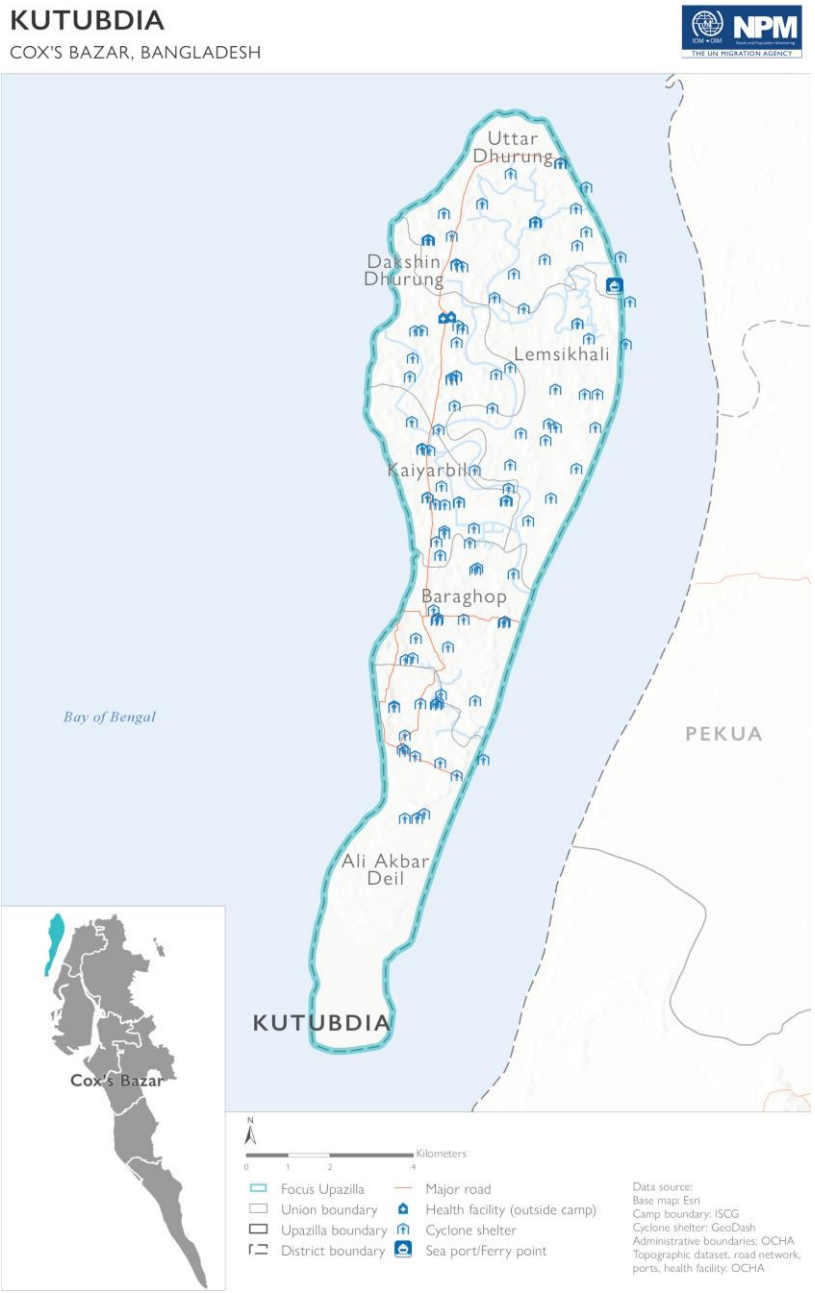
Eastern Chakaria is hilly, while western Chakaria is low-lying, along the Bay of Bengal. During the monsoon season, Chakaria is vulnerable to both tidal flooding and flash flooding, causing seabed erosion and landslides (ICDDR,B, 12/2006). The upazila's susceptibility to flash flooding is aggravated by deforestation in the hills for tobacco processing (BD News 24, 14/08/2016). This combination of flash flooding and tidal flooding increases the risk of flooding in the plains.

Chakaria is geographically susceptible to cyclones and the historic frequency of direct cyclone strikes is relatively high. As a result, roughly 45% of the upazila is vulnerable to inundation from high storm surges (Alam, 11/2019) and Chakaria has the highest number of cyclone shelters in Cox's Bazar district: 130 (Mahmood et al., 07/2014). However, many of these shelters are dilapidated and fail to provide for the special needs of women, children, older people, and people with disabilities. Women and girls are also often concerned with protection and privacy issues in cyclone shelters, and there is generally a lack of sufficient WASH facilities inside them. This is partly because shelters are managed by each upazila's local government, with varying funding capacities. Cyclone shelters are often remote and scattered, and people are reluctant to relocate to far away areas as they do not want to abandon their livelihoods (Alam and Collins, 10/2010). The lack of proper transport infrastructure also plays a significant role in people's vulnerability to cyclones. Most roads near coastal areas are earthen, and during the cyclone period, heavy rainfall and wind damages and destroys transport routes.

Information Gaps

- Due to its proximity to Cox's Bazar Sadar, it is likely that market prices in Chakaria have increased because of the increased presence of humanitarian and development actors. Specific information on this remains unavailable.
- Although Chakaria is anecdotally considered the most conservative in Cox's Bazar district, the reason why is not widely researched.
- Information about in-migration to Chakaria for employment is unavailable. Urban poverty has not been explored in-depth in the upazila.

receive electricity in bulk and manage and operate rural facilities to distribute power, under the supervision of the Rural Electrification Board (REB) (Palit and Chaurey, 2011).



Area (Sq. Km)	215.79
Urban Area (Sq. Km)	9.98
Population (Urban)	25,488
Population (Rural)	99,791
Population Total	125,279
Households	22,587
Growth Rate %	1.54
Urbanisation %	40.49
Sex Ratio[10] %	105
Population Density (Person per Sq. Km)	581
Literacy Rate %	34.00

Source: District Development Plan for Cox's Bazar - Phase 1, 12/2019

Kutubdia is an island in the Bay of Bengal that has halved in size over the last 20 years due to rising water levels, sea-bed erosion, and large-scale climate migration to the nearby urban centres of Cox's Bazar and Chittagong and, sometimes, Dhaka (BBC, 09/12/2015). Kutubdia is subject to one of the fastest-ever sea level rises recorded, an increase of nearly 8mm a year over 20 years (The Guardian, 20/01/2017; The Guardian, 29/01/2013). Families that have lost their homes and other assets to the sea have resorted to negative coping mechanisms, such as removing their daughters from school for early marriage due to limited financial options (NY Times, 19/01/2018).

The island does not have regular electricity supply, with only 7% of households with access to electrification (the lowest in the district), rendering the population even more isolated (The Daily Star, 16/05/2016; Bangladesh Population Census, 2011). This is an improvement from 2% in 2001 (Bangladesh Population Census, 2001). Most efforts at electrification have been destroyed by continuous seabed erosion or natural disasters, such as cyclones. However, Kutubdia's poverty and extreme poverty headcount ratios of 31.1% and 13.8% respectively are still lower than the national averages of 31.5% and 17.6% (World Bank, 11/2016). Additionally, it has an urbanisation rate of 40.49% that is a contrast to its decreasing size and geographical remoteness (District Development Plan for Cox's Bazar - Phase 1, 12/2019).

[10] Male to Female

There are limited means by which to reach Kutubdia from mainland Cox's Bazar. The most widely used method is by boat or speedboat from Mognama *ghat* (port) in Pekua. Travel to and from the island is affected by bad weather and sea conditions.

The absence of essential health services on the island and the limited capacity of community health systems contributes to the population's deteriorating health and nutrition status (ACF, 12/2017). These needs have recently been recognized by international development and humanitarian actors who have begun working on the island to address them (ISCG, 05/2017). There are also some local and national CSOs with a long-term presence on the island implementing development and microfinance programmes.

Food Security and Livelihoods

Agriculture and fishing are the primary sources of income. However, seabed erosion continuously decreases the amount of available land for cultivation and constant flooding destroys crops annually. The local population has reported that fishing is no longer viable in shallow waters as warming waters have resulted in decreased yield (The Guardian, 20/01/2017). As a result, many fishermen have resorted to deep sea fishing, which is limited to only a few months a year due to depressions and cyclones in the Bay of Bengal. Diversifying income opportunities is a challenge and there are limited available options. Subsequently, most of the population is underprivileged, with poor living conditions and limited access to diversified food (ACF, 12/2017). The Global Acute Malnutrition (GAM) rate is 7.6% and Severe Acute Malnutrition is 1.1%, compared to 4% and 3% nationally (ACF, 12/2017). The prevalence of severe stunting in children is 27.6%, higher than the national average (23.1%) (ACF, 12/2017). As a result of chronic malnutrition, the morbidity rates of children aged 6-50 months due to diarrhoea, fever and Acute Respiratory Infection (ARI) are high, at 15.2%, 64%, 48.1% respectively (ACF, 12/2017).

Seasonal Risks

Displacement as a result of climate-change induced disasters is common (Barua and Rahman, 12/2018). During the monsoon season, the low-lying plains flood. Due to its low-lying nature, the island is susceptible to storm surges (Alam, 11/2019). Saltwater inundation from these storm surges renders paddy fields infertile and rice crops inedible (NY Times, 19/01/2018). The island also faces extreme drought during the summers, limiting agricultural practices. Six villages have disappeared since 1991, displacing approximately 40,000 people (BBC, 09/12/2015; NY Times, 19/01/2018).

Information Gaps

- Despite the remote nature of the island and frequency of climate-induced migration, Kutubdia has an urbanisation rate of 40.49% (District Development Plan for Cox's Bazar - Phase 1, 12/2019). Reasons for this are unclear at the time of writing.
- There is a lack of in-depth information on climate-induced migration.
- How the population of Kutubdia recovers from loss and damage is unclear.
- WASH, health, and livelihoods data for Kutubdia is limited, outdated, unavailable or difficult to access.
- It is unclear how Kutubdia remains in communication with other upazilas, and the country, due to the precarious electrification status.

Area (Sq. Km)	362.18
Urban Area (Sq. Km)	7.70
Population (Urban)	27,321
Population (Rural)	293,897
Population Total	321,218
Households	58,177
Growth Rate %	2.24
Urbanisation %	16.93
Sex Ratio[11] %	107
Population Density (Person per Sq. Km)	887
Literacy Rate %	30.80

Source: District Development Plan for Cox's Bazar - Phase 1, 12/2019

Maheshkhali is an island upazila with the highest poverty and extreme poverty headcount ratios in Cox's Bazar, at 40.2% and 21.4% respectively. This is significantly higher than the national averages of 31.5% and 17.6% (World Bank, 11/2016). This can be attributed in part to its remote location and lack of sustainable livelihood options. 65.31% of shelters in the upazila are *kutcha*[12] and are particularly vulnerable to extreme weather events (Bangladesh Population Census, 2011). Although all the wards and unions are under the rural electrification network,[13] only 24.7% of households have access to electricity (Bangladesh Population Census, 2011). Additionally, Maheshkhali has an open defecation rate of 20%, compared to the national average of 7.7%. This makes sense given that 11.22% of households do not have access to any toilet facilities, the third highest in the district (Bangladesh Population Census, 2011).

Maheshkhali is partially connected to mainland Cox's Bazar through Chakaria and can be reached by road and by boat from Cox's Bazar Sadar. However, recent literature suggests that the upazila is almost completely cut off from the rest of the country and that most information and news is received by radio or word-of-mouth (Das and Hossain, 07/2017). The low urbanisation rate (16.93%) suggests a lack of adequate infrastructure, and existing facilities may be impacted by high tides, heavy seas, and recurring disasters, like its neighbouring upazila, Kutubdia (Das and Hossain, 07/2017).

11 Male to Female
12 Structures made from mud, bamboo, and straw

13 The rural electrification network is the extension of the electricity grid from the Bangladesh Power Development Board to rural electricity cooperatives called Palli Bidyuit Samity (PBS). The role of PBS is to receive electricity in bulk and manage and operate rural facilities to distribute power, under the supervision of the Rural Electrification Board (REB) (Palit and Chaurey, 2011).

Most women in Maheshkhali marry between the ages of 10 and 20 (Das and Hossain, 07/2017), indicating a high prevalence of child marriage. Despite the availability of primary and secondary schools, access to school and school attendance is a significant challenge, with the second lowest literacy rate in Cox's Bazar (District Statistics, 2011; USAID, 10/2018).

Two coal power-generation plants are being built in Matarbari union, which could have wide-ranging environmental, livelihood, and health impacts (NewAgeBD 27/11/2019). The plants will likely negatively impact marine habitats and affect coastal fishing. Excavation for these plants has blocked the island's sluice gates and natural drainage systems, increasing vulnerability to prolonged waterlogging (Start Fund Bangladesh 09/07/2018).

Food Security and Livelihoods

Most households earn their income is from salt production, shrimp and crab farming, fishing, agriculture, and day labour (often in the aforementioned occupations). Employment is largely seasonal, and people are frequently engaged in two or more occupations, switching according to seasons. The unemployment rate has increased since land for the power plant projects was acquired; the construction firms do not employ locally (Start Fund Bangladesh 09/07/2018). Women are not directly involved in income generation, but they assist in family fisheries-related activities, such as unloading, sorting, gutting, net mending, processing, and selling in the markets (Das and Hossain, 07/2017). To cope with lean times, fisherman often take loans from microcredit institutions and NGOs at high interest rates and engaging in daily wage labour out of fishing season (Das and Hossain, 07/2017).

Maheshkhali is regularly exposed to extensive flash flooding from the Bay of Bengal, threatening livelihoods and food security. Seawater inundation increases soil salinity, impacting drinking-water supplies, irrigation and soil quality for agriculture (USAID, 10/2018). Regular disasters exacerbate existing challenges of access to drinking water, low access to improved sanitation facilities, and the risk of infectious disease (ACAPS 30/01/2018). The affected areas remain waterlogged for days, affecting crops and harvest.

8.2% of children in Maheshkhali are severely underweight and 27.5% of children are severely stunted (World Bank, 11/2016), higher than the national averages of 7.9% and 23.1% respectively. Like Chakaria, Maheshkhali has a prevalence of rickets amongst children, although the rate at time of writing was unknown (ICDDR,B, 20/04/2011).

Seasonal Risks

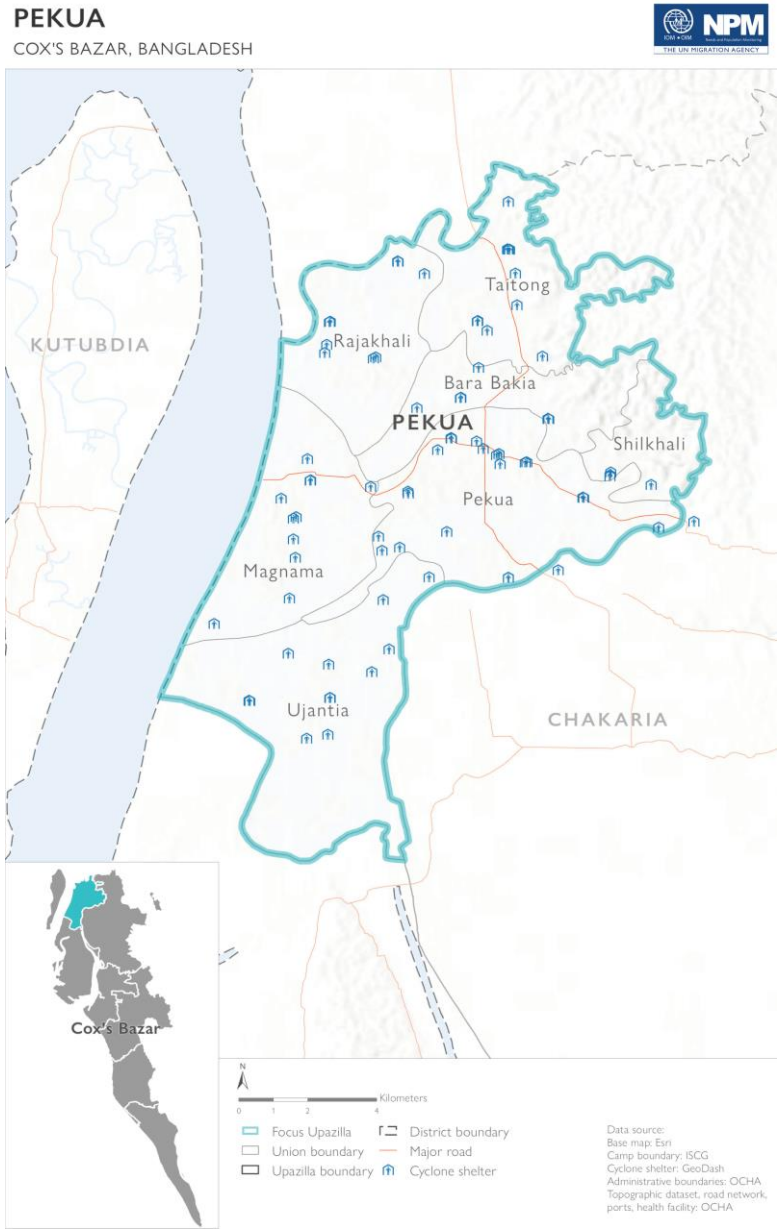
Access to Maheshkhali can be disrupted during the monsoon and periods of poor weather as there is only one road into the upazila from Chakaria and the only other form of entry is via boat from Cox's Bazar Sadar. During severe weather events, the road can become inundated and boats may not operate, hindering movement in and out.

Incomplete recovery from previous disasters and a lack of risk-informed development activities increase the vulnerability of Maheshkhali's communities. There has been substantial loss of farmland due to increasing river siltation and deforestation, as well as river erosion and landslides during the monsoon season. Along with infrastructural damage, river erosion uproots people from their communities and social networks and forces them move away from places they are familiar with (Siddiqui and Kashem, 10/2019).

A combination of vulnerable livelihood opportunities and the impact from severe weather events has resulted in rural-to-urban migration. A significant portion of climate-induced migrants in Dhaka come from coastal upazilas such as Maheshkhali, though their first point of migration is likely Cox's Bazar Sadar, then Chittagong (Adri and Simon, 02/2017). Roughly 4% of Maheshkhali's population have also migrated internationally for labour (BBS, 11/2015) and people in the upazila are particularly vulnerable to trafficking. There are known transit points in Maheshkhali for human trafficking by boat through the Bay of Bengal (Fair BD 5/11/2015).

Information Gaps

- There is little publicly available qualitative secondary data on the impact of riverbank erosion.
- The food security status and nutritional profile of Maheshkhali is not widely documented or researched.



Area (Sq. Km)	139.61
Urban Area (Sq. Km)	18.64
Population (Urban)	29182
Population (Rural)	142356
Population Total	171538
Households	31944
Growth Rate %	2.25
Urbanisation %	33.85
Sex Ratio %	101
Population Density (Person per Sq. Km)	712
Literacy Rate %	35.30

Source: District Development Plan for Cox's Bazar - Phase 1, 12/2019

All unions of Pekua are under the rural electrification network.[14] However, only 19% of households have access to electricity (Bangladesh Population Census, 2011). Pekua has poverty and extreme poverty headcount ratios of 30.9% and 14.3% respectively, slightly lower than the national averages of 31.5% and 17.6% (World Bank, 11/2016). Roughly 7.8% of households do not have access to toilet facilities and thus resort to open defecation, in line with the national average of 7.7% (World Bank, 11/2016). Like all other upazilas of Cox's Bazar and nationally, the main source of drinking water is tube-wells (Bangladesh Population Census, 2011).

Food Security and Livelihoods

Between 60% and 72% of the population is engaged in agriculture as their primary source of income, which is much higher than the rest of Cox's Bazar district (UNDP, 11/2018; Bangladesh Population Census, 2011). Pekua is one of three upazilas where rice is the main agricultural crop (UNDP, 11/2018). Like other upazilas, most (62%) of the population working in agriculture is landless (Bangladesh Population Census, 2011). The second most prominent source of employment is the service sector (22%). Although there is limited published research on the subject, it can be assumed that most working people in Pekua rely on daily wages as this is the norm across the district. The industrial sector is limited, engaging only 5% of the population (Bangladesh Population Census, 2011).

14 The rural electrification network is the extension of the electricity grid from the Bangladesh Power Development Board to rural electricity cooperatives called Palli Bidyuit Samity (PBS). The role of PBS is to receive electricity in bulk and manage and operate the rural facilities to distribute power, under the supervision of the Rural Electrification Board (REB) (Palit and Chaurey, 2011).

Pekua has a Global Acute Malnutrition rate of 12.4% and a Severe Acute Malnutrition rate of 1.2%, which is similar to the rates among the Rohingya (UNICEF, 05/2019). Although Pekua has the lowest rate of severely stunted children (25%) in Cox's Bazar district (higher than the national average of 23.1%), it has the third highest rate of severely underweight children in the district (9.9%, higher than the national average of 7.9%) (World Bank, 11/2016).

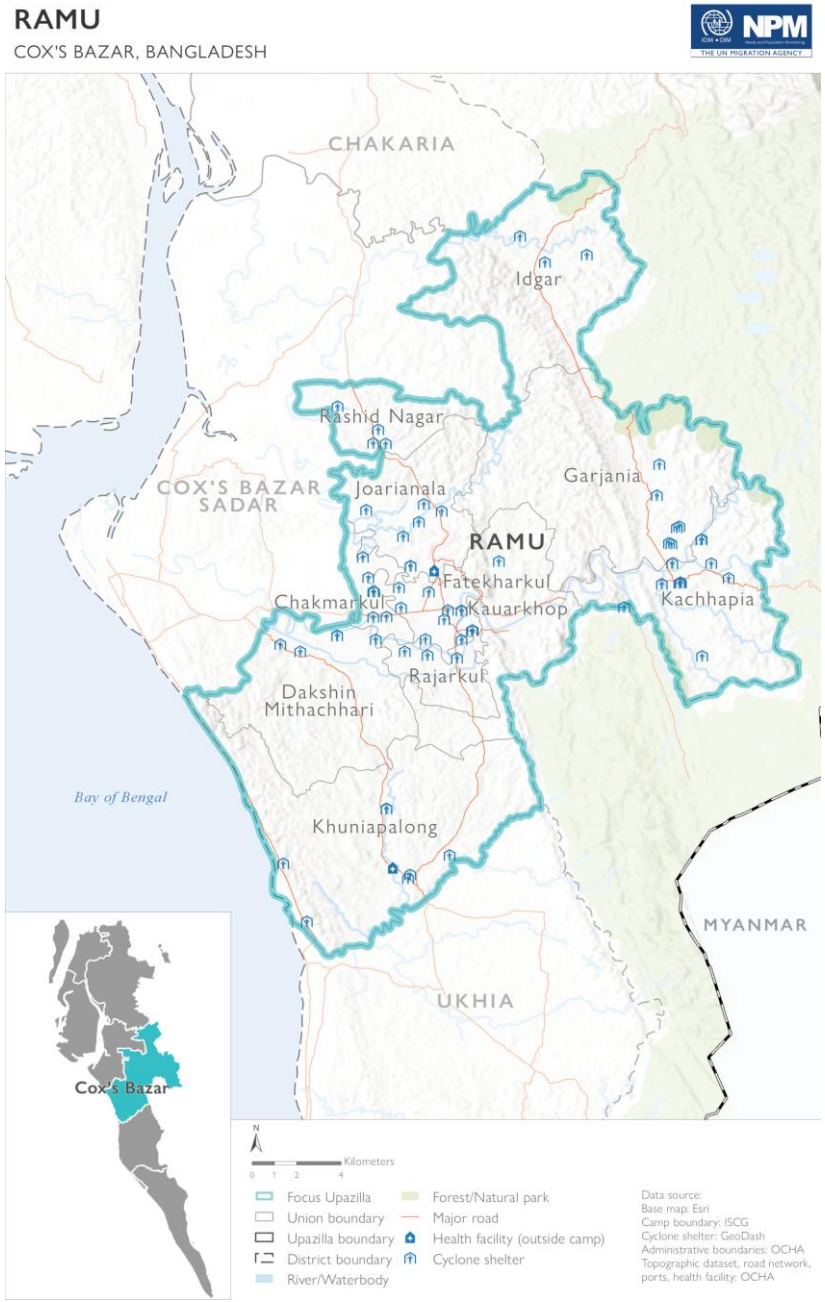
Seasonal Risks

Much of Pekua is low lying and vulnerable to severe impact during the monsoon and during severe storms. Some areas, such as Uttor Shilkali, become inaccessible between June and September every year (Refugees International, 07/2017). Although the risk of cyclone landfall in Pekua is low, when it does occur it is likely cause high storm surges (Alam, 2019). Pekua is highly vulnerable to flood damage due to its low-lying nature and high rate of *kutcha*[15] housing (78.40%), the highest in the district (Alam, 11/2019; Bangladesh Population Census, 2011). These *kutcha* houses are vulnerable to collapse during floods and cyclones and offer limited protection to inhabitants (HCTT Joint Needs Assessments, 07/2015).

Information Gaps

- Information on vulnerabilities and sectoral needs is unavailable or limited.
- Proximity to Kutubdia suggests there could be climate-induced migration into Pekua from Kutubdia. However, this is not explored in the available secondary data.
- Historically, Pekua has been impacted by the adverse effects of cyclones in the region (ISCG, 05/2017; Government of Bangladesh, 04/2009; COAST, 05/2013). However, the lack of pre-crisis information prevents us from understanding the rate of recovery between each severe weather event.

15 Structures made from mud, bamboo, and straw



Area (Sq. Km)	391.71
Urban Area (Sq. Km)	22.03
Population (Urban)	42072
Population (Rural)	224568
Population Total	266640
Households	47904
Growth Rate %	2.74
Urbanisation %	31.40
Sex Ratio %	103
Population Density (Person per Sq. Km)	681
Literacy Rate %	36.60

Source: District Development Plan for Cox's Bazar - Phase 1, 12/2019

Ramu is unique in Cox's Bazar district because it is of religious importance to Hindu and Buddhist communities, who consider parts of the upazila to be sacred. Because of this, there is a comparatively substantial religious minority community in Ramu. Ramu also has a history of violence against religious minority communities, in which many homes and temples have been destroyed (Dhaka Tribune 30/09/2018) .

Despite Ramu's development indicators being some of the worst in the district, it has the third highest electrification rate[16] in the district (26.9%) This is still significantly lower than the national average of 56.6% (World Bank, 11/2016).

Ramu shares a border with Ukhia, and therefore there is the presence of some Rohingya refugees (UNDP, 11/2018). Several Rohingya communities have resided in Ramu for over 10 years (IOM, 07/2017). These groups are more integrated into the host community than the more recent arrivals. After the 2017 influx, households in Ramu have reportedly experienced loss of income due to increasing competition in informal labour (UNDP, 11/2018).

The poverty and extreme poverty headcount ratios are 34.3% and 17.8% respectively, higher than the national averages of 31.5% and 17.6% (World Bank, 11/2016). Ramu has an open defecation rate of 17.5%, twice the national average (7.7.%) and the third highest in the district after Ukhia and Maheshkhali (World Bank, 11/2016). Roughly 16% of households do not have access to any type of toilet facility, the second highest rate in the district behind Ukhia (Bangladesh Population Census, 2011). This suggests vulnerability to health risks,

16 Percentage of people with access to electricity

especially diseases such as diarrhoea, cholera, and typhoid. Access to healthcare in Ramu is limited to two health facilities.

There are frequent complaints about quality of education and inadequate teaching materials in Ramu. Most of the upazila's Muslim population prefers to send their children to Madrasahs for religious education[17] (USAID, 10/2018). There are no government school feeding programs for primary students, and students are often reported to be hungry (USAID, 10/2018).

Food Security and Livelihoods

Most of the population relies on daily wage labour, with nearly 56% engaged in agriculture. This is followed by the service sector, which includes activities such as rickshaw pulling and is also largely based on daily wages. These livelihoods are frequently affected as Ramu is prone to natural disasters such as cyclones, flash floods, river erosion, and landslides (Upazila Disaster Management Committee, 07/2014). Though resource rich, disasters are a major barrier to socioeconomic development.

The communities maintain a diet of rice and vegetables, mainly grown locally. However, these crops are highly susceptible to loss and damage during natural disasters, resulting in seasonal food scarcity. To cope, people resort to eating undiversified dried food, such as energy biscuits and puffed rice (Ahmed et al., 12/2017). 9.5% of children were reported as severely underweight and 28.6% severely stunted, higher than the national averages of 7.9% and 23.1% (World Bank, 11/2016).

Seasonal Risks

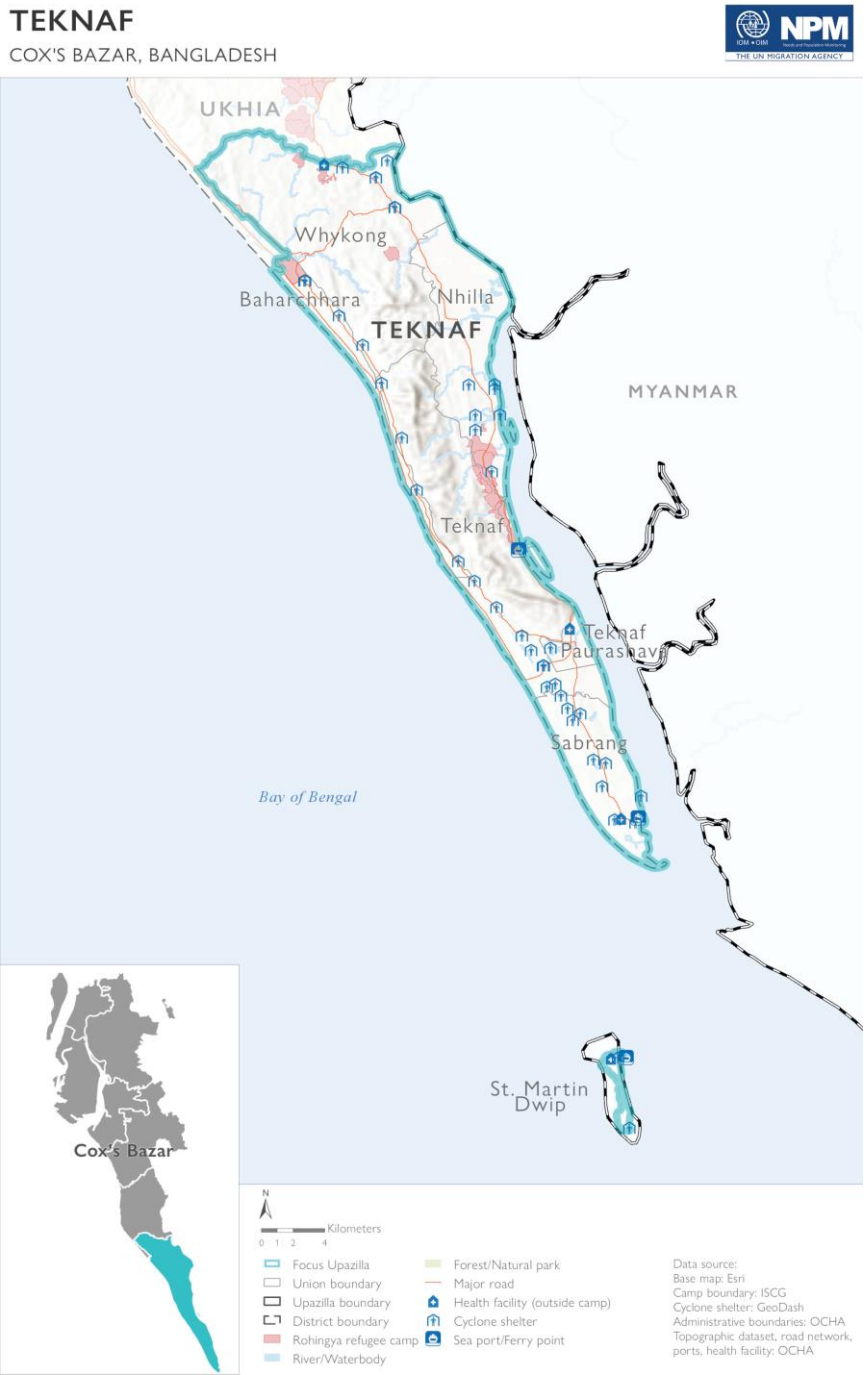
Most of Ramu is rural and transportation between the unions is challenging. Most roads are unpaved and connect to one main road leading to Cox's Bazar Sadar. Travel is often difficult and access during the monsoon season is limited. 50% of Ramu is elevated, therefore flash floods from uphill down to the plains are common. Recurring flash floods can create landslides, damaging earth roads and cutting off travel within and between villages. Flash floods affect both hilly and low-lying areas and cause erosion on the riverbanks, which has resulted in the loss of homes and assets.

74.9% of housing is *kutcha*,[1] and thus susceptible to significant damage from severe weather events. As a result, most residents require frequent shelter repairs, hindering their financial progress. Vulnerable households tend to borrow money from informal money lenders, microcredit institutions, or NGOs with high interest rates to upgrade their homes.

Information Gaps

- Although some Rohingya communities settled in Ramu prior to 2017, there is a gap in analysis of the impact on, and interaction with, Bangladeshi host communities and newly arrived Rohingya refugees.
- There is a lack of research on social cohesion between the Rohingya who settled prior to 2017, Bangladeshi Muslims, and religious minorities in the upazila.
- Very little literature is available on the living and working conditions of religious minorities in Ramu or on how and why religion influences dynamics in Ramu.
- Though Ramu is closely located to the Rohingya camps in Ukhia and Teknaf, the potential spill-over impact on the local economy has not been documented.
- It is unknown how many organisations (development or humanitarian) are present in Ramu as a result of the spill over effects from the Rohingya influx of 2017.

17 Muslim faith schools



Area (Sq. Km)	388.66
Urban Area (Sq. Km)	31.50
Population (Urban)	51440
Population (Rural)	212949
Population Total	264389
Households	46328
Growth Rate %	2.76
Urbanisation %	38.72
Sex Ratio %	101
Population Density (Person per Sq. Km)	680
Literacy Rate %	26.70

Source: District Development Plan for Cox's Bazar - Phase 1, 12/2019

Teknaf is among the poorest upazilas in Cox's Bazar district, ranking among the 50 most socially deprived in the country (BANBEIS, 2017). This is due to both topographical and infrastructural challenges. A lack of cultivatable land and the consequent dependence on markets for food drives high levels of food insecurity and vulnerability to market price fluctuations (REVA 3, 12/2019; CWG 12/2017; WFP 26/11/2017). 25.9% of households in Teknaf have access to electricity, compared to the national average of 56.5% (World Bank, 11/2016). Access to drinking water is limited, particularly in remote rural areas, and only one-third of the population has a drinking-water source in their homes (USAID, 10/2018). An estimated 9% of people do not have access to toilet facilities (Bangladesh Population Census, 2011) and only 36% have access to sanitary latrines, compared to the national average of 61% (BDHS, 2014). The sanitary latrines that do exist are usually *kutcha*, made of mud and crude materials that easily deteriorate and become unsanitary due to poor maintenance, seasonal hazards, and high costs of repair (ACF, 12/2017). Access to health facilities is restricted by distance, cost, and the limited capacity of local facilities to provide adequate services (WHO 21/10/2017; ISCG 31/10/2017).

Teknaf has the lowest literacy rate in Cox's Bazar district (26%) (District Statistics, 2011) and a high incidence of child labour (7-9%) (UNICEF, 01/2014). The J-MSNA 2019 findings found that overall attendance remained low in Teknaf, with 36% of children aged 5-11 and 44% of youth aged 12-17 not attending any formal learning programme. Many teachers who were employed in host community schools before the influx left to work for higher wages in camps, putting additional strains on the local education system (J-MSNA, 09/2019). Since the 2017 influx of Rohingya refugees, there have been increasing concerns of children,

mainly boys, dropping out of school to work because of increased employment opportunities in and around the camps (CPD, 11/11/2017). As of 2018, 85% of children engage in paid and unpaid work in the area (Education sector and Child Protection Sub-sector, 2017). Girls are less likely to continue secondary education due to distance, safety concerns, and cost, and child marriage was practiced the communities of Teknaf even prior to the influx (REACH, 12/2018). An increase in child marriage practices has been reported as a negative coping mechanism resulting from the strain on resources and increased security concerns after the influx (Plan International, 06/2018).

There is a significant presence of government, development, and humanitarian actors in Teknaf due to the large Rohingya population living within camps in the upazila, exacerbating pre-existing vulnerabilities of an already remote community. The humanitarian presence has been mostly limited to the communities adjacent to the camps.

Food Security and Livelihoods

The 2017 influx increased market demand and opportunities. Price hikes became a major challenge for most of the host community. Prior to the influx, 33% of Teknaf was food insecure and 59% were borderline[18] (Save the Children, BRAC, World Vision, WFP and UNHCR, 01/2018). In 2019, roughly 1-2% of households in Teknaf had an extreme Food Consumption Score (FCS) and approximately 26% of households were borderline, indicating an improvement in food consumption, even if households are borrowing money to purchase food (J-MSNA, 09/2019). However, COVID-19 has likely reversed these improvements.

Estimated dietary diversity remains poor. Approximately one-third (32%) of Bangladeshi households in Teknaf and Ukhia are estimated to consume two food groups or fewer per day and access to nutritious foods is low (REVA 3, 12/2019; J-MSNA, 09/2019). As many reports group Teknaf and Ukhia together, it is difficult to analyse Teknaf-specific impacts. Teknaf does have the highest malnutrition rates in the district, however, with 11.6% of children severely underweight and 30.7% of children severely stunted, in contrast to the national averages of 7.9% and 23.1% respectively, indicating chronic malnutrition (World Bank, 11/2016). This was further aggravated by the influx which generated cheaper competition for informal and unskilled labour and disturbed existing livelihood strategies for the host community (IFRC, 01/2020). The impact on host community livelihoods contributes to social tensions and resentment between the local population and refugees, particularly over natural resources such as land, water, fish and firewood (NAHAB, 06/2018).

Vulnerability levels remained comparable in 2017 and 2018, at 41% for Teknaf and Ukhia combined (REVA 3, 12/2019). Female headed households are generally more vulnerable than male headed households, at 52% and 38% respectively. Female-headed households are also considerably more affected by food insecurity than male-headed households (J-MSNA, 09/2019; REVA 3, 12/2019). This is because women have less access to income-earning opportunities and are thus more reliant on sporadic livelihood activities. This is evident in the low female labour participation rates in Teknaf (J-MSNA, 09/2019).

Most households rely on seasonal labour. An estimated 82% of Teknaf's total income is from fish and fishery related activities such as shrimp cultivation and the dry fish industry (Ghosh et al, 12/2015). Fishing in the Naf river was been a critical source of income for residents in Teknaf and nearby areas. However, since the 2017 influx, the Government of Bangladesh put a fishing ban in place on the Naf river to try to stop Yabba[19] trafficking from Myanmar. The fishing ban has not yet been lifted, pushing many households into debt as they lack alternative livelihood opportunities due to lack of cultivatable land.

Households involved in farming, fishing, firewood collection, and daily labour have had to expand and look elsewhere for employment or for alternative means for survival. Members of the host community involved in casual labour (agricultural and non-agricultural) and unskilled wage labour declared themselves poorer in 2019 than before the influx, compared to those in skilled wage labour and business/petty trade (J-MSNA, 09/2019; REVA 3, 12/2019). This suggests that while those in casual labour worry about perceived competition in the labour market from refugees, skilled workers and those in business/petty trade see increased business and employment opportunities. There has also been an increase in migration to urban centres such as Cox's Bazar Sadar, Chittagong, or Dhaka to pursue daily-wage labour.

Human trafficking is prevalent in Cox's bazar, with well-known transit areas in Teknaf (IOM, 09/2018). There is significant evidence that the Rohingya camps are frequently targeted for human trafficking which generates a spill-over effect for host communities as the need and desire to migrate for work is strong (IOM, 09/2018). The lack of opportunities for women and girls, combined with gender-based discrimination, leads to trafficking specifically for sexual exploitation (IOM, 09/2018). Finally, due to Teknaf's remote location along the border with Myanmar, there is a heightened sense of insecurity because of armed robbers, transnational criminal activities, and links to religiously extremist groups (USAID, 10/2018).

18 Borderline means if their food security situation is not managed, they may face food crisis soon.

19 A category one drug

Seasonal Risks

Most of Teknaf consists of highlands with some tidal flood plains. During the monsoon season (June–September), the Naf river floods villages along riverbanks and access to certain areas becomes limited while others, such as Shawporir Dwip, Bargona, Monigona, Lambabeel, become inaccessible (IOM, 07/2017). Heavy monsoon rains coupled with sustained deforestation, hilly terrain, and largely *kutcha*[20] housing (70%) increases vulnerability to landslides (Bangladesh Population Census, 2011). The land along riverbanks is used mostly for shrimp cultivation, an important source of income in the upazila that is largely impacted by monsoon flooding. Heavy rainfall also often destroys crops and food stocks, reducing food availability as agricultural land is limited to begin with. During heavy rains, flooded tube-wells often lead to contamination of already scarce drinking water. Flooded roads further restrict movement, especially for hard-to-reach communities that rely on already poor roads, further limiting access to essential services and water points and leaving households to rely on collected rainwater (ACF 12/2017).

Information Gaps

- The host communities in Teknaf and Ukhia are often reported on together. As a result, the existing literature does not provide a distinct analysis or information on the socio-economic situation in each upazila.
- Much of the existing analysis focuses on the Rohingya camps and nearby communities and does not include information about the socio-economic dynamics within the host community.
- There is limited literature focussing on the host communities located within the camp boundaries and how their living, working, and healthcare seeking conditions have directly changed as a result.
- There is limited information about development programmes and operational NGOs prior to the influx in 2017.

20 Structures made from mud, bamboo, and straw. Highly vulnerable to environmental factors.

Area (Sq. Km)	261.80
Urban Area (Sq. Km)	18.32
Population (Urban)	27,317
Population (Rural)	180,062
Population Total	207,379
Households	37,940
Growth Rate %	2.90
Urbanisation %	26.21
Sex Ratio[21] %	102
Population Density (Person per Sq. Km)	792
Literacy Rate %	36.30

Source: District Development Plan for Cox's Bazar - Phase 1, 12/2019

Ukhia has the third highest poverty headcount and second highest extreme poverty headcount ratios in Cox's Bazar, at 37.8% and 20.1% respectively. This is higher than the national averages of 31.5% and 17.6% (World Bank, 11/2016). Despite all of Ukhia being under the rural electrification network,[22] only 23.4% of households have access to electricity, up from 19% in 2001 (Bangladesh Population Census, 2011). Ukhia has limited access to drinking water and low access to improved sanitation facilities, with 43.66% of households using non-sanitary latrines and 25% without any latrine facilities (Bangladesh Population Census, 2011). The open defecation rate is the highest in the district (22.9%), noticeably higher than the national average of 7.7% (World Bank, 11/2016). This increases the population's vulnerability to disease. At the same time, topography, distance, and cost makes it difficult for people to access adequate and timely healthcare.

Difficult terrain, bad roads, and insufficient infrastructure contribute to poor living conditions and access to essential services. Among other challenges, the mass influx of refugees also had a negative impacts on transport systems, infrastructure, and public services (J-MSNA, 09/2019). Sustained deforestation, which has increased with the 2017 influx of Rohingya refugees and is coupled with the construction of settlements, has caused large-scale environmental damage, increasing the risk of landslides in hilly areas and compromising livelihoods (Ministry of Environment and Forests and UNDP, 03/2018).

More than 9% of children were engaged in child labour in 2011, higher than the national average of 6% (Safer World, 05/2013). This is likely due to household poverty and limited alternative livelihood opportunities for adults in the upazila. The poverty and child labour rates suggest that Ukhia may also have a prevalence of child marriage, like neighbouring

21 Male to Female
22 The rural electrification network is the extension of the electricity grid from the Bangladesh Power Development Board to rural electricity cooperatives called Palli Bidyuit Samity (PBS). The role of PBS is to receive electricity in bulk and manage and operate rural facilities to distribute power, under the supervision of the Rural Electrification Board (REB) (Palit and Chaurey, 2011).

Teknaf, as the causal factors are often the same (UNHCR, 01/2018). However, the rate of child marriage in Ukhia is currently unknown.

As in Teknaf, there is a significant presence of government, development, and humanitarian actors in Ukhia due to the large Rohingya population living within camps in the upazila, exacerbating the pre-existing vulnerabilities of an already remote host community.

Food Security and Livelihoods

Literature suggests that despite the government and humanitarian actors taking measures to mitigate the negative impacts from the 2017 influx of Rohingya refugees, poverty has increased in Ukhia (UNDP, 11/2018). The upazila was already ranked one of the 50 most socially deprived upazilas in the country, and the poorest in Cox's Bazar district (BANBEIS, 2017). The poverty headcount and extreme poverty headcount ratios pre-influx were above the national averages (31.5% and 17.6%), at 37.8% and 20.1% respectively – with Ukhia having the highest extreme poverty headcount ratio in the district (World Bank, 11/2016). Vulnerability levels remained comparable in 2017 and 2018, at 41% (Ukhia and Teknaf combined) (REVA 3, 12/2019). Female-headed households are also considerably more affected by food insecurity than male-headed households (J-MSNA, 09/2019; REVA 3, 12/2019). This is because women have less access to income-earning opportunities and are thus more reliant on sporadic livelihood activities (J-MSNA, 09/2019; REVA 3, 12/2019).

Estimated dietary diversity remains poor. Approximately one-third (32%) of Bangladeshi households in Teknaf and Ukhia are estimated to consume two food groups or fewer per day and access to nutritious foods is low (REVA 3, 12/2019; J-MSNA, 09/2019). As many reports group Teknaf and Ukhia together, it is difficult to analyse Ukhia-specific impacts. However, Ukhia has the second highest rate of severely underweight children in the district (10%) and the highest rate of severely stunted children (32.1%), in contrast to the national averages of 7.9% and 23.1% respectively (World Bank, 11/2016). Roughly 3% of households have a poor Food Consumption Score (FCS) and 25% are borderline (J-MSNA, 09/2019).

Approximately 55% of the population is engaged in the agricultural sector, but the proportion who are landless is unclear (Bangladesh Population Census, 2011). Roughly 85% of households reported their main source of income from labour (J-MSNA, 09/2019). After the 2017 influx, the combination of labour surplus and limited livelihood opportunities further reduced labour opportunities and daily wages for the host community. However, there has been an increase in income for people engaged in small trading shops, tea and food stalls, and other service sector activities due to the large presence of refugees and humanitarian workers in the area (Save the Children, BRAC, World Vision, WFP and UNHCR, 01/2018).

A significant percentage of the population is engaged in fishing and fisheries related activities, mainly as daily wage labourers. The income of fishing communities is generally below the poverty line, especially during the lean period (December-June) when they struggle to catch enough fish to survive. As a result, food insecurity and malnutrition, along with high debt, are prevalent in Ukhia. 30% of households struggle with chronic food insecurity and 55% of households are classified as having 'borderline' food security (USAID, 10/2018). 72% of households in host community reported engaging in coping mechanisms due to a lack of money to meet basic needs in the 30 days prior to data collection for the J-MSNA 09/2019, though it is difficult to understand what proportion of that affects households in Ukhia as data for Ukhia and Teknaf is often grouped together.

Unemployment and poverty are drivers for crime and trafficking. Along with Teknaf and Maheshkhali, Ukhia has some well-known transit points for human smuggling. Households and individuals struggling with poverty are increasingly vulnerable to human and drug trafficking (USAID, 10/2018).

Seasonal Risks

When cyclones hit Cox's Bazar, they hit Ukhia with the highest frequency and most intensity compared to other upazilas (Alam, 11/2019). However, because Ukhia is mostly highlands and is bordered by an elevated coastline, it is less impacted by storm surges than its neighbours. There are not enough operational cyclone shelters in the upazila, as current structures have the capacity to shelter approximately 20% of the Bangladeshi population in the upazila (based on population projections for 2017) (DDM, 08/2014).

The total amount of rainfall is highest in areas where the frequency of cyclones is high and the average annual rainfall in Ukhia is between 3,001-3,500 mm, the highest in Cox's Bazar District, along with Teknaf and southern areas of Ramu. 67.17% of shelters in the upazila are *kutcha*[23] and are very vulnerable to damage and destruction. Particularly in the hilly areas, landslides are often triggered by incessant rain (ACAPS, 03/2018; ISCG, 06/2019).

23 Structures made from mud, bamboo, and straw. Highly vulnerable to environmental factors.

Information Gaps

- The host communities in Teknaf and Ukhia are often reported on together. As a result, existing literature does not provide a clear understanding of the distinct socio-economic situations in each upazila. Much of the existing analysis focuses on the Rohingya camps and nearby communities and does not include information about the socio-economic dynamics within the host community.
- There is limited information about development programmes and operational NGOs prior to the influx in 2017.Much of the existing analysis focuses on the Rohingya camps and nearby communities and does not include information about the socio-economic dynamics within the host community.
- There is limited literature focusing on the host communities located within the camp boundaries and how their living, working, and healthcare seeking conditions have directly changed as a result.