Beyond Camps and Communities: The Economics of Refugee Relocation in Bangladesh *

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January 4, 2026

Abstract

Relocating refugees to remote purpose-built settlements offers an alternative to hosting refugees in traditional camps or local communities, yet its consequences remain poorly understood. This paper evaluates the well-being and fiscal implications of relocating Rohingya refugees from the camps of Cox's Bazar to Bhasan Char, a newly developed remote island settlement in Bangladesh. Using data from the 2019 and 2023 Cox's Bazar Panel Survey waves and the 2022 Bhasan Char Panel Survey, and leveraging the absence of systematic selection criteria in the relocation process, the paper compares well-being outcomes between relocated and non-relocated households using unadjusted means and propensity score matching. Two findings emerge. First, relocation is associated with declines in refugee well-being, including lower food consumption, higher illness and depression, and lower wages. Second, these outcomes occur despite substantially higher costs: per capita service delivery in Bhasan Char is about three times more expensive than in Cox's Bazar.

JEL Classification: F22, O15, R23
Keywords: Forced Displacement, Bangladesh, Relocation policies.

*We thank Zaeem Al Ehsan for his work as field coordinator of the Cox's Bazar Panel Survey (CBPS) and for cleaning and preparing the data for analysis, and Data International for undertaking the data collection. We also thank our partners at Yale University including Mushfiq Mubarak, Paula Lopez Pena, and Ellen Bates-Jefferys, and George Washington University including Jennifer Seager, for the excellent collaboration on the CBPS. This project was approved by IRB protocol #2000033048. The CBPS data collection was generously funded by the World Bank-UNHCR Joint Data Center on Forced Displacement. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent. All errors are our own.

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I INTRODUCTION

As forced displacement continues to grow exponentially reaching 122.6 million individuals by mid-2024 (UNHCR, 2024b), there is urgency to identify effective ways to support displaced individuals and their host communities. One of the most pressing policy questions is to understand the sustainability and efficiency of different hosting arrangements for displaced populations at destination countries. Traditionally, two dominant hosting models have been employed: one involves granting displaced persons varying degrees of freedom to settle within host communities or across national territories; the other confines them to designated temporary refugee camps. As of 2023, approximately 6.6 million refugees, roughly 24 percent of the global total, reside in camp-like settings (UNHCR, 2023a). Camp-based arrangements are commonly favored in developing countries when large numbers of refugees arrive within a short timeframe. Over 50 percent of refugees in low-income countries reside in camps, compared to just 5 percent in upper-middle-income countries. In response to growing congestion, rising costs, and political pressures, some governments have introduced a third, less common model: the relocation of refugees to purpose-built settlements in remote or isolated areas. Despite its rising salience in policy debates, empirical evidence on the welfare and fiscal implications of such relocation strategies remains scarce.

This paper contributes to this debate by examining the well-being gaps between Rohingya refugees (henceforth called the Displaced Rohingya Population (DRP)) living in Bangladesh who have been relocated to the island of Bhasan Char in 2021 and those who remained in the refugee camps of Cox's Bazar. Bhasan Char is a low-lying silt island located approximately 60 kilometers off the mainland in the Bay of Bengal. Formed through sediment accretion in the early 2000s, the island spans roughly 40 square kilometers and is encircled by a 13-kilometer flood embankment intended to mitigate cyclone and tidal surge risks (Uddin, 2024, Human Rights Watch, 2020). Though the settlements

in Bhasan Char were initially built for poor Bangladeshi communities, the Government of Bangladesh (GoB) initiated the relocation program of Rohingya largely in response to severe overcrowding in the Cox's Bazar refugee camps, which host nearly 1 million Rohingya refugees and rank among the most densely populated refugee settlements in the world (Ndip et al., 2024). Although Bhasan Char island has been developed with basic infrastructure, such as elevated housing clusters, solar-powered utilities, cyclone shelters, and essential health and education facilities, it remains geographically isolated and economically detached from mainland labor markets and host communities.

In addition to assessing differences in well-being of Rohingya in Cox's Bazar and Bhasan Char across key dimensions, such as food security, health, labor outcomes, and assistance and service access, this study also evaluates the comparative fiscal costs of hosting refugees in Bhasan Char versus Cox's Bazar. Given the substantial investments required to operate a standalone humanitarian infrastructure on a remote island, understanding the financial implications is critical for evaluating the long-term viability of the relocation model.

Our analysis draws on data from the Cox's Bazar Panel Survey (CBPS), a longitudinal dataset representative of the DRP in Bangladesh. We use two survey waves, conducted in 2019 and 2023 for Cox's Bazar and one survey wave, conducted in 2022 for Bhasan Char. The 2019 wave includes refugees residing in the Cox's Bazar camps prior to the start of relocation, which began in 2021; the 2023 wave collected information on refugees still residing in Cox's Bazar at the time of data collection. The Bhasan Char Panel Survey extends coverage to households residing in Bhasan Char, applying the same sampling and survey methodology and was conducted in late 2022.

The GoB does not apply targeting criteria for the relocation of the DRP to Bhasan Char and relocation is voluntary in nature. However, there is no formal documentation on the procedure of relocating households, we thus conducted an extensive text analysis search

of all media coverage related to the relocation program to compile evidence on the process. The analysis suggests that there was no clear or consistent criteria used to determine which households were targeted for relocation. Retrospective pre-relocation data from CBPS also indicates that individuals who were later relocated tended to be younger and less educated than those who remained in Cox's Bazar. Hence, we employ two complementary methods to estimate well-being differences between relocated and non-relocated households: unconditional mean comparisons and propensity score matching (PSM). The latter adjusts for observable pre-relocation characteristics to improve comparability between groups. However, as unobservable differences may remain, these estimates should be interpreted as descriptive rather than causal. While the causal identification is not possible in this context, the importance of the question for millions of individuals and its novelty, merits a descriptive analysis.

Across the board, and consistently across both unadjusted comparisons and PSM estimates, the results indicate that relocated refugee households exhibit significantly lower well-being—measured along outcomes related to food consumption, physical and mental health, labor market, and assistance and service access—relative to those who remained in Cox's Bazar. The magnitude of these gaps is substantial, particularly given the already high vulnerability of the Rohingya population in Bangladesh. For example, relocated households report, on average, a 44 percent lower food consumption score, a 37 percent decline in dietary diversity, and a 47 percent reduction in the frequency of food item consumption, relative to the households who remained in Cox's Bazar. Mental and physical health outcomes are also worse after relocation to Bhasan Char: the prevalence of moderate to severe depression is 6.2 percentage points higher—nearly double the baseline—and physical illness is 17 percent more common. Labor market engagement is markedly weaker, with monthly wages among the employed approximately 45 percent lower in Bhasan Char relative to those observed in Cox's Bazar. In terms of aid delivery, the likelihood of receiving food assistance is 28 percentage points lower, while access to

non-food items drops by 38 points.

Importantly, these findings appear to be partly shaped by the geographic and economic isolation of Bhasan Char itself. The island's remoteness, located 60 kilometers offshore, with no host communities, constrained market access, and a reliance on fully external logistics, poses inherent challenges for service delivery, labor integration, and supply chains. These structural constraints play a critical role in driving the observed gaps, highlighting the limits of relocation-based models in physically and economically disconnected settings.

We also collect detailed data on the per capita financial costs of hosting the DRP in Cox's Bazar and Bhasan Char. The results reveal stark cost differentials: annual per capita operational expenditures in Bhasan Char range from USD 1,350 to 1,810, approximately three times higher than the estimated USD 430 to 580 per capita in Cox's Bazar. This cost disparity is driven by the logistical and infrastructural challenges of operating in a remote island environment. For example, food assistance costs in Bhasan Char reach up to USD 565 per person annually, compared to USD 180 in Cox's Bazar, while shelter and protection costs are similarly elevated. These figures exclude the initial capital outlay of nearly USD 10,000 per capita for Bhasan Char's infrastructure.

The findings of this study raise critical questions about the viability of the Bhasan Char relocation model as a durable solution for displaced populations. Relocation is consistently associated with substantial well-being deficits across all measured domains—nutrition, health, labor outcomes, and access to assistance—among one of the most vulnerable refugee populations in the world. These adverse well-being outcomes, coupled with the model's exceptionally high fiscal cost—three times higher per capita than in Cox's Bazar—underscore its inefficiency. In a context where humanitarian resources are already insufficient to meet basic needs (Wieser, 2025; Rozo and Grossman, 2025), such a cost-intensive strategy appears financially untenable. The structural constraints im-

posed by Bhasan Char's remoteness further limit the feasibility of improving outcomes through marginal operational adjustments. Taken together, the evidence suggests that the relocation model to remote locations not only falls short on humanitarian grounds but is also economically unsound, calling for a fundamental shift—and possibly a reconsideration—of its continued implementation.

Contribution to the literature: This paper contributes to the literature examining the effectiveness of different types of hosting models for refugee populations. On one hand extensive previous research has examined the effects of hosting refugees in temporary camps, particularly in low-income countries. It has documented a range of externalities associated with this type of hosting model. On the positive side, camps have been linked to increased economic activity and improved public services in nearby host communities (Ndip et al., 2024; Alix-Garcia et al., 2018), higher agricultural prices (Alix-Garcia and Saah, 2010), expanded employment opportunities outside subsistence agriculture, and greater asset ownership among refugees (Loschmann, Bilgili and Siegel, 2019). In some cases, international aid to camps has also improved host community perceptions and political attitudes through spillovers in local public goods (Zhou and Grossman, 2021). However, a substantial body of work highlights adverse impacts. These include increased incidence of communicable diseases such as malaria (Dagnelie, Mayda and Maystadt, 2023; Montalvo and Reynal-Querol, 2005), deterioration in child health and nutrition outcomes (Baez, 2011; Dagnelie, Mayda and Maystadt, 2023; Ozden et al., 2022; Anti and Salemi, 2021a), lower educational attainment, and slight increases in deforestation around camps (Anti and Salemi, 2021b; Maystadt et al., 2020; Dampha, Salemi and Polasky, 2024; Ndip et al., 2024). Welfare effects also appear heterogeneous across local populations, with both winners and losers depending on sector and labor market position (Maystadt and Verwimp, 2014). Within the context of Bangladesh, recent evidence suggests that the presence of large-scale camps in Cox's Bazar stimulated local economic growth and humanitarian employment, while simultaneously increasing health risks and insecurity

for host communities (Ndip et al., 2024). Davis et al. (2024) show that refugee camps have been disproportionately located in socioeconomically disadvantaged areas, exacerbating existing regional inequalities. Similarly, Segnana, Cevallos and Ndip (2024) find that proximity to Rohingya camps worsens both first- and second-order beliefs of hosts about refugees.

On the other hand, a growing body of literature has also studied the effect of hosting models that facilitate refugee integration in local communities. Most of the evidence underscores the positive effects of labor market integration on refugee well-being, including improved mental health, physical health, income, consumption, and educational outcomes for both refugees and their children (Hussam et al., 2022; Marbach and Ropers, 2018; Hvidtfeldt et al., 2018; Sarvimäki and Hämäläinen, 2016; Bansak, Hainmueller and Hangartner, 2016; Battisti, Peri and Romiti, 2021; Sarvimäki and Hämäläinen, 2016; Lochmann, Rapoport and Speciale, 2019; Dahlberg et al., 2020; Foged and van der Werf, 2023; Foged et al., 2023; Arendt, Dustmann and Ku, 2023, Ibáñez et al., 2024). Moreover programs that facilitate integration, such as skill development, language training, and job search assistance—are particularly effective. In contrast, restrictive employment policies and prolonged asylum processes are associated with lasting negative labor market outcomes (Hainmueller, Hangartner and Lawrence, 2016; Hvidtfeldt et al., 2018; Fasani, Frattini and Minale, 2021; Ahrens et al., 2023).

Our paper contributes to this extensive body of work by examining the well-being effects of a third alternative for hosting refugees: their reallocation to purpose-built settlements in remote or isolated areas. It provides a counterpoint to the positive outcomes documented under integration models and underscores the need to ground displacement policies in principles of connectivity, autonomy, and access.

Finally, our study contributes to the emerging empirical literature on refugee policy in Bangladesh (UNHCR, 2023c; Ndip et al., 2024; Davis et al., 2024; Segnana, Cevallos and

Ndip, 2024; Sakamoto, Ullah and Tani, 2024; Filipski et al., 2020; Alam et al., 2022; Hussam et al., 2022; Wieser, 2025). Despite the political salience and financial investment in the Bhasan Char relocation initiative, no previous study has systematically assessed its consequences. Our study is the first to systematically compare well-being and fiscal outcomes between relocated and non-relocated Rohingya households using high-frequency survey data. By combining individual-level data, media analysis, and cost accounting, our work speaks directly to the current policy imperative of transitioning from humanitarian to sustainable, self-reliant hosting models—particularly in contexts where aid is insufficient to meet long-term needs.

II Context: The Rohingya Refugee Crisis and the Relocation to Bhasan Char

The Rohingya, a stateless Muslim minority from Myanmar's Rakhine State, have endured decades of systemic persecution, exclusion, and military violence. In August 2017, Myanmar's security forces launched a brutal campaign of mass killings, sexual violence, and village burnings, which the United Nations later described as bearing "genocidal intent." In response, over 742,000 Rohingya crossed into Bangladesh within months, adding to an existing refugee population and bringing the total number to nearly 1,133,981 by mid 2025 (UNHCR, 2025).

Bangladesh, despite facing its own developmental pressures, responded swiftly by establishing large-scale refugee temporary camps in Cox's Bazar. These camps rapidly became some of the most densely populated areas on earth. With an average of only 10.7 square meters of space per person, far below the UN-recommended minimum of 45 square meters for refugee camps (HRW, 2018), the camps were plagued by overcrowding, poor sanitation, limited shelter capacity, and escalating tensions between refugees and host communities (Sreeparna Banerjee, 2019; The Diplomat, 2022).

II.A Relocation to Bashan Char

To address mounting pressures associated with the Rohingya refugee crisis, the GoB proposed in late 2017 a controversial plan to establish a new settlement on Bhasan Char, a recently formed silt island in the Bay of Bengal. Located approximately 60 kilometers from the mainland, the island spans 40 square kilometers (Figure 1). The Bhasan Char project, officially titled Ashrayan (i.e., "provided shelter"), is currently overseen by the Bangladesh Navy and comprises 13,000 acres, of which 6,427 acres are considered usable highland (Bhattacharyya, 2020). With over USD 300 million in government investment, the project includes 1,440 clusters of houses in 120 shelter stations, along with infrastructure such as concrete roads and drainage systems, schools, two hospitals, four community clinics, mosques, administrative buildings, a fire station, police station, a 2-megawatt power plant, solar power systems, a lighthouse, telecommunication services, office space for government and non-governmental organizations, playgrounds, and recreational and learning centers (Bhattacharyya, 2020). Each Rohingya family was allocated a 12-by-14-foot unit equipped with bunk beds (Regan and Wright, 2020). Additionally, a 12-kilometer-long, 9-foot-high embankment with an integrated drainage system was constructed to protect the island from cyclones, storm surges, and other natural disasters, alongside 120 cyclone shelters for emergency use (Uddin, 2024; Human Rights Watch, 2020).

Despite these investments, qualitative accounts suggest that refugees relocated to Bhasan Char encounter significant barriers to achieving sustainable livelihoods. The island's geographic isolation limits access to markets and employment opportunities, restricting income-generating activities to humanitarian-run employment programs (Wieser, 2025). In contrast to Cox's Bazar, where refugees may engage in informal labor or humanitarian programs, Bhasan Char's logistical constraints, high transportation costs, and lack of commercial networks hinder economic integration (Tanha et al., 2024). The island is

only accessible by water, with travel to the mainland requiring two to three hours by engine boat (Islam and Siddika, 2022). This remoteness also heightens exposure to natural hazards. Located in one of the world's most cyclone-prone regions, Bhasan Char faces frequent storms along Bangladesh's southern coast (Mallick, Ahmed and Vogt, 2017). Moreover, Bangladesh is among the countries most vulnerable to sea-level rise, with projections suggesting that a 10 percent intensification in storm surges combined with a one-meter sea-level rise could submerge 23 percent of its coastal land (Dasgupta et al., 2011).

Economic activity on the island includes livestock rearing, handicrafts, poultry farming, fishing, and small-scale agriculture. However, many of these remain economically unsustainable. The island's naturally saline soil presents a major obstacle to crop cultivation. NGOs and Rohingya farmers have addressed this challenge through innovative soil treatment techniques, including improved drainage and the introduction of saline-tolerant crops, gradually converting infertile land into productive farmland (UNHCR, 2022a). Nonetheless, limited local markets and restricted trade routes continue to suppress fair pricing for agricultural produce (Karim, 2024).

The first group of Rohingya—rescued from the sea after being stranded was relocated to Bhasan Char in May 2020. The formal relocation program began in December 2020. As of April 2025, a total of 37,028 Rohingya refugees, representing 8,503 families, reside on the island (UNHCR, 2024c). The GoB aims at relocating up to 75,000 DRP to the island. A visual timeline of these developments is presented in Figure 2.

From the beginning, the relocation to Bhasan Char was met with considerable debate. The relocation process is undertaken by the GoB without coordination with UN agencies. There are no official recounts or documents describing any objective criteria on how the rellocated households were selected. To systematically examine how the issue was portrayed publicly, we conducted an extensive text analysis search of news articles related

to the relocation of Rohingya refugees from Cox's Bazar to Bhasan Char, published between 2019 and 2025. We found a total of 88 articles from credible sources. Articles were screened to ensure they directly addressed the relocation process. Two key dimensions were extracted from each article: (i) whether the relocation was described as voluntary, and (ii) whether improved living conditions on Bhasan Char were mentioned. As shown in Figure 3, 76.1 percent of these articles described the relocation as involuntary, while only 24 percent characterized it as voluntary. This pattern suggests that skepticism regarding the voluntary nature of the program was widespread in early reporting.[1] The articles also suggest that there were no objective criteria for selecting the households for relocation.

Over time, however, perceptions have shifted. While early reports were largely negative, later articles captured an emerging shift in sentiment among relocated refugees (Figure 4). Some expressed satisfaction with housing quality and security, citing improved shelter conditions and less exposure to communal tension and violence compared to the Cox's Bazar camps (Islam, 2020; Dhaka Tribune, 2021). By late 2021, key international actors had revised their stance. A Memorandum of Understanding was signed between the GoB and United Nations agencies, allowing humanitarian operations to expand on the island. By 2022, over 50 national and international NGOs, including UNHCR and WFP, were delivering services on Bhasan Char (Molla, 2022; Sakib, 2022). UNHCR and diplomatic delegations visited the site and expressed cautious approval of the facilities (Sakib, 2022; Kamruzzaman, 2021).

III Well-Being Disparities between Refugees in Cox's Bazar and Bhasan Char

III.A Data

To investigate the well-being effects of the relocation policy, we use data from the Cox's Bazar Panel Survey (CBPS) and the Bhasan Char Panel Survey, a comprehensive longitu-

[1] Appendix **??** present all the media articles found as well as the web scraping exercise.

dinal study tracking the socio-economic outcomes of Rohingya refugees and host communities in Bangladesh. The CBPS comprises two waves, conducted in 2019 and 2023, and includes 5,016 households—representing 25,421 individuals—across six upazilas (subdistricts) in Cox's Bazar and one upazila in Bandarban that also hosts Rohingya populations. The sample is representative of refugees residing in camps (both newly arrived and earlier arrivals) and host communities, including both native Bangladeshi households (with heads born in Bangladesh) and non-natives (earlier waves of Rohingya migrants).

The CBPS employs a standardized survey protocol consisting of two components. The first is a household-level interview administered to one adult per household, covering demographics, food security, consumption, assistance received, asset ownership, income, and anthropometric data for a randomly selected child under age five. The second component is an adult interview conducted with two randomly selected adults (aged 18 and older) per household, collecting information on labor market participation, migration history, healthcare utilization, exposure to crime and conflict, and general well-being. In the 2023 round, 97 percent of the original households (4,996) and 80 percent of eligible adults (7,486) were successfully re-interviewed. While the core household questionnaire remained largely unchanged, the adult questionnaire was updated: modules on labor market and migration histories, and experiences with crime and conflict, were dropped, and new modules were introduced to assess return intentions to Myanmar, social cohesion with host communities, and host perceptions of the Rohingya.

Between the two survey rounds, the relocation occurred between November and December 2022, during which approximately 30,000 Rohingya refugees were moved to the Bhasan Char island settlement in Noakhali district. In response to the distinct living conditions on the island, the Bhasan Char Panel Survey was implemented by UNHCR, introducing a new sampling stratum for Bhasan Char. This extension included 962 households, representing roughly 12 percent of all households on the island. As the only

Bangladeshi nationals residing on Bhasan Char are humanitarian workers, law enforcement personnel, government officials, and traders supporting the refugee population, no host community sample was collected. One adult aged 15 or above was randomly selected from each household to complete the individual interview.

The survey instruments used on Bhasan Char were adapted from the 2019 CBPS questionnaires with several modifications: (i) questions were reworded or added to better reflect the island context; (ii) response options were expanded based on training and piloting feedback; (iii) some questions were modified or removed in line with changes made to the 2023 Cox's Bazar survey; and (iv) certain questions were omitted to reduce interview length. As the core structure remains consistent, the data allow for direct comparison between relocated DRP in Bhasan Char and those remaining in Cox's Bazar refugee camps.

For the purposes of this study, we restrict the sample to the displaced population. After merging the 2023 CBPS dataset with the Bhasan Char sample and excluding host community members and individuals under age 15, the final dataset includes 2,174 refugees from Cox's Bazar camps and 958 from Bhasan Char. The richness and comparability of these data provide a robust foundation for evaluating the effects of the relocation policy on refugees' well-being.

III.A.1 Descriptive statistics

Table 1 presents pre-relocation descriptive statistics comparing DRPs currently residing in Bhasan Char and those remaining in the refugee camps of Cox's Bazar. All characteristics reflect the period prior to the relocation to Bhasan Char, which occurred between November and December 2022. This comparison is not intended to estimate treatment effects but to assess potential baseline differences between the two populations before the policy intervention took place.

We observe statistically significant differences across several pre-relocation characteristics. Individuals in Bhasan Char are more likely to be female, significantly younger, and

thus exhibit lower levels of educational attainment compared to those in Cox's Bazar. They are also less likely to have been students in 2018, are less likely to report reading ability, and tend to live in larger households with more children. Additionally, the average age of children in the household is lower in Bhasan Char. A higher share of respondents in Bhasan Char are identified as household heads, and there is a slightly higher prevalence of marriage.

To account for these pre-existing differences and better isolate the effect of relocation on well-being outcomes, we control for all the baseline variables listed in Table 1, excluding education level in Myanmar and children's average age in 2018, due to the limited number of observations, and married in 2018, as it does not strictly capture pre-relocation status. These covariates are used in the construction of propensity scores for our matching strategy and serve to improve the comparability of the two populations in subsequent analyses.

III.B Empirical Strategy

Since there was no objective criteria used for the selection of household relocation that we can exploit, we examine differences in well-being between DRP residing in Cox's Bazar and those relocated to Bhasan Char using two complementary strategies: unadjusted mean comparisons and propensity score matching (PSM). The latter accounts for pre-relocation characteristics that are time-invariant and plausibly unaffected by the relocation itself. By conditioning on observable covariates, including demographic and socioeconomic attributes, we aim to mitigate selection bias and improve the comparability of groups.[2] While PSM addresses observable heterogeneity (as shown in Table 1), unobserved differences may persist. Therefore, we interpret the estimated gaps as descriptive rather than causal.

[2]Appendix **??** demonstrates common support in the propensity score distribution, suggesting satisfactory overlap between groups.

III.C Main Outcome Groups

We organize our analysis around several groups of outcomes that reflect key dimensions of refugee well-being: food consumption, physical and mental health, and labor market outcomes. For each group, we estimate average differences between households that remained in Cox's Bazar and those that were relocated to Bhasan Char. In addition to individual indicators, we construct group-level indices to improve precision. When the number of outcomes within a group is large, detailed estimates are reported in Appendix **??**.

These groups of outcomes are constructed as follows:

1. *Food consumption.* We measure household food consumption using three complementary indicators. First, the Food Consumption Score (FCS) is a weighted index that aggregates the frequency of consumption of various food items over the past seven days, with weights reflecting the nutritional value of each food group, following the World Food Programme's methodology. Second, the Dietary Diversity Score (DDS) captures the number of distinct food groups consumed at least once during the previous week. Third, we calculate the average frequency of food item consumption, defined as the unweighted mean number of days (ranging from 0 to 7) on which the household consumed each of 25 tracked food items. Finally, we combine these three measures into a single composite index.[3]

2. *Physical and mental health.* We assess health outcomes using two measures. The Illness Prevalence Index is constructed as the average of binary indicators capturing whether the respondent reported experiencing any of the following conditions in the past month: chest pain, cold symptoms, cough, hypertension, difficulty breath-

[3]This index is constructed by first standardizing the FCS, DDS, and the average food frequency measures. We then compute the row-wise average of these standardized variables and re-standardize the resulting index using the mean and standard deviation of the control group. This approach allows for straightforward interpretation of effect sizes relative to the untreated population.

ing, diarrhea, or physical injury. This index serves as a summary proxy for physical health. Mental health is measured using an indicator for moderate or severe depression based on the Patient Health Questionnaire (PHQ-9). Respondents were asked eight questions regarding depressive symptoms over the preceding two weeks, with responses scored from 0 ("Not at all") to 3 ("Nearly every day"). The resulting scores were summed to create a depression severity index ranging from 0 to 24. A respondent is classified as moderately or severely depressed if their score is 10 or higher, following established clinical thresholds. Finally, we combine these two measures into a single composite health index, calculated as the average of the Illness Prevalence and Depression indices.

3. *Labor Market Outcomes.* We construct a labor market index using three variables: an indicator for employment in the past week, the logarithm of total weekly hours worked, and the logarithm of monthly wage among employed individuals. Each variable is first standardized, and the row-wise mean of these standardized values is then computed. The resulting index is subsequently re-standardized using the mean and standard deviation of the control group to facilitate interpretation relative to the untreated population. This composite measure captures both the extensive and intensive margins of labor market engagement.

Across Tables 2 through 4, we report estimates of the Average Treatment Effect on the Treated (ATT), defined as the mean difference in outcomes between individuals relocated to Bhasan Char and their matched counterparts in Cox's Bazar (Panel A). For comparison, Panel B presents unadjusted mean differences between the two groups.

III.D Food consumption

Across all three indicators, households relocated to Bhasan Char exhibit significantly worse food security outcomes than those who remained in Cox's Bazar (Table 2). The Food Consumption Score (FCS), a weighted index reflecting the frequency and nutritional

value of food consumed over the past seven days, is 44 percent lower among relocated households (118.3) compared to those in Cox's Bazar (206.1). The Dietary Diversity Score (DDS), which captures the number of distinct food groups consumed at least once in the past week, drops by 37 percent, from 8.0 to 5.0 food groups. The average frequency of food item consumption—defined as the mean number of days, from 0 to 7, that any of 25 tracked food items were consumed—declines by 47 percent, from 5.45 days in Cox's Bazar to 2.93 days in Bhasan Char. Using the three dimensions discussed above, Column (1) presents a composite Food Consumption Index, which reflects a 5.6 standard deviation decline in overall food consumption among relocated households underscoring a substantial deterioration in food security. These are large and consistent gaps, especially given the already extreme vulnerable nutritional baseline in Cox's Bazar. The similarity between the unadjusted mean differences and the ATT from the propensity matching score suggests that pre-relocation characteristics do not affect these gaps. Taken together, the findings point to a marked deterioration in food security following relocation to Bhasan Char.

III.E Physical and Mental Health

Relocated individuals in Bhasan Char exhibit significantly poorer health outcomes than those in Cox's Bazar (Table 3). The Illness Prevalence Index is 0.027 points higher for the relocated group, increasing from a mean of 0.156 in Cox's Bazar to 0.185 in Bhasan Char—equivalent to a 17 percent increase. While the raw difference may appear modest, it represents a meaningful rise in the incidence of physical illness across a population already facing substantial health vulnerabilities. Mental health disparities are even more pronounced. The prevalence of moderate to severe depression rises by 6.2 percentage points, nearly doubling. The effects for the combined index of health vulnerability are positive and suggest more vulnerability for relocated households, yet they are not statistically significant because the row-mean combination of the indexes adds some imprecision.

One possible explanation for the health disparities is the limited availability of health services on Bhasan Char. Unlike Cox's Bazar, which hosts a broader range of medical facilities, Bhasan Char provides only primary care. For more serious conditions, individuals must travel by boat to the mainland—a journey that is both logistically challenging and potentially delays treatment, allowing illnesses to worsen.

Overall, the results point to a significant deterioration in both physical and mental health among the relocated population. This is particularly concerning given that refugee populations already exhibit high baseline rates of mental health issues; the relocation program appears to have exacerbated these conditions, rather than alleviating them.

III.F Labor Market Outcomes

Relocated individuals in Bhasan Char exhibit substantially weaker labor market outcomes relative to those in Cox's Bazar (Table 4). Most notably, reported monthly wages are approximately 45 percent lower among the relocated group, as indicated by a log wage coefficient of 0.601. While differences in employment status and weekly hours worked are less consistent, varying between unadjusted and propensity score–matched estimates, the overall labor market index is negative across specifications, though statistically imprecise. These findings likely reflect the economic isolation of Bhasan Char, where opportunities for paid work are limited and largely shaped by humanitarian programming rather than market-based demand. The absence of integration with broader labor networks and the lack of private sector presence constrain both employment access and wage potential for the relocated population.

III.G Key takeaways on well-being gaps

Taken together, the results largely indicate that relocation to Bhasan Char is associated with significantly worse well-being across multiple dimensions. Food Consumption Scores are 44 percent lower, dietary diversity declines by 37 percent (from 8.0 to 5.0 food groups), and the average frequency of food item consumption drops by 47 percent. Monthly wages

among the employed are approximately 45 percent lower relative to Cox's Bazar. The prevalence of moderate or severe depression nearly doubles, rising by 6.2 percentage points.

These disparities are observed relative to a comparison group–DRP in Cox's Bazar–that is itself highly vulnerable. That households relocated to Bhasan Char consistently fare worse across all key domains—nutrition, health, employment, assistance, and asset ownership—raises serious concerns about the humanitarian and policy rationale behind the relocation strategy. While Bhasan Char was designed to relieve congestion and enhance living conditions, the evidence suggests it may instead have intensified hardship.

IV The Cost of Relocation: Evaluating Financial Sustainability

A critical dimension in assessing the long run viability of refugee relocation to Bhasan Char is its fiscal footprint. Table 6 presents comparative estimates of annual per capita operational costs for Rohingya refugees residing in Cox's Bazar and Bhasan Char as of 2024, disaggregated by key humanitarian sectors.[4] These figures reveal a consistent pattern: across every major category including infrastructure, food assistance, protection, shelter, water and sanitation, and health and education service delivery hosting refugees in Bhasan Char incurs substantially higher costs.

These elevated costs are not marginal. While the estimated annual operational expenditure per refugee in Cox's Bazar ranges between USD 430 and 580, the corresponding range in Bhasan Char lies between USD 1,350 and 1,810. This differential reflects a com-

[4]Food Security and Nutrition, which typically accounts for 25–30 percent of the humanitarian budget, refers to direct food assistance and nutrition interventions, primarily delivered through the World Food Programme (WFP) (OCHA, 2024). Protection services, generally allocated 5–10 percent of the budget, include legal aid, child protection, and gender-based violence prevention programs managed by UNHCR and its partners. Shelter and Settlements, which receive approximately 12–18 percent of total funding, cover the construction, maintenance, and improvement of refugee housing (OCHA, 2024). WASH (Water, Sanitation, and Hygiene) programs, accounting for around 5–8 percent of the budget, address access to potable water, sanitation services, and hygiene promotion, coordinated by UNICEF and WASH cluster actors (UNICEF, 2023). Lastly, Health and Education, which together are typically allocated 25–30 percent of humanitarian budgets, encompass primary healthcare services, maternal and child health, disease prevention, and non-formal education programs aligned with global Sphere Standards and UNHCR's Public Health Strategy (World Bank, 2022).

bination of logistical, demographic, and infrastructural factors. Bhasan Char's remote insular geography imposes steep transport and coordination costs. Its smaller population size limits economies of scale. In contrast to Cox's Bazar, where humanitarian infrastructure has evolved incrementally and remains embedded within a more accessible mainland ecosystem, Bhasan Char requires a full suite of standalone services. Many of these services are capital intensive and difficult to operate in a cost-effective manner.

Food security and nutrition expenditures illustrate this cost asymmetry clearly. The World Food Programme food assistance and nutrition programming cost an estimated USD 470 to 565 per refugee annually in Bhasan Char, compared to USD 150 to 180 in Cox's Bazar. Similarly, protection costs per capita range from USD 95 to 190 on the island, compared to just USD 30 to 60 in Cox's Bazar. Shelter and settlements costs also remain significantly higher, estimated between USD 225 and 340 per person annually, even without accounting for a one-time infrastructure investment of nearly USD 10,000 per capita.

This cost structure reveals that the delivery of basic services on Bhasan Char is inherently more expensive. Moreover, the economic isolation of the island prevents the kind of labor market integration or community-based provisioning that might offset these expenditures. In Cox's Bazar, by contrast, the denser population and somewhat embedded market and service infrastructure has lower costs.

V Conclusion

This paper examines the well-being and fiscal implications of a third model of refugee hosting: relocation to isolated purpose-built settlements. Bangladesh currently hosts more than 1 million Rohingya refugees, the vast majority of whom fled targeted violence and persecution in Myanmar beginning in 2017. Most reside in the densely populated camps of Cox's Bazar, where conditions are fragile, services overstretched, and the risks of environmental shocks and protracted displacement persist. In response, the Government of Bangladesh developed Bhasan Char, as an alternative site for relocation. Using

data from the 2019 and 2023 waves of the Cox's Bazar Panel Survey and the 2022 wave of the Bhasan Char Panel Survey, including a representative sample of households relocated to Bhasan Char, this paper assesses how that relocation strategy compares to continued hosting in the mainland camps. Because the relocation process was not governed by an objectively measurable or consistently applied selection rule, we rely on both unadjusted mean differences and propensity score matching to compare outcomes. The matching procedure adjusts for observable pre-relocation or time invariant characteristics. As such, the estimates are descriptive rather than causal, reflecting average differences between otherwise comparable groups.

We document two main findings. First, relocation to Bhasan Char is associated with a systematic reduction in refugee well-being across all measured dimensions. Households report significantly poorer food consumption, with lower dietary variety and nutritional value; physical illness prevalence is 17 percent higher; the share of individuals experiencing moderate to severe depression nearly doubles; and monthly wages are approximately 45 percent lower. Second, these reductions in well-being occur despite dramatically higher costs. Per capita service delivery in Bhasan Char is approximately three times more expensive than in Cox's Bazar, driven by the island's geographic isolation, lack of market access, and the need for fully standalone infrastructure and logistics systems.

From a policy perspective, these findings raise serious concerns about the long-term viability and justification of the Bhasan Char relocation strategy. The evidence shows that the model delivers systematically worse outcomes for refugees—despite significantly higher per capita expenditures—undermining both humanitarian goals and cost-effectiveness. Given the high vulnerability of the Rohingya population in Cox's Bazar, the fact that relocated households fare substantially worse is particularly troubling. Moreover, the island's lack of economic integration and dependence on external aid make it structurally unsustainable. In the context of rising global displacement and constrained humanitar-

ian budgets, scaling up or replicating this model would divert scarce resources toward a high-cost, low-impact approach. Without substantial reforms to improve refugee self-reliance, enable labor market access, or secure long-term funding, continued investment in Bhasan Char risks entrenching an isolated humanitarian enclave with limited prospects for durable solutions.

Two important dimensions that this study could not address due to data limitations are differences in security conditions and levels of overcrowding between Bhasan Char and Cox's Bazar. As more data become available, future research should explore these aspects to provide a more comprehensive understanding of the trade-offs associated with relocation policies.

VI TABLES

Table 1. Pre-relocation differences between DRPs residing in Bhasan Char and Cox's Bazar

Variable	Bhasan Char	Cox's Bazar	Mean Difference	Observations Bhasan Char	Observations Cox's Bazar
	(1)	(2)	(3)	(4)	(5)
Female [Yes=1]	0.65	0.55	0.09 ***	958	2,174
	(0.48)	(0.50)			
Age in 2018	28.72	30.37	-1.65 ***	958	2,174
	(12.11)	(15.81)			
Ed. Level in Myanmar	2.20	2.47	-0.27 ***	254	863
	(1.02)	(1.07)			
Student in 2018 [Yes=1]	0.31	0.38	-0.07 ***	956	2,168
	(0.46)	(0.48)			
Reading ability [Yes=1]	0.16	0.28	-0.12 ***	957	2,168
	(0.37)	(0.45)			
Born in Myanmar [Yes=1]	0.94	0.98	-0.04 ***	958	2,174
	(0.24)	(0.15)			
Household Head [Yes=1]	1.00	0.38	0.62 ***	958	2,174
	0.00	(0.49)			
Household Size in 2018	4.05	4.35	-0.30 ***	958	2,174
	(2.39)	(2.17)			
Number of Children in 2018	1.87	1.47	0.40 ***	958	2,174
	(1.50)	(1.42)			
Children Age in 2018	4.83	5.38	-0.55 ***	718	1,445
	(2.59)	(2.94)			
Married [Yes=1]	0.84	0.67	0.17 ***	957	2,174
	(0.36)	(0.47)			

Notes: The table presents the results of t-tests comparing the means of pre-relocation characteristics before moving to Bhasan Char between Rohingya refugees residing in Bhasan Char and Cox's Bazar. Column (1) reports the mean value for the Bhasan Char sample, and column (2) reports the mean value for the Cox's Bazar sample. Column (3) shows the mean difference between the two samples. Statistical significance is denoted by: * significant at the 10% level, ** at the 5% level, and *** at the 1% level. Columns (4) and (5) correspond to the number of observations in each sample, respectively. Variables are defined as follows: Female indicates whether the respondent is female; Age in 2018 refers to the respondent's age in 2018; Education Level in Myanmar measures the years of education completed in Myanmar; Student in 2018 indicates whether the respondent was a student in 2018; Reading Ability indicates whether the respondent reports being able to read; Born in Myanmar indicates whether the respondent was born in Myanmar; Household Head identifies whether the respondent is the head of the household; Household Size in 2018 captures the number of individuals in the household in 2018; Number of Children in 2018 refers to the number of children in the household in 2018; Children Age in 2018 captures the average age of the children in the household in 2018; and Married indicates whether the respondent is married 2018.

Table 2. Food Consumption Gaps between Bhasan Char and Cox's Bazar

	Food Consumption Index (1)	Food Consumption Score (2)	Dietary Diversity Score (3)	Avg. Freq. of Food Item Consumption (0-7) (4)
Panel A. Matching Estimates				
ATT	-5.597***	-90.363***	-2.970***	-2.562***
	(0.113)	(3.807)	(0.036)	(0.064)
Treated Obs. (Matched Sample)	955	955	955	955
Control Obs. (Matched Sample)	823	823	823	823
Total Matched Observations	1778	1778	1778	1778
Panel B. T-test				
Mean Difference	-5.517***	-87.758***	-2.974***	-2.514***
	(2.775)	(57.438)	(1.490)	(1.309)
Observations	3132	3132	3132	3132
Av. (Cox's Bazar)	0.000	206.051	8.000	5.447
Av. (Bhasan Char)	-5.517	118.292	5.026	2.933
Outcome Level	Household	Household	Household	Household

Notes: This table presents estimates of the impact of relocation to Bhasan Char on food consumption. Panel A reports results from propensity score matching, estimating the Average Treatment Effect on the Treated (ATT), where the treated group consists of households relocated to Bhasan Char, and the control group includes households residing in Cox's Bazar. The ATT is defined as the difference in outcomes between treated households and their matched controls. Standard errors are reported in parentheses. Panel B presents unadjusted comparisons of mean outcomes between the two groups using t-tests. The propensity score model includes the following pre-migration covariates: female indicator, age in 2018, student status in 2018, reading ability, birthplace in Myanmar, household head status, household size in 2018, and number of children in 2018. Column (1) reports the Food Consumption Index, constructed by first standardizing the variables in columns (2) through (4). The row-wise average of these standardized variables is then computed, and the resulting index is re-standardized using the mean and standard deviation of the control group to facilitate interpretation relative to the untreated population. Column (2) presents the Food Consumption Score (FCS), a weighted index based on the frequency of consumption of food items over the past seven days, grouped and weighted according to nutritional value following World Food Programme methodology. Column (3) reports the Dietary Diversity Score (DDS), defined as the number of distinct food groups consumed at least once in the past week. Column (4) displays the average frequency of food item consumption, calculated as the unweighted mean number of days (ranging from 0 to 7) that the household consumed each of the 25 tracked food items. Statistical significance is denoted by: * significant at the 10% level, ** at the 5% level, and *** at the 1% level.

Table 3. Physical Health and Mental Health between Bhasan Char and Cox's Bazar

	Health Vulnerability Index (1)	Illness Prevalence Index (2)	Moderate or Severe Depression (3)
Panel A. Matching Estimates			
ATT	0.018	0.027*	0.062**
	(0.020)	(0.016)	(0.030)
Treated Obs. (Matched Sample)	854	407	814
Control Obs. (Matched Sample)	664	565	640
Total Matched Observations	1518	972	1454
Panel B. T-test			
Mean Difference	0.006	0.030***	0.026**
	(0.181)	(0.125)	(0.272)
Observations	2599	1884	2495
Av. (Cox's Bazar)	0.104	0.156	0.072
Av. (Bhasan Char)	0.111	0.185	0.098
Outcome Level	Individual	Individual	Individual

Notes: This table presents estimates of the impact of being relocated to Bhasan Char on the health and mental health outcomes of the forcibly displaced population, using propensity score matching (Panel A) and t-tests comparing means between the treated group (sample in Bhasan Char) and the control group (sample in Cox's Bazar) (Panel B). Panel A reports the Average Treatment Effect on the Treated (ATT), calculated as the difference in outcomes between the treated group and their matched controls, with standard errors reported in parentheses. The propensity score model includes the following pre-migration covariates: female indicator, age in 2018, student status in 2018, reading ability, birthplace in Myanmar, household head status, household size in 2018, and number of children in 2018. The Illness Prevalence Index in Column (1) is constructed as the average of binary indicator variables coded as 1 if the respondent reported suffering from any of the conditions listed in Columns (2) through (8) of Table **??** within the past month. The Moderate or Severe Depression indicator is based on the Patient Health Questionnaire (PHQ-9). Respondents answered eight questions about depressive symptoms experienced over the past two weeks, each scored from 0 ("Not at all") to 3 ("Nearly every day"). The scores were summed to create a depression severity index ranging from 0 to 24. A binary indicator equal to 1 was assigned if the respondent's total score was greater than or equal to 10, corresponding to moderate or more severe levels of depression. Statistical significance is denoted by: * significant at the 10% level, ** at the 5% level, and *** at the 1% level.

Table 4. Labor Market Outcome Gaps between Bhasan Char and Cox's Bazar

	Labor Market Index	Employed Last Week [=1]	Weekly Hours Work (Log)	Monthly Wage (Log)
	(1)	(2)	(3)	(4)
Panel A. Matching Estimates				
ATT	-0.012	-0.007	0.140	-0.601**
	(0.028)	(0.048)	(0.147)	(0.263)
Treated Obs. (Matched Sample)	955	955	192	195
Control Obs. (Matched Sample)	692	692	165	167
Total Matched Observations	1647	1647	357	362
Panel B. T-test				
Mean Difference	-0.031	0.034	-0.103	-0.970***
	(0.822)	(1.894)	(0.824)	(1.476)
Observations	2764	2764	597	637
Av. (Cox's Bazar)	0.000	0.169	3.331	7.362
Av. (Bhasan Char)	-0.031	0.204	3.228	6.392
Outcome Level	Individual	Individual	Individual	Individual

Notes: This table presents estimates of the impact of being relocated to Bhasan Char on the Economic Opportunity of refugees, using propensity score matching (Panel A) and t-tests comparing means between the treated group (sample in Bhasan Char) and the control group (sample in Cox's Bazar) (Panel B). Panel A reports the Average Treatment Effect on the Treated (ATT), calculated as the difference in outcomes between the treated group and their matched controls, with standard errors reported in parentheses. The propensity score model includes the following pre-migration covariates: female indicator, age in 2018, student status in 2018, reading ability, birthplace in Myanmar, household head status, household size in 2018, and number of children in 2018. The outcome variables include: (i) Employed last week [=1], indicating whether the individual worked for pay in the last week; (ii) Weekly hours work (log), the natural logarithm of total weekly hours worked; (iii) Monthly wage (log), the natural logarithm of monthly wage for those employed. The Economic Opportunities Index is constructed by first standardizing each of the following variables: employment status, weekly work hours (log), and monthly wage (log). We then compute the row-wise mean of these standardized variables. Finally, the index is standardized using the control group's mean and standard deviation to facilitate interpretation relative to the untreated population. Higher values of the index indicate greater economic opportunity. Statistical significance is denoted by: * significant at the 10% level, ** at the 5% level, and *** at the 1% level.

Table 5. Service Access Gap between Bhasan Char and Cox's Bazar

	Assistance and Service Access Index	Received Food Items (Last month)	Received Service Support (Last month)	Received Non-food Items (Last month)	Healthcare Access Index	Educatio Access
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Matching Estimates						
ATT	-0.109***	-0.284*	-0.014	-0.384***	0.027***	0.001
	(0.041)	(0.147)	(0.232)	(0.041)	(0.006)	(0.009)
Treated Obs. (Matched Sample)	955	557	894	954	797	955
Control Obs. (Matched Sample)	823	818	18	764	666	823
Total Matched Observations	1778	1375	912	1718	1463	1778
Panel B. T-test						
Mean Difference	-0.092***	-0.173***	-0.096	-0.376***	0.038***	-0.042***
	(0.640)	(1.390)	(3.931)	(1.007)	(0.044)	(0.194)
Observations	3132	2727	1003	2991	2545	3130
Av. (Cox's Bazar)	0.384	0.706	0.694	0.662	0.062	0.052
Av. (Bhasan Char)	0.293	0.534	0.598	0.286	0.100	0.010
Outcome Level	Individual	Household	Household	Household	Individual	Individua

Notes: This table presents estimates of the impact of relocation to Bhasan Char on overall refugee Service Access. Panel A reports results from propensity score matching, estimating the Average Treatment Effect on the Treated (ATT), where the treated group consists of households relocated to Bhasan Char, and the control group includes households residing in Cox's Bazar. The ATT is defined as the difference in outcomes between treated households and their matched controls. Standard errors are reported in parentheses. Panel B presents unadjusted comparisons of mean outcomes between the two groups using t-tests. The propensity score model includes the following pre-migration covariates: female indicator, age in 2018, student status in 2018, reading ability, birthplace in Myanmar, household head status, household size in 2018, and number of children in 2018. The Service Access Index in Column (1) is calculated as the average of Columns (2) through (6). Column (2) reports receipt of Food Items, including high-energy biscuits (HEB), cookies, super cereal, and milk or dairy products. Column (3) captures receipt of Service Support such as health assistance, education assistance, drinking water services, and shelter or protection services. Column (4) includes Non-Food Items such as hygiene products, cooking fuel, cooking utensils, clothing, bedding/mosquito nets, bamboo, tarps, and buckets or mugs. Column (5) reports the Healthcare Access Index, defined as the average of binary indicators capturing whether the respondent visited a doctor in the past month for specific physical health-related reasons (see Table **??**, Columns 2–11). Column (6) presents the Education Access Index, coded as 1 if the respondent reported currently attending school. Higher values indicate greater service access. Statistical significance is denoted by: * significant at the 10% level, ** at the 5% level, and *** at the 1% level.

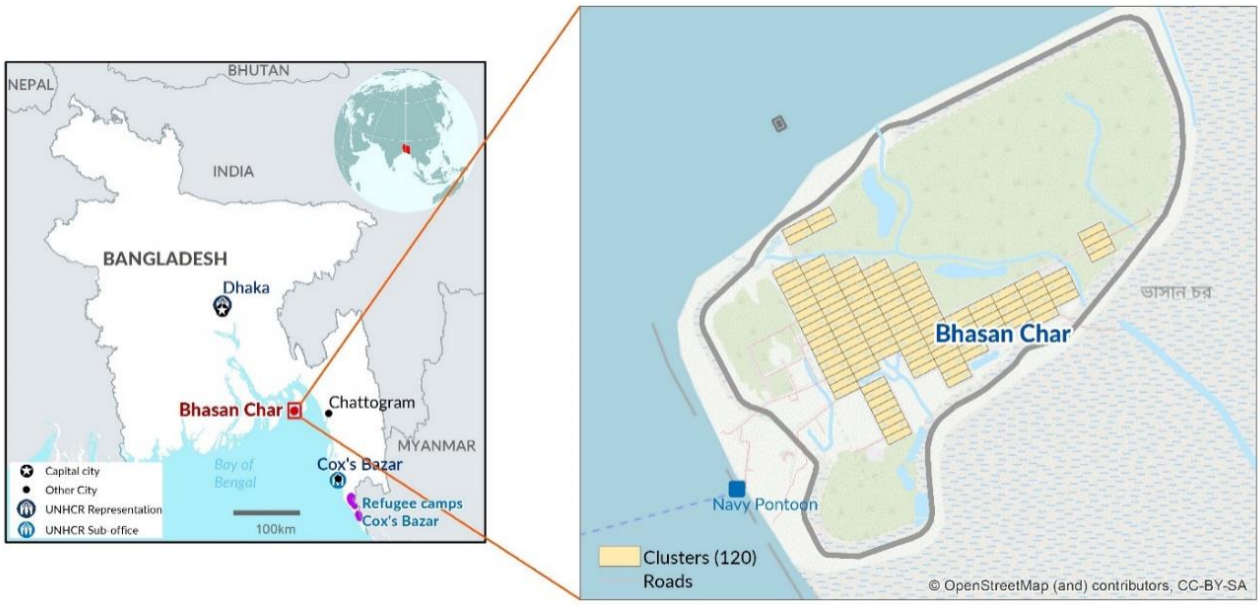
Table 6. Estimated Costs per Refugee, Cox's Bazar vs Bhasan Char, 2024

Sector	Cox's Bazar (per refugee/year)	Bhasan Char (per refugee/year)	Typical Share if Fully Funded	Sources
Budget per refugee	$600	$1,881	-	ISCG (2024)
Initial Infrastructure	$0	$9,953	–	The Business Standard (2023)
Food Security and Nutrition	$150–180	$470–565	25–30%	Reuters (2025)
Protection	$30–60	$95–190	5–10%	UNHCR (2024a)
Shelter and Settlements	$72–108	$225–340	12–18%	UNHCR (2022b)
WASH (Water, Sanitation)	$30–48	$95–150	5–8%	UNICEF (2023)
Health and Education	$150–180	$470–565	25–30%	World Bank (2022) UNHCR (2023b)
Total Annual Cost	**$430–580**	**$1,350–1,810**	–	

Notes: The table presents estimated sectoral annual costs per refugee for Cox's Bazar and Bhasan Char based on 2024 funding appeals and standard humanitarian budget allocation shares (ISCG, 2024). Figures for Cox's Bazar are adjusted to reflect 68.2% funding realization, while Bhasan Char figures are based on full appeal amounts due to limited funding realization data. Sector cost allocations follow standard guidelines where Food Security and Nutrition and Health/Education typically account for 25–30% of the total humanitarian budget, Shelter and Settlements for 12–18%, Protection for 5–10%, and WASH services for 5–8% (OCHA, 2024; UNICEF, 2023; World Bank, 2022). The "Initial Infrastructure" row refers to one-time government investments in Bhasan Char estimated at approximately $9,953 per refugee (The Business Standard, 2023), while Cox's Bazar infrastructure costs remain minimal due to the emergency nature of settlement construction. "Total Annual Cost" figures correspond to the sum of sector estimates for each location.

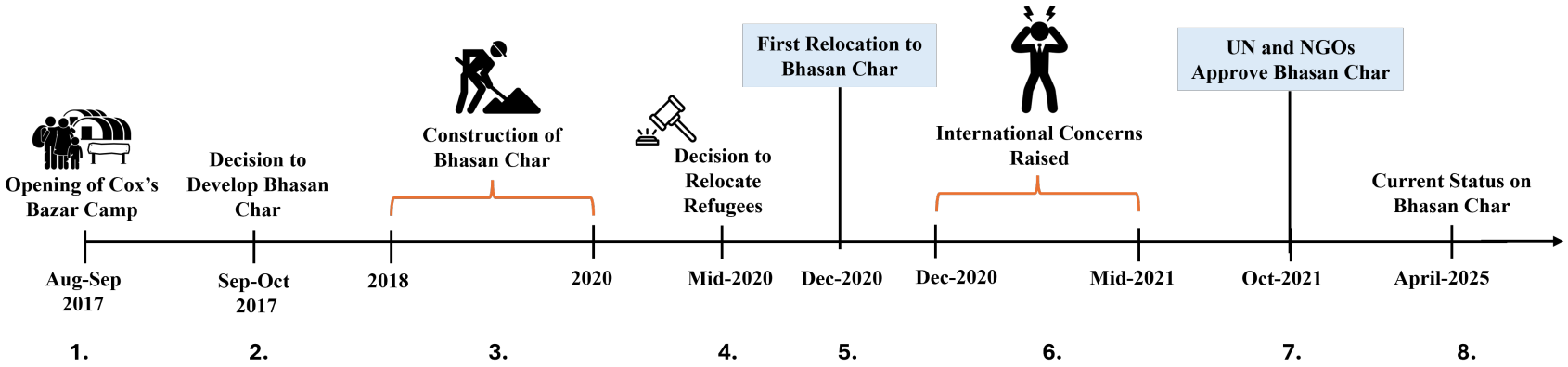
VII FIGURES

Figure 1. Location of Cox's Bazar and Bhasan Char



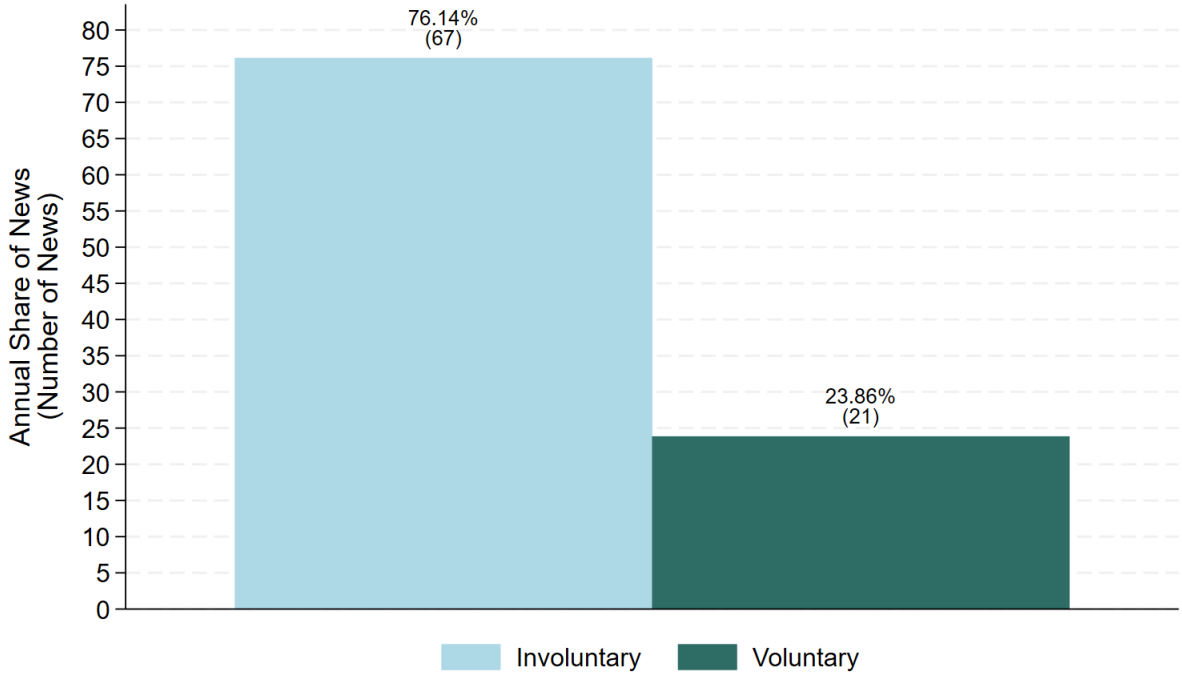
Source: The UN Refugee Agency, numbers are based on the address updated in proGres.

Figure 2. Key Events Related to the Relocation of Rohingya Refugees to Bhasan Char



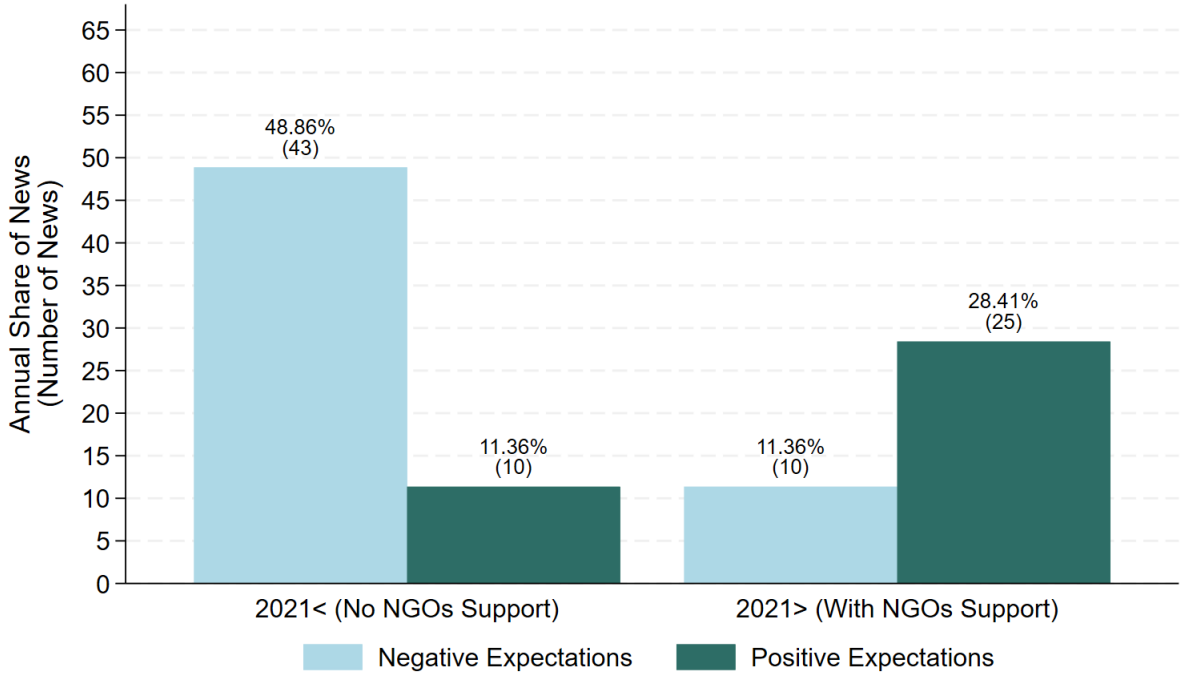
Notes: This figure presents a timeline of key events related to the relocation of Rohingya refugees from Cox's Bazar to Bhasan Char, based on publicly available information from news reports, official government announcements, and international agency updates. The timeline highlights major milestones including the opening of Cox's Bazar camps, the development and construction of Bhasan Char, decisions regarding relocation, initial movements, international concerns, the approval by UN agencies and NGOs, and the current status of the refugee population on the island as of April 2025.

Figure 3. Refugees' Reported Relocation to Bhasan Char as Voluntary According to News Coverage



Notes: This figure is based on information extracted through a web scraping exercise of 88 news articles retrieved via Google News that reported on the relocation of Rohingya refugees from Cox's Bazar to Bhasan Char. Articles were reviewed to classify whether the relocation was characterized as voluntary. A detailed summary of the news articles included in the analysis is provided in Table **??** and **??**.

Figure 4. Refugees' Reported Living Conditions in Bhasan Char According to News Coverage



Notes: This figure is based on information extracted through a web scraping exercise of 88 news articles retrieved via Google News that reported on the relocation of Rohingya refugees from Cox's Bazar to Bhasan Char. Articles were reviewed to capture refugees' expectations about living conditions in Bhasan Char (positive or negative) and whether relocated refugees reported experiencing better conditions. A detailed summary of the news articles included in the analysis is provided in Table **??** and **??**.

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