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ABSTRACT

Countries in Latin America, Asia, and Africa exposed to the environmental consequences of climate change are predicted to see voluntary and forced internal migration on an unprecedented scale in the coming decades. This will likely put a great strain on host communities receiving the internally displaced. In many communities, the long-term residents may be skeptical toward the internal climate migrants, creating grounds for heightened tensions and even violent conflict. To alleviate such tensions, it is important to understand how attitudes toward internal climate migrants among host community members form, an issue that has thus far received little attention in climate research. To promote research on host communities receiving internal climate migrants in developing countries, this article develops a conceptual framework which seeks to map key factors influencing attitudes toward climate migrants. It proposes that distance between migrants and host community members along multiple dimensions is central to understanding how such attitudes form. The framework categorizes the different dimensions of distance into spatial, attitudinal, experiential, and social proximity. The article applies the framework to a survey conducted among over 630 long-term host community residents in the climate exposed Satkhira District of Bangladesh and finds evidence that variables reflecting these categories of proximity shape attitudes toward internal climate migrants.

HIGHLIGHTS

- Host–migrant proximities shape attitudes toward internal climate migrants
- Attitudes toward internal climate migrants are inherently relational
- Attitudes toward climate migrants worsen with increased spatial and social distance
- Values and worldviews influence perceptions about internal climate migrants

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1. Introduction

The tropical cyclone Idai that struck the South-West coast of Mozambique in March 2019 lasted only one day. However, it left almost two million people in need of assistance as it displaced almost 150,000 people and wreaked an estimated $1 billion worth of damage to agriculture, buildings, and infrastructure (UN, 2019; UNHCR, 2019). This worst storm in Mozambique's history was most likely only a harbinger of a future where storms of such unprecedented force become commonplace and 'normal' storms increasingly frequent (IPCC, 2018). Besides increasing the intensity and frequency of rapid-onset hazards (i.e., storms, flooding, wildfires, etc.), human-induced climate change is changing the environment in more gradual ways, through changes in temperatures and precipitation, ocean acidification, and sea-level rise. Such slow-onset hazards, leading to droughts, desertification, soil erosion and salinization, and changes in seasons, rainfall patterns, and flora and fauna, are expected to displace up to 143 million people internally in Africa, Asia, and Latin America by 2050 (Rigaud et al., 2018).[1]

As people affected by climate change, often living in rural areas in poor countries, will increasingly look for more viable and safer places to live, many of them moving internally and over short distances (Government Office for Science, 2011), countries need to prepare for the coming increase in internal migration flows. Under some scenarios, the degradation brought by climate change could trigger migration on a scale not previously experienced and that may happen simultaneously in many developing countries. Most likely, the scope and scale of the climate-induced migration will not only test the limits of the national and international governance and cooperation in helping those in need, but also the limits of the host communities experiencing an influx of migrants. At worst, this can cause major disruptions and instability if the tensions between the displaced and host communities due to, for example, competition over scarce resources or human distrust and mutual suspicion, intensify and escalate (Burke, Hsiang, & Miguel, 2015; Economist, 2019; Vivekananda, Wall, Sylvestre, & Nagarajan, 2019)(REF).

An important part of the preparation for the anticipated future climate migration is to address the infrastructural, social, and other needs of locations where the displaced are likely to settle. Another, and equally vital part, is to prepare the hearts and minds of the host communities receiving the displaced. For the latter, a thorough understanding of how host community members' attitudes toward climate migrants form is needed, an issue that thus far has been a neglected area within climate change research (Boas et al., 2019).

To promote research on the formation of host community attitudes toward internal climate migrants, this article makes two main contributions: First, it develops a conceptual framework on how different aspects of host-migrant proximity impact host community members' attitudes toward internal climate migrants. Second, it tests the framework using a household survey of over 630 respondents from potential host communities in the climate-exposed Satkhira District in Bangladesh. This context has the advantage of being ethnically and religiously homogeneous, allowing us to study host-migrant disparities free of the influence of ethnicity, which has been highlighted as an important source of migration-related conflict (Fearon & Laitin, 2011; Krcmaric, 2014).

Drawing on literature on international migration, natural hazards, and climate change and its consequences, our conceptual framework posits that four types of proximities can be salient for host community members' views on internal climate migrants: i) their geographic distance to highly exposed areas from where the migrants are likely to come (spatial proximity); ii) their values and worldviews concerning fellow citizens (attitudinal proximity); iii) the extent to which they have experiences similar to those of migrants (experiential proximity); and iv) their social similarity with the migrants in terms of education, wealth, and occupation (social proximity).

Our empirical results from Bangladesh show that perceived community capacity to settle migrants is positively related to the willingness of host communities to do so. In other words, physical and economic capacities of host communities do matter. However, the key insight our analysis brings to light is that attitudes toward migrants are inherently relational, and map into

[1] A person's or household's decision to migrate is influenced by many factors, such as socio-economic, cultural, and political aspects, and is only rarely solely based on degrading environmental conditions. Due to the complex and not yet well understood relationship between climate change and migration, all estimations of future climate migration are characterized by great uncertainty (Boas et al., 2019; Cattaneo et al., 2019).

spatial, attitudinal, experiential, and social proximities. Moreover, our results suggest that these aspects may be highly positional; we find that attitudes toward migrants worsen with increased social distance to them. These results suggest that attitudes toward internal climate migrants are not reducible to simple theories of resource and labor market competition.

This article contributes to three distinct bodies of literature. First, to our knowledge, this article is among the first to study how host community members' attitudes toward climate migrants form (Boas et al., 2019). The analysis complements that of Kolstad et al. (2019), which finds that attitudes toward internal climate migrants are difficult to change, but has less to say about how such attitudes form. Second, although there is a large body of literature on attitudes toward international migrants among citizens of the Global North (Hainmueller et al., 2015), studies on immigration perceptions in countries in the Global South are much more scarce (Barcelo, 2016; Buehler & Han, 2019; Ruedin, 2019). Our results, in particular on the effects of social distance, provide support for earlier results showing that factors influencing anti-immigrant sentiments in the Global South can be different from those in the Global North (Harris, Findley, Nielson, & Noyes, 2018). Third, more generally, we complement the relatively understudied area of climate change perceptions in developing countries, which mainly has focused on agriculture (Dang, Li, Nuberg, & Bruwer, 2019). Some of these studies evoke distance (for example, from a water source) or experience of a hazard event as a factor in farmers' perceptions of risk and adaptation (Azadi, Yazdanpanah, & Mahmoudi, 2019; Dang, Li, Nuberg, & Bruwer, 2014; Oremo, Mulwa, & Oguge, 2019; Rizwan et al., 2019) and other studies show that exposure and past experiences of a hazard event influence the formation of risk perceptions toward future events and, to some extent, climate change attitudes (Adelekan & Asiyanbi, 2016; Mind'je et al., 2019; Ngo, Poortvliet, & Feindt, 2019).

The article proceeds as follows. Section 2 presents the conceptual framework for categorizing the factors related to proximity that may affect how the host community members perceive internal climate migrants. Section 3 describes the study area, data, and methods and Section 4 the results. Section 5 discusses the key results and Section 6 concludes with some remarks on directions for further research and policy implications.

2. Conceptual framework

The findings from the quantitative and qualitative research on how attitudes toward immigrants, refugees, natural hazards and their victims, and climate change, its consequences, and climate actions suggest that a range of factors related to proximity may influence attitudes among host community members toward internal climate migrants. For many – in the Global North at least – climate change and its consequences are (still) abstract phenomena that primarily affect other people, in other places, and in a somewhat distant and uncertain future, that is, they are psychologically distant[2] (Ballew et al., 2019; Bruegger, Dessai, Devine-Wright, Morton, & Pidgeon, 2015; de Guttry, Susser, & Doering, 2019; McDonald, Chai, & Newell, 2015; Alexa Spence, Poortinga, & Pidgeon, 2012). Similarly, the literature on immigration suggests that psychological distance between hosts and migrants influences hosts' attitudes toward migration (Hainmueller, Hiscox, & Margalit, 2015; Rustenbach, 2010) and the literature on disasters that increased psychological distance to a disaster and its victims influences helping and prosocial behavior (Andrighetto, Baldissarri, Lattanzio, Loughnan, & Volpato, 2014; Zagefka, 2018).

We thus propose that when seeking to understand how host community members' attitudes toward internal climate migrants form, one should consider host community members' proximity to climate migrants in terms of their own distance to potentially highly exposed areas (spatial proximity), personal values and worldviews that shrink or expand the compassion shown to fellow citizens (attitudinal proximity), experiences of similar life events (experiential proximity), and educational, economic and occupational similarity with the potential migrants (social proximity) (Table 1).

[2] Psychological distance refers to the extent to which an object or event is removed from the self here and now. The ways in which the object or event can be removed from this reference point include time, space, and social distance, constituting different distance dimensions (Trope & Liberman, 2010).

Table 1. Proximity aspects influencing attitudes toward climate migrants

Spatial proximity	Attitudinal proximity	Experiential proximity	Social proximity
• Distance to places highly exposed to climate-related hazard events	• Values and personality • Attribution bias • In- and outgroup attitudes	• Similar past experiences • Similar present experiences • Similar (anticipated) future experiences	• Educational similarity • Economic similarity • Occupational similarity

Spatial proximity

Physical distance to areas exposed to climate-related hazards has in many studies been shown to be relevant when it comes to people's concern for climate change, its consequences, and support for mitigation and adaptation measures (Bhattachanu et al., 2019; Brody, Zahran, Vedlitz, & Grover, 2008; A Spence, Poortinga, Butler, & Pidgeon, 2011; Verlynde, Voltaire, & Chagnon, 2019). In particular, people living in the proximity of highly exposed areas or having personal experience of being harmed by a hazard event tend to be more concerned about climate change and support climate action (P. Lujala, Lein, & Rød, 2015; McDonald et al., 2015; Alexa Spence et al., 2012; Zanocco, Boudet, Nilson, & Flora, 2019) such as reducing energy use (Ogunbode, Liu, & Tausch, 2017; A Spence et al., 2011), preparing and taking individual measures in the anticipation of future weather-related events (Demski, Capstick, Pidgeon, Sposato, & Spence, 2017; Päivi Lujala & Lein, 2020), accepting restrictions like curtailing coastal development (Ray, Hughes, Konisky, & Kaylor, 2017), and adopting new farming techniques (Azadi et al., 2019). In disaster studies, the spatial proximity to (potential) disaster events has been shown to be related to higher levels of prosocial and helping behavior (Drury, Brown, Gonzalez, & Miranda, 2016; Li, Li, Decety, & Lee, 2013; Maki et al., 2019).

Reduced geographic distance to weather-related hazards may induce people to update their beliefs when it comes to both the likelihood and the potential consequences of future – climate change augmented – weather-related events for themselves and others. Further, those living closer to the most exposed areas may have a more realistic idea of how powerless the affected communities can be when faced by, for example, a tropical cyclone or devastating flooding, leading to increased compassion and understanding toward those migrating out of harm's way.

Attitudinal proximity

Attitudes toward immigrants and asylum seekers are mediated through values, worldviews, and personality (Dinesen, Klemmensen, & Norgaard, 2016; Hainmueller & Hangartner, 2013; Hainmueller & Hiscox, 2007), as are perceptions of climate change (Hornsey, Harris, Bain, & Fielding, 2016; Poortinga, Whitmarsh, Steg, Bohm, & Fisher, 2019) and disaster victims (Zagefka, Noor, Brown, de Moura, & Hopthrow, 2011). In particular, people holding self-transcending values such as altruism, forgiveness, respect, and benevolence, as well as egalitarian views on division of resources, tend to be more concerned about climate change and support ameliorative action (Corner, Markowitz, & Pidgeon, 2014). In the context of welcoming climate migrants to one's own community, such values can be related to perceptions that climate migrants are not responsible for their own misfortune, but are migrating due hardship caused by external factors that are beyond their own control or are the result of randomness or fate (Harell, Soroka, & Iyengar, 2017); they may thus be perceived as more worthy of assistance (Marjanovic, Greenglass, Struthers, & Faye, 2009; Zagefka et al., 2011).

Shorter interpersonal distance, in the form of trust in other people, has been shown to predict more positive attitudes toward immigrants (Chang & Kang, 2018; Herreros & Criado, 2009; Rustenbach, 2010; van der Linden, Hooghe, de Vroome, & Van Laar, 2017). Such trust may be related to a person's own altruistic values and expectations that the new community members will behave decently, have or acquire with time the same values as the host community members, and in general contribute to the wellbeing of their new homeplace. In particular, a wider cultural distance has been shown to be a strong predictor of opposition to immigration as many individuals perceive immigrants as a threatening (e.g., ethnic or religious) outgroup (Card, Dustmann, & Preston, 2012; Malhotra, Margalit, & Mo, 2013; Thomsen & Rafiqi, 2019). Strong

ingroup social identity may thus predict skepticism toward internal climate migrants, especially if the migrants have a different sociocultural background.

Humanistic values and viewing others more like oneself and being trustworthy and deserving should thus decrease attitudinal distance to fellow citizens and lead to a greater willingness to accommodate internal climate migrants.

Experiential proximity

Distance between the host community members and climate migrants may also be reduced through similar life experiences that evoke feelings of solidarity and empathy toward migrants. As noted above (see spatial proximity), within climate perception and hazard victim studies, geographic closeness to highly exposed areas and experiences of hazard events have been shown to promote concern for climate change and support climate-friendly and prosocial behavior. Within migration studies, however, the impact of sharing life-experiences with the immigrants remains largely unstudied (Sarrasin, Green, Bolzman, Visintin, & Politi, 2018). The few exceptions have focused on how people with an immigrant background view immigration, finding that recent immigrants tend to have more positive attitudes while those who have been born in the country but having foreign roots have views more similar to the natives (Braakmann, Waqas, & Wildman, 2017; Just & Anderson, 2015; Sarrasin et al., 2018). One likely explanation is that people who have migrated themselves are better able to understand the choices made by the migrants, why they migrate, and the difficulties and diverse challenges involved in the relocation. Related to this, previous research has shown that interventions that foster sympathy and empathy enhance prosocial behavior and tendency to assist others (Eisenberg, Eggum, & Di Giunta, 2010) and willingness to help disaster victims (Andrighetto et al., 2014).

Thus, we would expect that host community members with life experiences similar to the migrants would express more positive opinions toward internal climate migrants. Besides their own migration history, other types of shared experiences and vulnerabilities may be salient as well, for example, having close relatives living in highly exposed areas, having a personal experience with a hazard event, or personal anticipation of future migration.

Social proximity

Climate hazard studies suggest that people who believe that people like themselves are threatened by climate change are more likely to support climate action (Hart & Nisbet, 2012; McDonald et al., 2015). Similarly, it can be the case that when people perceive climate migrants to be like themselves, they are more willing to accommodate them. In our case, in which the highly exposed areas tend to be poorer than the less exposed areas and the poor and least educated constitute the most vulnerable population segments within these areas (Mallick, Ahmed, & Vogt, 2017), this would imply that the poorer and less educated host community members would be the most welcoming toward internal climate migrants, as could also be those with similar occupations as the migrants. Conversely, class distinctions could make wealthier host community members more critical of migrants, as could expectations of tax increases on the wealthy to accommodate the migrants or erosion of their political influence in the host community.

In contrast to the above, studies on immigration and climate change perceptions – mainly conducted in Western countries – show that the more educated tend to support immigration and to be more concerned about climate change and supportive of climate action (Chang & Kang, 2018; Hainmueller & Hiscox, 2007; Poortinga et al., 2019; Rustenbach, 2010). Similarly, labor market competition is thought to cause more negative attitudes toward immigrants among those who fear for their jobs (Mayda, 2006).[3] Several studies from Western countries, however, show conflicting support for the labor market competition thesis (Hainmueller & Hiscox, 2010; Malhotra et al., 2013; Rustenbach, 2010), and provide evidence that high-skilled workers tend to be more positive about migrants, irrespective of a migrant's skill level (Hainmueller et al., 2015). At least

[3] Labor market competition theories predict that people are more hostile to migrants when perceived as competitors for jobs held by them, e.g. low-skilled native workers who fear competition from low-skilled immigrants. Similarly, those with low family incomes are expected to hold more negative attitudes toward migrants due to (perceived) direct competition for economic resources and public services and (a fear of) migrants driving down real wages in low-skilled occupations.

one study, conducted in Hong Kong and assessing attitudes toward mainland Chinese migrants, found that local laborers had a more positive attitude toward low-skilled immigrants than high-skilled professionals (Lee, Vyas, & Chou, 2017).

3. Research design and data

The quantitative analysis is based on a survey conducted in March–April 2019 in the Satkhira District located in southwest Bangladesh (Figure 1). The design of the quantitative survey was informed by two rounds of qualitative fieldwork (in May and September 2018) conducted in the study location and nearby areas including over 40 informal interviews and discussions with local government officials, scientists, NGO representatives, and community members to understand migration patterns and host community perceptions on migration in the area. The analysis draws also on another survey including 410 participants conducted in two areas in the coastal Satkhira (Gabura) and Khulna districts (Koyra) (Figure 1), both extremely exposed to weather-related events and both of which constitute catchment areas of climate migrants to other unions in the Satkhira district (Wiig, Bezu, Kolstad, Lujala, & Mahmud, 2020).

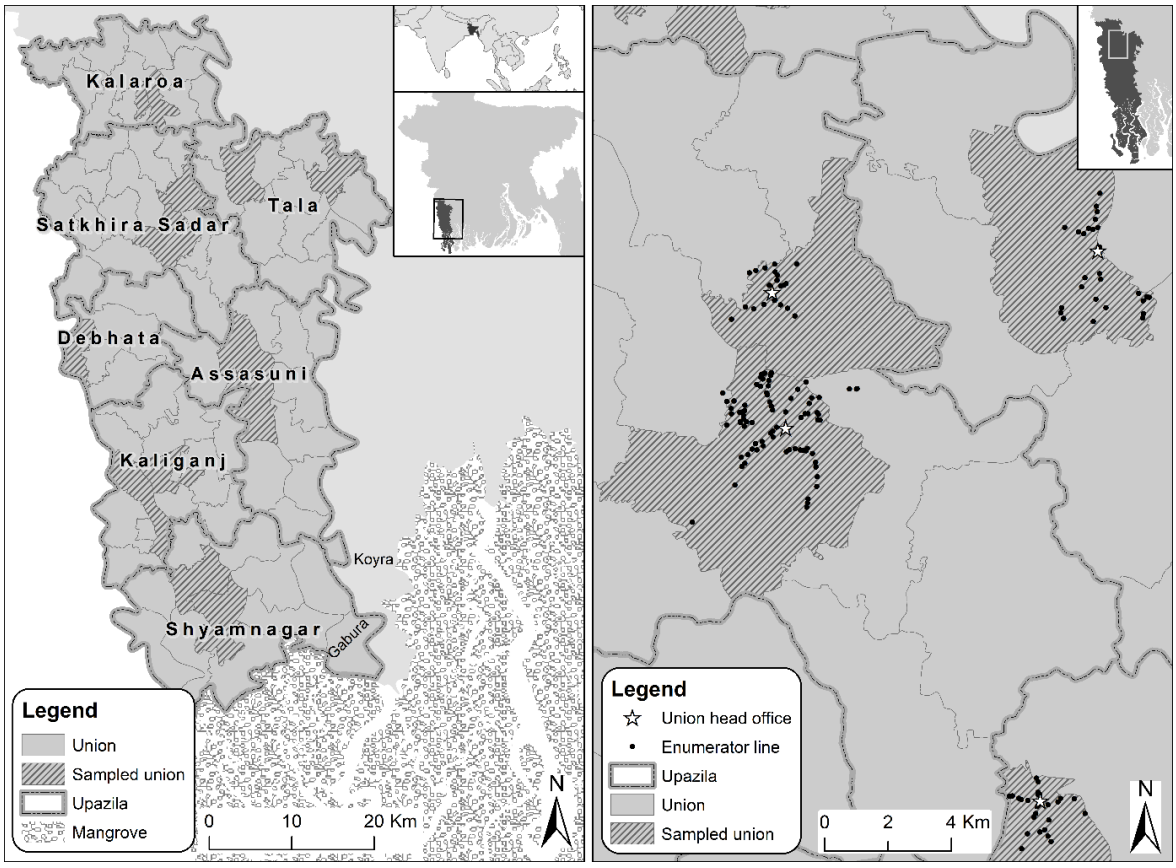

Figure 1. Sampled unions in Satkhira District (A) and examples of enumerator lines (B).

Study area

Bangladesh is one of the most exposed and vulnerable countries to climate change in the world. According to the Long-Term Climate Risk Index (Eckstein, Hutfils, & Winges, 2018, p. 8), the country was ranked among the ten most affected countries in the world for the period 1998–2017, with 190 registered weather-related hazard events. The coastal Satkhira District, which is located on the Ganges floodplain, north of the Sundarbans mangrove forest, is expected to suffer increasingly from climate change exacerbated riverine flooding, strong winds, storm surge, salt water intrusion, and changing weather patterns, the first effects being already felt now in southern Satkhira (Islam et al., 2019). The Satkhira District has over 2 million inhabitants and its population relies mainly on agriculture and pisciculture, the main exports from the district being shrimp, paddy, and jute.

Satkhira district is interlaced by rivers and waterways that bring fresh, fertile silty water to the floodplain, but which also in the southernmost areas channel salty tidal and sea surge water upstream. Riverine flooding in the deltaic floodplain area is a natural phenomenon and supports the intensive agriculture that is based on the fertile silt brought by the rivers and spread by flooding to the paddy fields. Although the heavy damages to houses and crops caused by sudden flooding and waterlogging are partially caused by extensive embankments and insufficient water drainage (Fenton, Paavola, & Tallontire, 2017), glacier melt and changes in rainfall patterns, in particular increasingly heavy rains during the monsoon period, are likely to result in even more extensive floods and riverbank erosion in the future.

Other climate change-related threats in the coastal Satkhira include frequent cyclones and storm surges, the latter exacerbated by the sea level rise. Although not as deadly as they used to be, thanks to improved evacuation routines (Sadik et al., 2018), tropical cyclones like Sidr in 2007, Aila in 2009, and Bulbul in 2019[4] cause economic havoc among the Bangladesh's coastal communities as the strong winds and flash floods destroy buildings and crops, and the accompanying storm surges push salty seawater upstream, breaking through the embankments to the surrounding areas, causing not only direct damage but, notably, contaminating the soil for several years (Haldar, Saha, Ahmed, & Islam, 2017; Mallick et al., 2017; Subhani & Ahmad, 2019).

In southern Satkhira, the increasingly worsening conditions for agriculture, the threat of periodic destruction of houses and crops, and fear for life and health can over time cause economic and mental burdens that can be difficult to bear and alleviate, leading to increased voluntary and forced migration to nearby areas and beyond.

Survey design

The survey was conducted in 13 of the 78 administrative unions in Satkhira, covering all seven sub-districts (upazila; Figure 1).[5] The unions were selected based on their attractiveness for migrants due to the existence of relevant job opportunities (e.g. day labor, rickshaw pulling) and limited exposure to waterlogging and soil salinization. The number of respondents in each unit was set proportionally to the unit's total population, which ranged from a little over 8'000 (Kaila) to 113'000 inhabitants (Satkhira City, district capital). The survey targeted long-term residents, defined as persons who had been born in the community or had lived there for at least 20 years or as persons who had lived in the community at least five years in addition to being married to a person born in the community.

The data for the analysis was collected as part of a randomized field experiment. The purpose of the field experiment was to study how a narrative stressing the repeated nature of climate change-related natural hazard events, and the repeated waves of human displacement induced by the events, affect host community members' willingness to accept internal climate migrants. Since the experimental treatment showed no discernible effect on attitude questions, we include both the treatment and control group in the sample analyzed here. The sample hence consists of 633 adults (18 years and over).[6] Similar estimates are obtained when analyzing only the control group, but with an obvious decrease in statistical power (see Supplementary Appendix, SA Tables 4–6 for the results).

[4] Sidr killed at least 4,000 and affected nearly 9 million people, causing USD 2.3 billion in damages (International Federation of Red Cross and Red Crescent Societies, 2008). Aila killed less than 200 people, but affected nearly 5 million people and damaged nearly 150,000 hectares of cropland, and in Gabura Union, for example, it damaged every house (UNDP, 2010; Walton-Ellery, 2009). Bulbul affected over 700,000 people, of which almost 250,000 were living in the Satkhira District, over 100,000 houses, and nearly 120,000 hectares of crops, and caused the evacuation of over 2 million people (International Federation of Red Cross and Red Crescent Societies, 2019).

[5] Bangladesh is divided into eight divisions. These are divided into districts (zila) and further into sub-districts (upazila). In rural areas, the subdistricts are further subdivided into unions.

6 Another field experiment, conducted simultaneously by the same research team, sought to understand how narratives attributing the responsibility for climate migrants to other actors and forces affect the host community members' attitudes toward migrants. The results are detailed in Kolstad et al., (2019). The two field experiments share the same control group while the attribution experiment included three additional treatment groups of a size of approximately 310 respondents each.

The respondents were interviewed face-to-face by trained enumerators using the local language (Bengali).[7] A team of four to six enumerators conducted the interviews in each union, starting from the union head office building and following pre-determined, evenly spaced lines on the map (Figure 1).[8] Starting from the sixth dwelling building from the union office building, the enumerators interviewed a member of one household in every sixth building with habitation, respecting the union borders. In the case of reaching the union border, the enumerators were instructed to turn left and follow the perimeter of the union border until about halfway to the next enumerator line, and then to turn back inwards toward the union office building. Each enumerator alternated in interviewing female and male respondents from one interview to the next one.

After determining whether the respondent was eligible (i.e., a long-term resident of the community), the first part of the survey focused on the respondent's background and household characteristics. These questions were followed by questions on the respondent's level of climate change knowledge and their personality traits. The topic of climate change and climate migration was then introduced by showing the respondent a video on the tablet used for data collection.[9] After watching the video, the respondent was asked questions related to the video, his/her attitudes toward migrants and climate change, as well as questions pertaining to respondents' values and worldviews and economic conditions in the community.

Data

Summary statistics, survey questions, answer alternatives, and variable definitions are provided in Appendix 1.

Dependent variables

Our first outcome variable (Attitude I) is based on the respondent's level of agreement with the statement: "It is a good thing that new migrants settle permanently in my home community." The responses were measured on a 5-point Likert scale ranging from 1 (Disagree very strongly) to 5 (Agree very strongly). Our second outcome variable (Attitude II), is a starker version of the first one, conditioning the future migration on a large present migration: "Even if our community were to receive many new migrants this year, I would still think that it is a good thing that new migrants settle here in the future", the response alternatives being the same as for the first outcome variable. Although our outcome questions do not explicitly evoke the term 'internal climate migrant', the framing was evident to the respondent from the video shown to the respondent right before the outcome questions were asked.

The distributions of responses to the two questions suggest that few respondents are indifferent about migration, but there are also relatively few holding extreme positions. Perhaps not surprisingly, people tend to agree more with the general statement than with the conditional one, the mean score declining from 3.2 to 2.9. The two scores are correlated at the 0.73 level. 36% of our respondents disagreed with the first outcome statement (Attitude I) while 47% disagreed with the second statement (Attitude II), the share of those disagreeing very strongly with the statement almost doubling (Figure 2). While 58% agreed with the first statement, it dropped to 46% in the case of the stronger version. In both cases, a mere 5% and 7% chose to remain indifferent i.e., neither disagreeing nor agreeing (score 3) with the statements, respectively.

[7] Bengali is the predominant and official language in Bangladesh. 98% of Bangladeshi people are of the same ethnic group and almost 90% are Muslims, Islam being the state religion.

[8] The approximate location for the last interview was recorded each day. To preserve anonymity, we did not record the interview locations.

[9] As part of the field experiment, two different videos were shown to the treatment and control group. Both videos included the same general introduction to climate change and its likely consequences, particularly in terms of population displacements. The treatment group video additionally contained a segment stressing the repeated nature of climate-related events and subsequent migration. We found no impact from the treatment on attitudes toward climate migrants and including a treatment dummy variable in our estimations had no impact on results reported in this article (these results can be obtained from the authors).

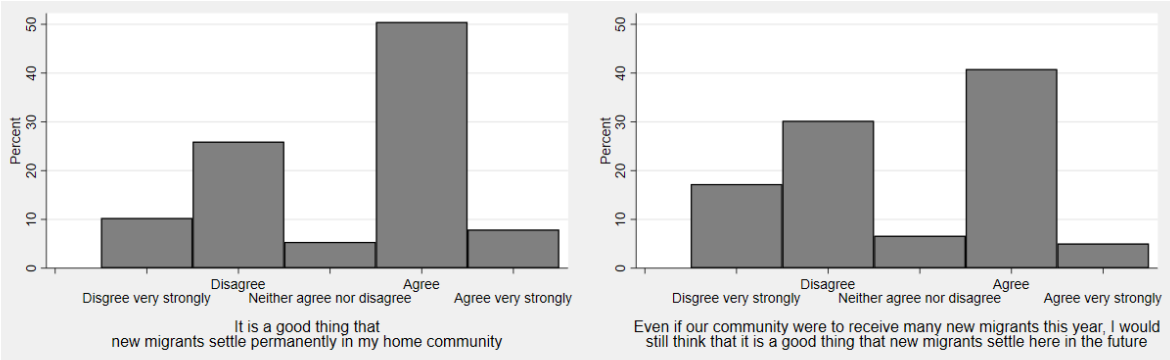

Figure 2. Agreement with the outcome statements, Attitude I and II.

Independent variables

We measure the respondent's spatial proximity to climate-related hazards in three ways. Our first variable measures the distance from the union head office to the closest occurrence of mangrove forest as an approximation for the distance to the most exposed coastal areas due to strong winds, cyclones, storm surges, sea level rise, and increasing soil salinization (Figure 3). To include the proximity to low-lying areas (i.e., the flood-prone areas), we generated a second variable that measures the mean elevation in the union and a third variable for mean elevation within a 20 km buffer zone around the union (excluding the union itself and the area extending to India) using the Digital Elevation Model (DEM) with a spatial resolution of approximately 30 meters on the equator (Figure 3) (Jarvis, Reuter, Nelson, & Guevara, 2008).

On average, the union head offices are located 33 kilometers from mangrove forest, the distance ranging from 9 to 56 kilometers. The mean union elevation ranges from 2 to 7 meters and the mean elevation for the surrounding area from 3 to 6 meters. As the three measures are highly correlated, but still partially measuring different aspects of distance to the most exposed areas, they were combined into one index, distance to exposure, using factor analysis.

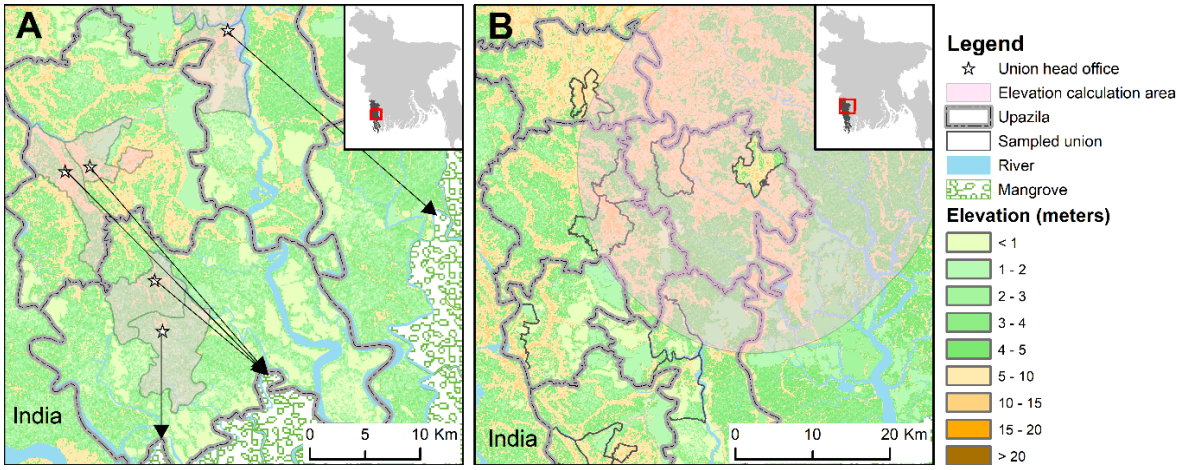

Figure 3. Spatial proximity to exposed areas. (A) Distance to the coast (arrows) and elevation in the sampled unions. (B) Elevation of the surrounding area, using a 20km buffer around the union (buffer shown for one union). Source for the elevation data: Jarvis et al. (2008).

We have several variables at our disposal as proxies for attitudinal proximity. We measure the degree the respondent trusts other people using the respondent's agreement with the statement "I see myself as someone who is generally trusting" (trust; 5-point Likert scale). Attribution bias is measured using the respondent's perception on to what degree s/he thinks it is people's own fault if they repeatedly experience bad luck (repeated bad luck own fault, 5-point Likert scale). Similarly, we include a dummy variable that measures the respondent's attitudes toward persons being accountable for their mistakes (accountability), the variable taking the value of 1 if the respondent shows a relatively strong preference for the accountability principle. We also asked a question that captures the strength of the respondent's religious beliefs (religious attitudes; 5-point Likert scale). Finally, perceptions on community identity, a proxy for in-group bias, are gauged via a question on

similarities between the respondent and their fellow community members compared to migrants (host community identification; 5-point Likert scale).

In general, people tend to trust other people (92% trust others at least to some extent), but think that those who repeatedly face bad luck should bear responsibility for it (71% agreeing with the statement that "If people have bad luck once, it is not their fault, but if they have bad luck repeatedly, it is their fault"). 64% agree with the statement "When people are displaced by climate change, that is the will of God, and there is little we can do" and 43% of the respondents would prefer the responsible person to receive a 1000 Taka (USD 12) fine for damage to a machine rather than fining two persons 100 Taka each (the culpable and one innocent), even when it means a reduction of 800 Taka in total fine. Finally, 80% of the respondents agree that they have more in common with the members of their community than with migrants.

As measures for experiential proximity, we include the respondent's own household's migration history (household migration history) and whether s/he has relatives living in an exposed area (extended family exposure). Nearly one-fourth of the households had moved from one union to another one in the past, the maximum number of such moves being 10. Almost 40% of the respondents had extended family members living in areas that were very exposed to climate change.

To measure social proximity, we include measures for the respondent's education level, occupation, and household wealth. Education is measured on a scale from no completed formal education (0) to completed tertiary level (4). In our sample, 23% have not completed primary schooling and 22% have completed upper secondary schooling or more. On average, our respondents have higher educational attainment than people living in the aforementioned coastal migrant catchment areas surveyed in Wiig et al. (2020); in these areas, 39% have no completed schooling and only 5% have completed upper secondary schooling or more.

Our household asset index is based on factor analysis of the ownership of the following assets: house, bicycle, radio, TV, motor vehicle or motorcycle, mobile phone, computer, and number of rooms occupied by the household (household assets). Again, on average, our respondents are wealthier than people living in the coastal migrant catchment areas: the shares are 20 percentage points higher for land ownership, 50 for bicycle, over 60 for TV, and 16 for motorbike ownership while also the number of rooms occupied by the household is higher (2.4 compared to 1.9).

In the coastal migrant catchment areas, the most common occupations are farming (inclusive fish and shrimp production; 10%), farm or fish/shrimp production laborer (9%), gathering, foraging, and hunting (9%), self-employment with no non-family employees (9%), and day laborers (15%). Therefore, we construct a dummy variable for those in our sample with the same occupations (the two studies use the same occupational categories; occupation). In total, 32% of our sample falls within these occupational categories (due to a high number of females included in the studies, over 40% of the respondents were housewives).

Control variables

As controls, we include gender and age, which have been associated with attitudes toward migrants and climate change in previous studies. Our average respondent is 41-years old and is as likely to be a male as a female. To control for the impact of community resources on attitudes, we include (self-reported) ease of getting a job (ease of getting job) and perceived resources available in the community to accommodate migrants (community resources). Both responses are measured using the 5-point Likert scale. People tend to disagree with the statement that it is easy for someone like him/her to get a job in the community (87%) and 46% agree and 40 % disagree with the statement that their community can hardly afford to receive new migrants.

Empirical strategy

We apply our conceptual framework on how host-migrant proximities influence host community members' attitudes toward internal climate migrants to our survey data from Satkhira District, Bangladesh, by estimating the following model:

$$y_i = \alpha + \beta_{SP} SP_j + \beta_A A_i + \beta_E E_i + \beta_S S_i + \sigma X_i + \varepsilon_i \quad (1)$$

where our outcome variable y is the respondent's stated attitude toward new internal climate migrants coming to their community. Our data is mostly at individual level i with the exception of our measure for spatial proximity SP which is at union level j. Our interest is in all coefficients β that capture the effects of our independent variables measuring spatial, attitudinal A, experiential E, and social S proximity. The vector X includes our control variables. We use OLS regressions, as it is straight forward to interpret the results, and report robust standard errors clustered on enumerator-union. As a robustness check, we also run ordered logit estimations. Stata 15.1 was used in all analyses. Replication data and instructions will be made available through Mendeley Data upon publication of the article.

4. Results

Tables 2 and 3 show the main results using OLS regressions and Appendix 2 robustness checks. The Supplementary Appendix provides the order logit results for all estimations (SA Tables 1–3) and results of the analysis using only the control group as the sample (SA Tables 4–6).

Table 2 shows the main results for both dependent variables, attitude toward new internal climate migrants (Attitude I; Models 1–3) and its stronger variant which conditions the statement on the community receiving many new migrants in the current year (Attitude II; Models 4–6). Models 1 and 4 include the variables included in our conceptual framework and controls for age and gender. To these, in Models 2 and 5 we add the controls for the local economic conditions and in Models 3 and 6 the variable for ingroup identity (home community identification). The latter variable is not related to our outcome variables, its impact on estimated coefficients for other variables is small, and its inclusion does not increase the overall performance of the model (measured as R-squared) while at the same time its inclusion decreases the sample size by over 70 observations. Therefore, we use Models 2 and 5 as our base models in the further analysis (Table 3) and robustness checks.

Table 2. Attitudes toward internal climate migrants

	(1)	(2)	(3)	(4)	(5)	(6)
	Attitude I			Attitude II		
Distance to exposure (index)	-0.209***	-0.211***	-0.188**	-0.474***	-0.471***	-0.482***
	(-2.71)	(-2.99)	(-2.43)	(-5.77)	(-5.62)	(-5.45)
	0.009	0.004	0.019	0.000	0.000	0.000
Trust	0.370***	0.229**	0.119	0.429***	0.328***	0.292***
	(3.15)	(2.66)	(1.45)	(4.52)	(4.17)	(3.92)
	0.003	0.010	0.153	0.000	0.000	0.000
Repeated bad luck own fault	-0.095*	-0.054	-0.074*	-0.106**	-0.077	-0.070
	(-1.85)	(-1.36)	(-1.89)	(-2.15)	(-1.62)	(-1.42)
	0.070	0.178	0.065	0.036	0.111	0.161
Religious attitudes	0.298***	0.280***	0.241***	0.214***	0.201***	0.186***
	(4.51)	(5.25)	(4.68)	(3.71)	(4.02)	(3.81)
	0.000	0.000	0.000	0.001	0.000	0.000
Accountability	-0.306**	-0.240**	-0.262**	-0.308**	-0.249*	-0.230
	(-2.43)	(-2.14)	(-2.24)	(-2.28)	(-1.96)	(-1.59)
	0.019	0.037	0.029	0.027	0.055	0.119
Household migration history	-0.042	-0.039	-0.038	-0.124	-0.119*	-0.108
	(-0.35)	(-0.41)	(-0.40)	(-1.45)	(-1.76)	(-1.63)
	0.727	0.684	0.692	0.154	0.085	0.110
Extended family exposure	0.040	-0.054	-0.046	-0.193*	-0.257**	-0.265**
	(0.37)	(-0.61)	(-0.51)	(-2.00)	(-2.50)	(-2.36)
	0.711	0.542	0.613	0.051	0.016	0.023
Education	-0.105*	-0.109***	-0.085*	-0.041	-0.046	-0.024
	(-1.93)	(-2.81)	(-1.84)	(-0.63)	(-0.81)	(-0.40)
	0.059	0.007	0.071	0.534	0.419	0.691
Household assets (index)	-0.140**	-0.135**	-0.161***	-0.132**	-0.125**	-0.124**
	(-2.39)	(-2.50)	(-2.68)	(-2.53)	(-2.55)	(-2.17)
	0.021	0.016	0.010	0.014	0.014	0.035
Occupation	-0.146	-0.098	-0.046	0.013	0.055	0.108
	(-1.10)	(-0.83)	(-0.43)	(0.13)	(0.53)	(1.14)
	0.277	0.410	0.672	0.901	0.596	0.260
Age	-0.000	-0.001	0.001	0.002	0.002	0.004
	(-0.13)	(-0.13)	(0.12)	(0.60)	(0.48)	(0.88)
	0.901	0.894	0.908	0.552	0.631	0.382
Male	-0.069	-0.105	-0.153*	-0.110	-0.123	-0.196**
	(-0.67)	(-1.13)	(-1.76)	(-1.21)	(-1.39)	(-2.45)
	0.505	0.264	0.085	0.232	0.171	0.018
Community resources		-0.382***	-0.426***		-0.281***	-0.280***
		(-6.08)	(-7.04)		(-3.93)	(-3.71)
		0.000	0.000		0.000	0.001
Ease of getting job		0.096*	0.118**		0.044	0.090
		(1.91)	(2.02)		(0.76)	(1.29)
		0.062	0.049		0.450	0.204
Host community identification			0.038			0.000
			(0.50)			(0.00)
			0.617			0.998
Observations	625	620	546	625	620	546
Clusters	52	52	50	52	52	50
R-squared	0.250	0.356	0.356	0.324	0.374	0.375

OLS estimations with robust t-statistics in parentheses, clustering in enumerator-union
*** p<0.01, ** p<0.05, * p<0.1

Table 3. Attitudes toward internal climate migrants, additional analysis

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Attitude I				Attitude II			
Distance to exposure (index)				-0.209***				-0.469***
				(-3.01)				(-5.63)
				0.004				0.000
Trust	0.223**	0.242***	0.231**	0.233***	0.308***	0.362***	0.331***	0.333***
	(2.62)	(2.79)	(2.64)	(2.74)	(4.29)	(4.30)	(4.22)	(4.21)
	0.012	0.007	0.011	0.009	0.000	0.000	0.000	0.000
Repeated bad luck own fault	-0.056	-0.055	-0.051	-0.056	-0.083*	-0.080	-0.072	-0.080
	(-1.43)	(-1.36)	(-1.29)	(-1.41)	(-1.79)	(-1.57)	(-1.45)	(-1.67)
	0.159	0.180	0.201	0.165	0.080	0.124	0.153	0.102
Religious attitudes	0.282***	0.271***	0.278***	0.281***	0.211***	0.178***	0.199***	0.202***
	(5.30)	(5.16)	(5.12)	(5.24)	(4.49)	(3.57)	(3.72)	(4.03)
	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.000
Accountability	-0.220*	-0.271**	-0.250**	-0.232**	-0.189	-0.326**	-0.266*	-0.234*
	(-1.91)	(-2.61)	(-2.14)	(-2.04)	(-1.57)	(-2.51)	(-1.92)	(-1.85)
	0.062	0.012	0.038	0.046	0.122	0.015	0.060	0.070
Household migration history	-0.035	-0.050	-0.045	-0.037	-0.102	-0.150**	-0.130*	-0.117*
	(-0.37)	(-0.50)	(-0.46)	(-0.38)	(-1.57)	(-2.02)	(-1.82)	(-1.71)
	0.716	0.617	0.645	0.702	0.123	0.048	0.074	0.093
Extended family exposure	-0.051	-0.060	-0.039	-0.059	-0.256**	-0.260**	-0.227**	-0.267**
	(-0.59)	(-0.67)	(-0.45)	(-0.67)	(-2.63)	(-2.32)	(-2.17)	(-2.55)
	0.560	0.505	0.657	0.506	0.011	0.025	0.035	0.014
Education	-0.105**	-0.113***	-0.121***		-0.030	-0.063	-0.070	
	(-2.67)	(-2.96)	(-3.16)		(-0.55)	(-1.07)	(-1.22)	
	0.010	0.005	0.003		0.582	0.288	0.227	
Household assets (index)	-0.136**	-0.132**	-0.142**	-0.130**	-0.125**	-0.125**	-0.140***	-0.117**
	(-2.55)	(-2.43)	(-2.67)	(-2.34)	(-2.62)	(-2.41)	(-2.90)	(-2.34)
	0.014	0.019	0.010	0.023	0.012	0.020	0.005	0.023
Occupation	-0.097	-0.086	-0.107	-0.086	0.055	0.081	0.033	0.074
	(-0.83)	(-0.73)	(-0.89)	(-0.72)	(0.54)	(0.77)	(0.30)	(0.71)
	0.413	0.468	0.377	0.473	0.589	0.446	0.763	0.481
Age	-0.000	-0.001	-0.001	-0.001	0.003	0.001	0.001	0.002
	(-0.07)	(-0.19)	(-0.30)	(-0.17)	(0.75)	(0.25)	(0.15)	(0.41)
	0.943	0.854	0.763	0.863	0.458	0.807	0.884	0.684
Male	-0.115	-0.105	-0.088	-0.116	-0.152*	-0.117	-0.086	-0.139
	(-1.23)	(-1.13)	(-0.95)	(-1.25)	(-1.73)	(-1.24)	(-1.00)	(-1.59)
	0.223	0.262	0.348	0.219	0.090	0.222	0.323	0.118
Community resources	-0.377***	-0.392***	-0.381***	-0.384***	-0.265***	-0.304***	-0.278***	-0.284***
	(-5.91)	(-6.29)	(-5.91)	(-6.21)	(-3.84)	(-4.15)	(-3.77)	(-4.03)
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ease of getting job	0.095*	0.084	0.101**	0.095*	0.044	0.015	0.058	0.044
	(1.91)	(1.60)	(2.05)	(1.93)	(0.82)	(0.23)	(1.05)	(0.77)
	0.061	0.116	0.045	0.059	0.418	0.821	0.300	0.446
Distance to mangrove (km)	-0.017***				-0.040***			
	(-3.11)				(-6.53)			
	0.003				0.000			
Elevation, union (m)		-0.131***				-0.259***		
		(-2.82)				(-4.37)		
		0.007				0.000		
Elevation, around union (m)			-0.196**				-0.452***	
			(-2.66)				(-5.25)	
			0.011				0.000	
No education				0.398**				0.267
				(2.46)				(1.33)
				0.017				0.190
Primary education				0.327**				0.250
				(2.02)				(1.46)
				0.048				0.151
Lower secondary education				0.112				0.076
				(0.65)				(0.51)
				0.518				0.613
Tertiary education				0.060				0.225
				(0.40)				(1.55)
				0.693				0.127
Observations	620	620	620	620	620	620	620	620
Clusters	52	52	52	52	52	52	52	52
R-squared	0.357	0.352	0.351	0.358	0.399	0.334	0.356	0.378

OLS estimations with robust t-statistics in parentheses, clustering in enumerator-union
*** p<0.01, ** p<0.05, * p<0.1

Spatial proximity

Physical proximity is related to attitudes: those who live in areas further from the coast and on more elevated ground are less welcoming to migrants. Moreover, the coefficients are considerably larger for Attitude II, the change in the coefficients being statistically highly significant, suggesting

that the proximity to the most exposed areas is even more salient when people consider welcoming migrants in the hypothetical case of already receiving substantial numbers of migrants. When the different measures for proximity to most hazard-prone areas are included separately (Table 3, Models 1–3 and 5–7), all three measures predict attitudes toward migrants, with higher statistical significance levels and larger impact sizes on Attitude II.

The effect sizes are considerable: For each ten kilometers one moves away from the coastline, the attitudes toward migrants increase in negativity by 0.17 points for Attitude I (Table 3, Model 1) and by 0.4 points for Attitude II (Table 3, Model 5). This means that, moving from the union located closest to the coast (9 km) to the union located furthest (56 km), we would expect the attitudes go from the score 3.8 to 2.0 on the Likert scale for Attitude II, keeping all the other variables at their means. Elevation has an equally strong impact on attitudes: A one-meter increase in the elevation of the surrounding area (incidentally, one meter equals one standard deviation for this variable) predicts a decrease of 0.2 and 0.45 in the scores for Attitude I and II, respectively.

Attitudinal proximity

Of our measures for attitudinal proximity to fellow citizens, we find that those who generally are trusting are more likely to welcome migrants. There is some indication that the effect size for trust could be larger for Attitude II, but the difference is not statistically significant across all specifications. Respondents with strong religious attitudes are also more positive toward migrants. People who think that people should be held accountable for their own errors clearly have more negative attitudes toward climate migrants (accountability), and there is some indication that those who believe that repeated bad luck is one's own fault are more skeptical toward migrants. As noted earlier, host community identification is not related to migration attitudes.

When it comes to effect sizes, a one standard deviation (0.6) increase in trust increases the score for Attitude II by 0.2 (Table 2, Model 5) and a one standard deviation (1.2) increase in religious attitudes increases the score for Attitude II by 0.25. Accountability (a dummy) – i.e. holding others strongly accountable for their mistakes – decreases the score for Attitude II by 0.25.

Experiential proximity

Contrary to expectations discussed in the conceptual framework section, shared experiences or vulnerabilities with migrants do not seem to generate more positive attitudes toward them. There is in fact some evidence that those who have relatives living in highly exposed areas (extended family exposure) are less welcoming to new migrants when it comes to Attitude II. Coefficients for household migration history have also a negative sign throughout the estimations, but in most estimations the coefficients are not significant at the conventional level (and never when ordered logit estimations are used; see Supplementary Appendix).

Social proximity

The results for household assets show that respondents from poorer households are consistently more welcoming, and those from wealthier households less favorably inclined, toward internal climate migrants. Less-educated respondents are also more positive toward climate migrants, although this is only true for Attitude I. For Attitude II we find no impact of education. Adding the different educational categories separately in the estimations (Table 3, Models 4 and 8), using completed upper secondary education as the reference category, reveals that those without formal education and those who have only completed primary school are clearly more positive toward climate migrants than the others. The differences for the three higher education categories are not statistically significantly different from each other. Our dummy for people with occupations prevalent in the potential migrant sending areas is not significantly related to our dependent variables.

Control variables and further robustness checks

Age is not related to attitudes toward climate migrants, nor do we find any evidence for a non-linear relationship (results not shown). The coefficient for gender (male) is consistently negative, but it fails in most estimations to reach the conventional significance level. Those who think that their community can hardly afford to receive new migrants (community resources) are

considerably less welcoming to climate migrants. Those who find it easy for someone like them to get a job in the community tend to be more positive about welcoming migrants, although this effect dissipates for Attitude II.

Appendix 2 shows robustness analysis when adding the control for treatment video status (Models 1 and 6), previous knowledge on climate change (Models 2 and 7), belief of typical migrants' level of wealth (Models 3 and 8), and believed number of future migrants (Models 4 and 9). Models 5 and 10 include further characteristics of the respondent (whether the household owns land, respondent's residency history in the community, and respondent's status in the household).[10] Inclusion of these variables has no substantial impacts on the size or significance levels of the other variables and none of them predict our outcome variables.

5. Discussion

Drawing on existing literature on perceptions of immigration, climate change, and natural hazards, we developed a conceptual framework centered on multi-dimensional migrant-host proximities as key aspects in shaping peoples' attitudes toward internal climate migrants. We tested four distinct, yet related dimensions of proximity using unique survey data from southwest coastal Bangladesh. Taken together, the study provides evidence that host–migrant proximities are important in understanding attitudes toward internal climate migrants in a developing country like Bangladesh. While results for our control variables suggest that perceived capacity to receive migrants matters for attitudes toward them,[11] results for our proximity variables underscore that these attitudes are not just a matter of capacities, they are also heavily relational, positional, and complex.

In our study, likely sending and receiving areas are spatially very close to each other, at maximum 60 km apart. The fact that there seems to be an impact of distance even over such short distances implies that one's own experience, or the threat of being directly affected, of a hazard can be salient in forming attitudes toward internal climate migrants. This result is in line with extant studies, conducted mainly in developed countries showing that one's own experience and short spatial distance to being impacted by climate change or a weather related hazard event tend to be related to concern over climate change, its consequences, and support for climate action (Bhattachanu et al., 2019; Brody et al., 2008; A Spence et al., 2011; Verlynde et al., 2019).

Similarly, our findings on values and worldviews are mostly in line with previous studies on perceptions of climate change and immigrants: those who see people more as makers of their own fate or hold people highly accountable for their actions, tend to be more skeptical toward climate migrants. In one respect, however, our results are perhaps surprising: we do not find evidence that stronger ingroup identity predicts more hostile attitudes toward migrants. One plausible explanation for this result is that the society we studied is very homogenous – the potential migrants and host community members speak the same language and have the same ethnicity and religion – and that we focused on short-distance migration, where sociocultural differences between the host community members and the migrants may be smaller than across larger geographic distances. Regarding our measure for religious attitudes, we found that those who thought that "when people are displaced by climate change, that is the will of God, and there is little we can do", were more likely to welcome new migrants. It is possible that this is related to the strength of people's religious beliefs and/or related humanistic values, but it is equally possible that the variable captures the effect of people feeling more empathy toward people who they believe cannot be blamed for their misfortune (Harell et al., 2017) or the effect of religious people perhaps being more inclined to accept other people of the same religious group (Bansak, Hainmueller, & Hangartner, 2016).

Contrary to expectations, we found little evidence that experiential proximity to migrants, measured as shared experiences of migration and extended family exposure, was positively related to attitudes toward migrants. We even found evidence that shared experience to some degree predicted more negative attitudes toward climate migrants, as having extended family

[10] See the summary statistics table for details on these measures (Appendix 1).

[11] These results are in line with recent studies conducted in Morocco (Buehler & Han, 2019) and South Africa (Harris et al., 2018).

members living in highly exposed areas was consistently related to more negative views. One possible explanation for this is that people in the studied region tend to rely on their extended family when migrating (Boas, 2019). Therefore, it is possible that the respondents with relatives living in exposed areas perhaps were wary of being stuck with the responsibility of helping their extended family members while also at the same time being asked to accommodate non-family migrants in their community. The fact that we find significant results for this variable only for the second, more strongly phrased attitudinal outcome variable, supports such an interpretation.

In contrast to many previous studies on migration and climate change perceptions (Chang & Kang, 2018; Hainmueller & Hiscox, 2007; Mayda, 2006; Poortinga et al., 2019; Rustenbach, 2010), we found that the less wealthy and the less educated were considerably more positive about receiving internal climate migrants. As noted, this finding suggests the positional nature of attitudes toward migrants, with attitudes becoming more negative as socio-economic or class differences increase. In general, we also see little evidence that labor market competition has a strong influence on attitudes in our case; respondents with occupations similar to those prevalent in migrant sending areas were no more critical of migrants than those in other occupations.

6. Conclusion

This article is one of the first studies examining host community attitudes toward internal climate migrants in developing countries. The study was motivated by the lack of research on the host communities that will be on the front lines in receiving substantial numbers of internal climate migrants in the coming decades, should the pessimistic predictions of hundreds of millions of people being driven from their homes and lands materialize (Boas et al., 2019). Understanding how the receiving communities view migrants and how those views are shaped is crucial in designing policies that seek to lessen tensions between the host communities and the displaced and to improve resettlement outcomes.

The article posits that psychological distance to internal climate migrants is important in determining perceptions of them, conceptually dividing the different dimensions of distance into spatial, attitudinal, experiential, and social proximity. In particular, we provide evidence that spatial distance to highly exposed areas, views related to trust, attribution bias and religion, and social proximity in terms of education level and wealth are salient for host community members' attitudes toward migrants moving over short distances due to climate change-related environmental changes in southwest Bangladesh.

This study is not without limitations. The study is unique in its focus on host communities in a highly climate-exposed region, but its external validity should be assessed in further studies. Although the study provides evidence that host–migrant proximity is an important factor in understanding how host community members perceive internal climate migrants, none of the specific findings can be taken as an established result until they have been studied in more depth across different contexts, inclusive of ethnically diverse societies. Basically, are the individual factors identified in this study consequently relevant when other data and/or better-defined variables are used? Related to this, there are likely to be several other factors, falling within the four proposed proximity categories, that can be relevant, but which were not included in this study. When it comes to spatial distance, a shortcoming in this study was the lack of individual distance to the 'threat', it thus being measured at the union level. Future studies should aim at measuring individual distance to highly exposed areas and places. Another import avenue for future research is to investigate how formation of perceptions of internal climate migrants can be influenced (Kolstad et al., 2019).

When it comes to policy implications, the study provides some tentative advice. First, the strong positive impact of spatial proximity on the areas most exposed to impacts of climate change suggest that a more realistic perception of natural hazards, as well as the helplessness of the affected communities, can improve empathy and support toward the displaced. Programs and campaigns focusing on creating awareness concerning the impact of climate change on displacement may thus contribute to improving attitudes toward migrants and create support for resettlement initiatives. Second, appealing to people's humanistic values and limited options faced

by those most adversely affected by climate-related environmental change may also positively impact people's attitudes toward internal climate migrants. Third, portraying the potential migrants as like 'oneself' may help in bridging the psychological distance between the host communities and the displaced.

7. References

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Appendix 1. Summary statistics and variable definitions

Variable	Obs	Mean	St. dev.	Min	Max	Definition / Question and answer alternatives
Attitude I	632	3.2	1.2	1	5	To what extent do you agree with the following statement: It is a good thing that new migrants settle permanently in my home community. 1 Disagree very strongly; 2 Disagree; 3 Neither agree nor disagree; 4 Agree; 5 Agree very strongly
Attitude II	632	2.9	1.3	1	5	To what extent do you agree with the following statement: Even if our community were to receive many new migrants this year, I would still think that it is a good thing that new migrants settle here in the future. Answer alternatives as for Attitude I
Distance to exposure (index)	633	0.0	1.0	-1.7	1.8	Factor analysis: Distance to mangrove forest; Elevation (union); Elevation (around union)
Distance to mangrove (km)	633	33.9	13.1	9.4	56.3	Distance to closest mangrove forest
Elevation, union (m)	633	4.9	1.5	2.0	7.0	Mean elevation of the union, calculated based on DEM.
Elevation, around union (m)	633	4.2	1.0	2.9	6.1	Mean elevation of the area surrounding the union (20km buffer), calculated based on DEM.
Trust	630	4.2	0.6	2	5	How well does the following statement describe your personality: I see myself as someone who is generally trusting. Answer alternatives as for Attitude I
Repeated bad luck own fault	630	3.8	1.0	1	5	To what extent do you agree with the following statement: If people have bad luck once, it is not their fault, but if they have bad luck repeatedly, it is their fault. Answer alternatives as for Attitude I
Religious attitudes	633	3.4	1.2	1	5	To what extent do you agree with the following statement: When people are displaced by climate change, that is the will of God, and there is little we can do. Answer alternatives as for Attitude I
Accountability	633	0.4	0.5	0	1	Imagine two people doing the same job in a factory. One day, one person damages the machine they are working at. The factory manager fines both workers 100 Taka; both the person who broke the machine and the other worker. You can instead decide to give a fine of 1000 Taka to the worker who broke the machine, and no fine to the other worker. If you were to choose between these two options, which one would you choose? 0: Let the first person be fined 100 Taka and the second person be fined 100 Taka. In total they are fined 200 Taka. 1: Let the first person be fined 1000 Taka and the second person nothing. In total they are fined 1000 Taka.
Host community identification	550	3.8	0.9	1	5	To what extent do you agree with the following statement: I have more in common with the members of my community than with migrants that arrive here. Answer alternatives as for Attitude I
Household migration history	633	0.2	0.8	0	10	How many times has your household moved from one union to another?

Extended family exposure	632	0.4	0.5	0	1	Do you have extended family members who currently live in areas very vulnerable to climate change? 0 No; 1 Yes
Education	633	1.5	1.2	0	4	What level of education have you completed? 0 None or other education; 1 Primary; 2 Secondary; 3 Higher secondary; 4 Tertiary
Household assets (index)	632	0.0	1.0	-2.2	4.2	Factor analysis: ownership of house, bicycle, radio, TV, motor vehicle or motorcycle, mobile phone, computer, number of rooms the household occupies.
Occupation	633	0.3	0.5	0	1	Respondents' occupation: Farming or fish/shrimp production on own land, Day laborer, Farm or fish/shrimp production laborer or day laborer, Gathering/foraging/hunting or Self-employed (owns business with no non-family employees)
Age	633	41.0	13.8	18	89	Age in years
Male	633	0.5	0.5	0	1	1 Male; 0 Female
Ease of getting job	631	1.9	0.9	1	5	How easy is it for someone like you to get a job in this community? 1 Very difficult; 2 Difficult; 3 Neither difficult nor easy; 4 Easy; 5 Very easy
Community resources	628	3.1	1.0	1	5	To what extent do you agree with the following statement: Our community can hardly afford to receive new migrants. Answer alternatives as for Attitude I
Video treatment	633	0.5	0.5	0	1	1 Received treatment video; 0 Received placebo video
Climate change knowledge	633	1.3	1.0	0	3	Can you explain what climate change is, or is this something you have not yet had the opportunity to learn about? The enumerator counted how many of the options the respondent mentioned: Buildup of CO2 and other greenhouse gases in the atmosphere that causes climate to change; Increasing temperatures; Changes in rain and seasons / unstable weather; More extreme weather events; Rising sea levels. 0: None; 1: 1 aspect: 2: 2 aspects; 3: 3 or more aspects. [Partially correct answers were counted as correct answers.]
Migrant wealth	576	2.3	0.8	1	5	The typical migrant to my community is likely to be _____? 1 Extremely poor; 2 Poor; 3 Neither poor nor rich; 4 Rich; 5 Extremely rich
Migration size	633	3.8	0.6	2	5	Do you think the number of migrants to this community in 5 years will be _____? 1 much smaller than today; 2 smaller than today; 3 the same as today; 4 larger than today; 5 much larger than today
Household landowner	632	0.8	0.4	0	1	1 Household owns land; 0 No
Born in community	633	0.6	0.5	0	1	1 Yes; 0 No

Residency time	633	33.61	5	89	Time the respondent has lived in the community (years)
Household head	633	0.4	0.5	0	1 1 The respondent is the household head; 0 The respondent is not the household head

Appendix 2. Attitudes toward internal climate migrants, robustness analysis

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Attitude I					Attitude II				
Distance to exposure (index)	-0.211***	-0.212***	-0.176**	-0.207***	-0.214***	-0.471***	-0.469***	-0.467***	-0.458***	-0.467***
	(-2.99)	(-2.95)	(-2.44)	(-2.89)	(-3.00)	(-5.61)	(-5.43)	(-5.28)	(-5.53)	(-5.51)
	0.004	0.005	0.018	0.006	0.004	0.000	0.000	0.000	0.000	0.000
Trust	0.230***	0.229**	0.135	0.224***	0.230**	0.328***	0.328***	0.300***	0.314***	0.322***
	(2.70)	(2.66)	(1.66)	(2.74)	(2.62)	(4.20)	(4.16)	(3.91)	(3.83)	(3.99)
	0.009	0.011	0.103	0.008	0.011	0.000	0.000	0.000	0.000	0.000
Repeated bad luck own fault	-0.055	-0.054	-0.089**	-0.055	-0.051	-0.077	-0.079	-0.089	-0.082*	-0.077
	(-1.37)	(-1.36)	(-2.52)	(-1.43)	(-1.29)	(-1.61)	(-1.64)	(-1.66)	(-1.71)	(-1.57)
	0.176	0.179	0.015	0.158	0.202	0.113	0.107	0.102	0.094	0.123
Religious attitudes	0.280***	0.280***	0.238***	0.279***	0.279***	0.201***	0.202***	0.192***	0.198***	0.204***
	(5.24)	(5.27)	(5.09)	(5.28)	(5.24)	(4.03)	(4.09)	(4.11)	(4.07)	(3.96)
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Accountability	-0.239**	-0.241**	-0.258**	-0.233**	-0.246**	-0.249*	-0.247*	-0.233*	-0.224*	-0.250*
	(-2.14)	(-2.15)	(-2.18)	(-2.04)	(-2.19)	(-1.97)	(-1.93)	(-1.75)	(-1.77)	(-2.00)
	0.038	0.036	0.034	0.047	0.034	0.054	0.059	0.086	0.083	0.050
Household migration history	-0.039	-0.040	-0.030	-0.037	-0.035	-0.120*	-0.118*	-0.112*	-0.113*	-0.111*
	(-0.41)	(-0.41)	(-0.33)	(-0.39)	(-0.37)	(-1.76)	(-1.75)	(-1.77)	(-1.79)	(-1.72)
	0.686	0.684	0.741	0.695	0.714	0.084	0.086	0.084	0.079	0.092
Extended family exposure	-0.054	-0.055	-0.033	-0.045	-0.051	-0.257**	-0.253**	-0.255**	-0.229**	-0.254**
	(-0.62)	(-0.62)	(-0.36)	(-0.51)	(-0.59)	(-2.48)	(-2.43)	(-2.41)	(-2.26)	(-2.53)
	0.538	0.541	0.720	0.611	0.555	0.017	0.019	0.020	0.028	0.014
Education	-0.110***	-0.111***	-0.093**	-0.107***	-0.107***	-0.046	-0.038	-0.039	-0.038	-0.044
	(-2.81)	(-2.85)	(-2.29)	(-2.80)	(-2.72)	(-0.81)	(-0.72)	(-0.65)	(-0.70)	(-0.77)
	0.007	0.006	0.026	0.007	0.009	0.421	0.476	0.519	0.490	0.443
Household assets (index)	-0.136**	-0.135**	-0.146**	-0.132**	-0.130**	-0.125**	-0.124**	-0.104**	-0.118**	-0.125**
	(-2.53)	(-2.50)	(-2.55)	(-2.38)	(-2.22)	(-2.56)	(-2.52)	(-2.10)	(-2.22)	(-2.34)
	0.014	0.016	0.014	0.021	0.031	0.013	0.015	0.041	0.031	0.023
Occupation	-0.096	-0.097	-0.025	-0.101	-0.100	0.055	0.051	0.104	0.046	0.045
	(-0.82)	(-0.83)	(-0.25)	(-0.85)	(-0.86)	(0.52)	(0.49)	(1.10)	(0.45)	(0.46)
	0.419	0.411	0.804	0.401	0.392	0.603	0.623	0.278	0.656	0.650
Age	-0.001	-0.001	-0.000	-0.001	-0.012	0.002	0.002	0.003	0.002	-0.005
	(-0.16)	(-0.14)	(-0.05)	(-0.15)	(-0.88)	(0.49)	(0.51)	(0.67)	(0.44)	(-0.39)
	0.874	0.890	0.960	0.884	0.381	0.628	0.615	0.505	0.665	0.699
Male	-0.104	-0.106	-0.150*	-0.101	-0.133	-0.124	-0.119	-0.162*	-0.111	-0.212
	(-1.13)	(-1.10)	(-1.75)	(-1.06)	(-0.86)	(-1.39)	(-1.31)	(-1.93)	(-1.23)	(-1.41)
	0.265	0.276	0.086	0.295	0.393	0.171	0.197	0.059	0.225	0.166
Community resources	-0.383***	-0.383***	-0.418***	-0.384***	-0.383***	-0.281***	-0.280***	-0.292***	-0.284***	-0.277***
	(-6.07)	(-6.19)	(-6.58)	(-6.03)	(-6.02)	(-3.92)	(-3.96)	(-3.81)	(-3.99)	(-3.88)
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ease of getting job	0.095*	0.096*	0.087	0.093*	0.094*	0.044	0.043	0.061	0.036	0.037
	(1.89)	(1.90)	(1.67)	(1.87)	(1.81)	(0.78)	(0.76)	(0.98)	(0.64)	(0.63)
	0.065	0.064	0.101	0.067	0.076	0.438	0.452	0.330	0.527	0.532
Video treatment	-0.031					0.010				
	(-0.45)					(0.10)				
	0.653					0.921				
Climate change knowledge		0.004					-0.021			
		(0.07)					(-0.40)			
		0.945					0.691			
Migrant wealth			-0.049					0.019		
			(-0.67)					(0.26)		
			0.509					0.799		
Migration size				-0.061					-0.188	
				(-0.49)					(-1.46)	
				0.629					0.151	
Household land owner					-0.036					0.026
					(-0.36)					(0.20)
					0.718					0.844
Born in community					-0.202					-0.039
					(-0.70)					(-0.14)
					0.489					0.893
Residency time					0.011					0.007
					(0.91)					(0.58)
					0.366					0.565
Household head					0.056					0.080
					(0.39)					(0.49)
					0.695					0.624
Observations	620	620	571	620	619	620	620	571	620	619
Clusters	52	52	51	52	52	52	52	51	52	52
R-squared	0.356	0.356	0.342	0.357	0.357	0.374	0.374	0.360	0.380	0.375

OLS estimations with robust t-statistics in parentheses, clustering in enumerator-union

*** p<0.01, ** p<0.05, * p<0.1

Supplementary Appendix (will be made available online)

SA Table 1. Attitudes toward internal climate migrants, ordered logit estimations

	(1)	(2)	(3)	(4)	(5)	(6)
		Attitude I			Attitude II	
Distance to exposure (index)	-0.372**	-0.407***	-0.373**	-0.836***	-0.873***	-0.912***
	(-2.46)	(-2.76)	(-2.19)	(-4.86)	(-4.71)	(-4.60)
	0.014	0.006	0.028	0.000	0.000	0.000
Trust	0.895***	0.686***	0.405**	0.881***	0.731***	0.678***
	(3.43)	(3.18)	(2.08)	(4.07)	(4.15)	(3.81)
	0.001	0.001	0.038	0.000	0.000	0.000
Repeated bad luck own fault	-0.089	-0.024	-0.101	-0.197**	-0.150*	-0.150
	(-0.82)	(-0.25)	(-1.13)	(-2.23)	(-1.68)	(-1.54)
	0.411	0.799	0.260	0.026	0.093	0.122
Religious attitudes	0.622***	0.639***	0.553***	0.449***	0.436***	0.429***
	(4.46)	(5.31)	(4.58)	(3.69)	(4.07)	(3.76)
	0.000	0.000	0.000	0.000	0.000	0.000
Accountability	-0.555**	-0.475**	-0.494*	-0.530**	-0.469*	-0.430
	(-2.32)	(-2.02)	(-1.95)	(-2.05)	(-1.84)	(-1.42)
	0.020	0.043	0.051	0.040	0.066	0.156
Household migration history	-0.123	-0.090	-0.086	-0.188	-0.171	-0.153
	(-0.48)	(-0.46)	(-0.43)	(-0.84)	(-1.05)	(-0.94)
	0.632	0.644	0.665	0.400	0.291	0.348
Extended family exposure	0.087	-0.108	-0.076	-0.302	-0.439**	-0.464**
	(0.45)	(-0.65)	(-0.43)	(-1.63)	(-2.16)	(-2.06)
	0.654	0.513	0.665	0.104	0.030	0.040
Education	-0.218**	-0.236***	-0.172	-0.102	-0.123	-0.068
	(-2.19)	(-2.78)	(-1.64)	(-0.83)	(-1.05)	(-0.55)
	0.028	0.005	0.100	0.408	0.296	0.580
Household assets (index)	-0.222*	-0.213*	-0.286**	-0.225**	-0.215**	-0.234**
	(-1.96)	(-1.86)	(-2.20)	(-2.34)	(-2.26)	(-2.07)
	0.050	0.062	0.028	0.019	0.024	0.038
Occupation	-0.280	-0.174	-0.096	-0.002	0.136	0.203
	(-1.13)	(-0.69)	(-0.39)	(-0.01)	(0.71)	(1.09)
	0.260	0.490	0.693	0.991	0.478	0.277
Age	-0.001	-0.002	0.001	0.004	0.003	0.008
	(-0.13)	(-0.20)	(0.10)	(0.46)	(0.36)	(0.92)
	0.898	0.839	0.923	0.646	0.717	0.359
Male	-0.118	-0.216	-0.295	-0.154	-0.226	-0.327**
	(-0.58)	(-1.03)	(-1.40)	(-0.90)	(-1.34)	(-2.10)
	0.564	0.302	0.161	0.366	0.182	0.035
Community resources		-0.752***	-0.866***		-0.566***	-0.574***
		(-5.28)	(-6.18)		(-3.81)	(-3.63)
		0.000	0.000		0.000	0.000
Ease of getting job		0.195*	0.233*		0.089	0.205
		(1.75)	(1.73)		(0.74)	(1.39)
		0.080	0.083		0.461	0.164
Host community identification			0.152			0.064
			(0.92)			(0.33)
			0.355			0.738
Observations	625	620	546	625	620	546
Clusters	52	52	50	52	52	50
R-squared	0.12	0.17	0.17	0.14	0.17	0.18

Ordered logit estimations with robust t-statistics in parentheses, clustering in enumerator-union
*** p<0.01, ** p<0.05, * p<0.1

SA Table 2. Attitudes toward internal climate migrants, ordered logit estimations, additional analysis

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Attitude I				Attitude II			
Distance to exposure (index)				-0.403***				-0.876***
				(-2.77)				(-4.72)
				0.006				0.000
Trust	0.674***	0.704***	0.693***	0.700***	0.709***	0.774***	0.731***	0.745***
	(3.15)	(3.22)	(3.16)	(3.21)	(4.19)	(4.27)	(4.17)	(4.20)
	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000
Repeated bad luck own fault	-0.028	-0.027	-0.020	-0.026	-0.163*	-0.139	-0.136	-0.152*
	(-0.31)	(-0.28)	(-0.21)	(-0.28)	(-1.86)	(-1.52)	(-1.53)	(-1.71)
	0.758	0.778	0.835	0.780	0.062	0.128	0.127	0.087
Religious attitudes	0.648***	0.621***	0.627***	0.643***	0.479***	0.374***	0.419***	0.440***
	(5.24)	(5.33)	(5.19)	(5.37)	(4.49)	(3.71)	(3.80)	(4.14)
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Accountability	-0.432*	-0.540**	-0.491**	-0.455*	-0.342	-0.619**	-0.485*	-0.441*
	(-1.80)	(-2.45)	(-2.01)	(-1.92)	(-1.38)	(-2.42)	(-1.80)	(-1.74)
	0.072	0.014	0.045	0.055	0.168	0.016	0.071	0.082
Household migration history	-0.077	-0.115	-0.104	-0.080	-0.145	-0.218	-0.190	-0.168
	(-0.40)	(-0.56)	(-0.54)	(-0.40)	(-0.92)	(-1.22)	(-1.13)	(-1.03)
	0.688	0.575	0.592	0.688	0.357	0.222	0.256	0.302
Extended family exposure	-0.107	-0.113	-0.075	-0.116	-0.451**	-0.422**	-0.377*	-0.456**
	(-0.66)	(-0.68)	(-0.45)	(-0.70)	(-2.29)	(-1.99)	(-1.87)	(-2.22)
	0.509	0.499	0.650	0.487	0.022	0.046	0.062	0.026
Education	-0.226***	-0.243***	-0.260***		-0.087	-0.151	-0.167	
	(-2.63)	(-2.93)	(-3.17)		(-0.76)	(-1.29)	(-1.44)	
	0.009	0.003	0.002		0.446	0.195	0.151	
Household assets (index)	-0.215*	-0.207*	-0.227**	-0.208*	-0.221**	-0.213**	-0.242***	-0.204**
	(-1.90)	(-1.80)	(-2.01)	(-1.79)	(-2.33)	(-2.22)	(-2.59)	(-2.13)
	0.058	0.072	0.044	0.074	0.020	0.026	0.009	0.033
Occupation	-0.172	-0.146	-0.198	-0.149	0.125	0.214	0.076	0.154
	(-0.68)	(-0.59)	(-0.76)	(-0.59)	(0.65)	(1.11)	(0.38)	(0.80)
	0.497	0.558	0.445	0.555	0.513	0.268	0.704	0.426
Age	-0.001	-0.003	-0.003	-0.002	0.005	-0.000	0.001	0.002
	(-0.12)	(-0.31)	(-0.35)	(-0.27)	(0.63)	(-0.01)	(0.07)	(0.28)
	0.905	0.759	0.724	0.786	0.526	0.996	0.944	0.778
Male	-0.239	-0.214	-0.181	-0.238	-0.286*	-0.204	-0.158	-0.243
	(-1.13)	(-1.03)	(-0.86)	(-1.15)	(-1.66)	(-1.17)	(-0.98)	(-1.43)
	0.257	0.304	0.389	0.250	0.097	0.242	0.328	0.153
Community resources	-0.739***	-0.775***	-0.744***	-0.754***	-0.547***	-0.591***	-0.549***	-0.572***
	(-5.15)	(-5.46)	(-5.08)	(-5.40)	(-3.72)	(-4.07)	(-3.71)	(-3.89)
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ease of getting job	0.194*	0.174	0.203*	0.198*	0.100	0.031	0.109	0.095
	(1.77)	(1.48)	(1.86)	(1.80)	(0.87)	(0.24)	(0.96)	(0.79)
	0.076	0.138	0.063	0.072	0.387	0.809	0.338	0.429
Distance to mangrove (km)	-0.033***				-0.077***			
	(-2.83)				(-5.24)			
	0.005				0.000			
Elevation, union (m)		-0.251***				-0.450***		
		(-2.60)				(-3.79)		
		0.009				0.000		
Elevation, around union (m)			-0.367**				-0.836***	
			(-2.41)				(-4.62)	
			0.016				0.000	
No education				0.838**				0.661
				(2.46)				(1.59)
				0.014				0.112
Primary education				0.594				0.551
				(1.59)				(1.45)
				0.112				0.147
Lower secondary education				0.151				0.233
				(0.46)				(0.82)
				0.648				0.413
Tertiary education				0.067				0.457
				(0.23)				(1.60)
				0.817				0.109
Observations	620	620	620	620	620	620	620	620
Clusters	52	52	52	52	52	52	52	52
R-squared	0.18	0.17	0.17	0.18	0.19	0.15	0.16	0.17

Ordered logit estimations with robust t-statistics in parentheses, clustering in enumerator-union
*** p<0.01, ** p<0.05, * p<0.1

SA Table 3. Attitudes toward internal climate migrants, ordered logit estimations, robustness analysis

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Attitude I					Attitude II				
Distance to exposure (index)	-0.409***	-0.414***	-0.333**	-0.390**	-0.413***	-0.873***	-0.863***	-0.897***	-0.850***	-0.874***
	(-2.77)	(-2.72)	(-2.20)	(-2.55)	(-2.81)	(-4.71)	(-4.54)	(-4.48)	(-4.62)	(-4.70)
	0.006	0.007	0.028	0.011	0.005	0.000	0.000	0.000	0.000	0.000
Trust	0.690***	0.685***	0.412**	0.675***	0.695***	0.731***	0.734***	0.682***	0.708***	0.725***
	(3.25)	(3.16)	(2.04)	(3.21)	(3.07)	(4.18)	(4.16)	(3.53)	(3.79)	(3.95)
	0.001	0.002	0.041	0.001	0.002	0.000	0.000	0.000	0.000	0.000
Repeated bad luck own fault	-0.026	-0.020	-0.145*	-0.029	-0.020	-0.150*	-0.155*	-0.185*	-0.159*	-0.151
	(-0.28)	(-0.22)	(-1.96)	(-0.32)	(-0.23)	(-1.68)	(-1.73)	(-1.76)	(-1.75)	(-1.62)
	0.779	0.829	0.050	0.750	0.822	0.094	0.084	0.078	0.080	0.106
Religious attitudes	0.640***	0.637***	0.532***	0.637***	0.633***	0.437***	0.439***	0.435***	0.435***	0.438***
	(5.31)	(5.32)	(4.85)	(5.34)	(5.23)	(4.08)	(4.21)	(3.98)	(4.06)	(3.98)
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Accountability	-0.474**	-0.480**	-0.488*	-0.454*	-0.481**	-0.468*	-0.460*	-0.432	-0.417	-0.473*
	(-2.03)	(-2.06)	(-1.95)	(-1.93)	(-2.04)	(-1.84)	(-1.77)	(-1.55)	(-1.64)	(-1.91)
	0.043	0.039	0.051	0.054	0.041	0.066	0.076	0.121	0.101	0.057
Household migration history	-0.087	-0.095	-0.082	-0.083	-0.083	-0.171	-0.167	-0.167	-0.162	-0.156
	(-0.45)	(-0.47)	(-0.45)	(-0.45)	(-0.42)	(-1.06)	(-1.06)	(-1.11)	(-1.07)	(-1.00)
	0.649	0.639	0.653	0.655	0.671	0.289	0.288	0.265	0.283	0.318
Extended family exposure	-0.109	-0.118	-0.061	-0.077	-0.095	-0.440**	-0.423**	-0.464**	-0.394**	-0.435**
	(-0.66)	(-0.68)	(-0.33)	(-0.46)	(-0.58)	(-2.15)	(-2.05)	(-2.27)	(-1.99)	(-2.16)
	0.506	0.494	0.743	0.644	0.560	0.032	0.040	0.023	0.046	0.030
Education	-0.236***	-0.253***	-0.196**	-0.226***	-0.234***	-0.123	-0.093	-0.101	-0.105	-0.120
	(-2.80)	(-3.14)	(-2.10)	(-2.79)	(-2.65)	(-1.05)	(-0.84)	(-0.79)	(-0.94)	(-1.03)
	0.005	0.002	0.036	0.005	0.008	0.295	0.398	0.432	0.348	0.302
Household assets (index)	-0.215*	-0.215*	-0.261**	-0.203*	-0.210*	-0.217**	-0.213**	-0.183*	-0.198*	-0.216**
	(-1.90)	(-1.89)	(-2.11)	(-1.70)	(-1.69)	(-2.30)	(-2.23)	(-1.85)	(-1.89)	(-1.97)
	0.058	0.059	0.035	0.089	0.091	0.021	0.026	0.065	0.059	0.049
Occupation	-0.165	-0.165	-0.030	-0.184	-0.153	0.139	0.120	0.215	0.109	0.126
	(-0.65)	(-0.66)	(-0.13)	(-0.71)	(-0.62)	(0.70)	(0.62)	(1.22)	(0.56)	(0.71)
	0.517	0.507	0.894	0.475	0.532	0.482	0.533	0.223	0.573	0.480
Age	-0.002	-0.002	-0.002	-0.002	-0.020	0.003	0.003	0.006	0.003	-0.018
	(-0.23)	(-0.22)	(-0.23)	(-0.21)	(-0.73)	(0.35)	(0.40)	(0.62)	(0.33)	(-0.60)
	0.816	0.828	0.821	0.831	0.467	0.723	0.692	0.534	0.742	0.551
Male	-0.217	-0.227	-0.286	-0.207	-0.145	-0.226	-0.209	-0.290*	-0.202	-0.352
	(-1.03)	(-1.05)	(-1.39)	(-0.96)	(-0.41)	(-1.34)	(-1.20)	(-1.75)	(-1.14)	(-1.12)
	0.301	0.295	0.165	0.336	0.685	0.181	0.230	0.080	0.256	0.262
Community resources	-0.752***	-0.754***	-0.852***	-0.756***	-0.754***	-0.566***	-0.563***	-0.591***	-0.577***	-0.563***
	(-5.29)	(-5.37)	(-5.79)	(-5.22)	(-5.28)	(-3.81)	(-3.84)	(-3.71)	(-3.80)	(-3.76)
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Ease of getting job	0.192*	0.197*	0.157	0.186*	0.195*	0.088	0.087	0.139	0.073	0.082
	(1.73)	(1.71)	(1.35)	(1.69)	(1.72)	(0.74)	(0.73)	(1.06)	(0.62)	(0.67)
	0.084	0.087	0.177	0.091	0.086	0.457	0.466	0.289	0.537	0.506
Video treatment	-0.105					-0.033				
	(-0.71)					(-0.17)				
	0.481					0.862				
Climate change knowledge		0.046					-0.076			
		(0.37)					(-0.71)			
		0.713					0.479			
Migrant wealth			-0.058					0.080		
			(-0.42)					(0.50)		
			0.673					0.615		
Migration size				-0.217					-0.373	
				(-0.82)					(-1.42)	
				0.411					0.155	
Household land owner					-0.052					-0.027
					(-0.24)					(-0.10)
					0.813					0.920
Born in community					-0.403					-0.250
					(-0.69)					(-0.37)
					0.492					0.713
Residency time					0.019					0.022
					(0.72)					(0.75)
					0.470					0.454
Household head					-0.043					0.113
					(-0.13)					(0.36)
					0.896					0.719
Observations	620	620	571	620	619	620	620	571	620	619
Clusters	52	52	51	52	52	52	52	51	52	52
R-squared	0.18	0.17	0.16	0.18	0.17	0.17	0.17	0.17	0.18	0.17

Ordered logit estimations with robust t-statistics in parentheses, clustering in enumerator-union
*** p<0.01, ** p<0.05, * p<0.1

SA Table 4. Attitudes toward internal climate migrants, control group

	(1)	(2)	(3)	(4)	(5)	(6)
		Attitude I			Attitude II	
Distance to exposure (index)	-0.170*	-0.217***	-0.180**	-0.399***	-0.434***	-0.431***
	(-1.76)	(-2.75)	(-2.15)	(-4.29)	(-4.62)	(-4.44)
	0.085	0.008	0.036	0.000	0.000	0.000
Trust	0.378***	0.179	0.114	0.381***	0.234**	0.243**
	(3.58)	(1.67)	(1.03)	(3.74)	(2.46)	(2.28)
	0.001	0.101	0.309	0.000	0.017	0.027
Repeated bad luck own fault	-0.007	0.023	0.021	-0.070	-0.049	-0.016
	(-0.10)	(0.35)	(0.32)	(-1.00)	(-0.70)	(-0.23)
	0.922	0.728	0.749	0.321	0.489	0.820
Religious attitudes	0.273***	0.266***	0.246***	0.187**	0.182***	0.191**
	(3.14)	(3.94)	(3.46)	(2.39)	(2.85)	(2.67)
	0.003	0.000	0.001	0.021	0.006	0.010
Accountability	-0.248	-0.197	-0.206	-0.327*	-0.290*	-0.254
	(-1.55)	(-1.41)	(-1.26)	(-1.89)	(-1.77)	(-1.27)
	0.127	0.164	0.215	0.065	0.083	0.209
Household migration history	0.009	0.016	0.024	-0.121	-0.116	-0.099
	(0.07)	(0.16)	(0.25)	(-1.19)	(-1.42)	(-1.24)
	0.942	0.874	0.805	0.240	0.161	0.222
Extended family exposure	-0.096	-0.201	-0.194	-0.270**	-0.348**	-0.373**
	(-0.60)	(-1.51)	(-1.52)	(-2.09)	(-2.63)	(-2.46)
	0.553	0.136	0.135	0.042	0.012	0.018
Education	-0.071	-0.034	-0.023	-0.050	-0.022	0.011
	(-0.83)	(-0.53)	(-0.33)	(-0.55)	(-0.28)	(0.13)
	0.411	0.598	0.744	0.582	0.778	0.895
Household assets (index)	-0.158*	-0.152*	-0.183**	-0.142*	-0.138*	-0.148
	(-1.92)	(-1.96)	(-2.12)	(-1.70)	(-1.69)	(-1.58)
	0.061	0.056	0.039	0.096	0.098	0.121
Occupation	-0.261	-0.171	-0.137	-0.153	-0.087	0.003
	(-1.48)	(-1.07)	(-0.81)	(-0.85)	(-0.54)	(0.02)
	0.144	0.289	0.424	0.398	0.593	0.986
Age	0.004	0.007	0.005	0.005	0.007	0.008
	(0.82)	(1.19)	(0.87)	(0.97)	(1.32)	(1.42)
	0.417	0.240	0.391	0.335	0.193	0.162
Male	0.011	-0.136	-0.155	-0.020	-0.129	-0.188
	(0.06)	(-0.86)	(-1.03)	(-0.14)	(-0.96)	(-1.40)
	0.949	0.392	0.307	0.891	0.343	0.168
Community resources		-0.406***	-0.430***		-0.299***	-0.271***
		(-4.90)	(-4.63)		(-3.45)	(-2.71)
		0.000	0.000		0.001	0.009
Ease of getting job		0.180**	0.190**		0.137	0.178*
		(2.36)	(2.17)		(1.62)	(1.84)
		0.022	0.035		0.112	0.072
Host community identification			-0.027			-0.048
			(-0.32)			(-0.50)
			0.747			0.620
Observations	314	314	281	314	314	281
Clusters	0.220	0.353	0.355	0.293	0.363	0.359
R-squared	50	50	48	50	50	48

OLS estimations with robust t-statistics in parentheses, clustering in enumerator-union
*** p<0.01, ** p<0.05, * p<0.1

SA Table 5. Attitudes toward internal climate migrants, control group, additional analysis

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Attitude I				Attitude II			
Distance to exposure (index)				-0.217***				-0.436***
				(-2.80)				(-4.62)
				0.007				0.000
Trust	0.166	0.195*	0.189*	0.175	0.199**	0.275***	0.251**	0.215**
	(1.54)	(1.82)	(1.76)	(1.62)	(2.17)	(2.82)	(2.54)	(2.12)
	0.131	0.075	0.085	0.112	0.035	0.007	0.014	0.039
Repeated bad luck own fault	0.023	0.023	0.024	0.021	-0.049	-0.046	-0.046	-0.046
	(0.36)	(0.35)	(0.37)	(0.32)	(-0.74)	(-0.64)	(-0.64)	(-0.67)
	0.722	0.730	0.710	0.751	0.463	0.528	0.523	0.508
Religious attitudes	0.270***	0.255***	0.264***	0.268***	0.195***	0.156**	0.181**	0.183***
	(4.00)	(3.78)	(3.84)	(3.96)	(3.20)	(2.44)	(2.67)	(2.96)
	0.000	0.000	0.000	0.000	0.002	0.018	0.010	0.005
Accountability	-0.168	-0.223	-0.214	-0.177	-0.221	-0.350**	-0.321*	-0.251
	(-1.19)	(-1.67)	(-1.50)	(-1.25)	(-1.39)	(-2.05)	(-1.90)	(-1.49)
	0.238	0.102	0.140	0.216	0.170	0.045	0.064	0.143
Household migration history	0.021	0.009	0.011	0.021	-0.102	-0.135	-0.124	-0.113
	(0.21)	(0.08)	(0.11)	(0.21)	(-1.33)	(-1.55)	(-1.49)	(-1.40)
	0.832	0.934	0.913	0.831	0.189	0.128	0.142	0.168
Extended family exposure	-0.200	-0.207	-0.181	-0.211	-0.354***	-0.347**	-0.310**	-0.370***
	(-1.53)	(-1.55)	(-1.36)	(-1.61)	(-2.74)	(-2.46)	(-2.35)	(-2.73)
	0.133	0.127	0.181	0.115	0.009	0.017	0.023	0.009
Education	-0.027	-0.044	-0.045		0.000	-0.050	-0.040	
	(-0.41)	(-0.69)	(-0.71)		(0.01)	(-0.64)	(-0.53)	
	0.680	0.491	0.481		0.995	0.524	0.596	
Household assets (index)	-0.152*	-0.151*	-0.161**	-0.144*	-0.134	-0.142*	-0.155*	-0.118
	(-1.97)	(-1.90)	(-2.08)	(-1.78)	(-1.67)	(-1.70)	(-1.90)	(-1.47)
	0.055	0.063	0.043	0.081	0.101	0.095	0.064	0.147
Occupation	-0.165	-0.168	-0.181	-0.144	-0.074	-0.082	-0.108	-0.043
	(-1.04)	(-1.04)	(-1.12)	(-0.89)	(-0.47)	(-0.48)	(-0.66)	(-0.27)
	0.304	0.305	0.266	0.377	0.644	0.630	0.514	0.786
Age	0.007	0.006	0.006	0.006	0.008	0.006	0.006	0.006
	(1.25)	(1.11)	(1.09)	(1.17)	(1.59)	(1.03)	(1.15)	(1.20)
	0.218	0.272	0.281	0.248	0.117	0.306	0.257	0.234
Male	-0.147	-0.123	-0.127	-0.167	-0.157	-0.097	-0.112	-0.170
	(-0.93)	(-0.77)	(-0.80)	(-1.01)	(-1.20)	(-0.68)	(-0.87)	(-1.32)
	0.355	0.445	0.425	0.316	0.237	0.503	0.388	0.192
Community resources	-0.399***	-0.417***	-0.399***	-0.414***	-0.286***	-0.318***	-0.286***	-0.314***
	(-4.75)	(-5.02)	(-4.72)	(-4.91)	(-3.34)	(-3.65)	(-3.24)	(-3.64)
	0.000	0.000	0.000	0.000	0.002	0.001	0.002	0.001
Ease of getting job	0.181**	0.160**	0.186**	0.181**	0.144*	0.093	0.152*	0.135
	(2.41)	(2.05)	(2.47)	(2.28)	(1.76)	(1.02)	(1.83)	(1.53)
	0.020	0.045	0.017	0.027	0.085	0.312	0.073	0.133
Distance to mangrove (km)	-0.018***				-0.038***			
	(-2.88)				(-5.25)			
	0.006				0.000			
Elevation, union (m)		-0.134**				-0.237***		
		(-2.52)				(-3.64)		
		0.015				0.001		
Elevation, around union (m)			-0.197**				-0.408***	
			(-2.48)				(-4.19)	
			0.016				0.000	
No education				0.199				0.326
				(0.76)				(1.28)
				0.450				0.208
Primary education				0.136				0.249
				(0.50)				(0.95)
				0.619				0.345
Lower secondary education				-0.003				0.156
				(-0.01)				(0.80)
				0.990				0.429
Tertiary education				0.182				0.456**
				(0.81)				(2.56)
				0.420				0.013
Observations	314	314	314	314	314	314	314	314
Clusters	0.356	0.349	0.347	0.357	0.390	0.328	0.346	0.372
R-squared	50	50	50	50	50	50	50	50

OLS estimations with robust t-statistics in parentheses, clustering in enumerator-union
*** p<0.01, ** p<0.05, * p<0.1

SA Table 6. Attitudes toward internal climate migrants, control group, robustness analysis

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Attitude I					Attitude II				
Distance to exposure (index)	-0.217***	-0.224***	-0.166**	-0.213**	-0.227***	-0.434***	-0.440***	-0.413***	-0.421***	-0.434***
	(-2.75)	(-2.83)	(-2.10)	(-2.63)	(-2.81)	(-4.62)	(-4.50)	(-4.26)	(-4.56)	(-4.56)
	0.008	0.007	0.041	0.011	0.007	0.000	0.000	0.000	0.000	0.000
Trust	0.179	0.178	0.105	0.174	0.178*	0.234**	0.232**	0.225**	0.220**	0.211**
	(1.67)	(1.66)	(0.97)	(1.65)	(1.69)	(2.46)	(2.48)	(2.18)	(2.31)	(2.26)
	0.101	0.104	0.335	0.105	0.098	0.017	0.017	0.034	0.025	0.028
Repeated bad luck own fault	0.023	0.025	-0.021	0.022	0.025	-0.049	-0.046	-0.072	-0.051	-0.043
	(0.35)	(0.40)	(-0.32)	(0.34)	(0.37)	(-0.70)	(-0.66)	(-0.94)	(-0.74)	(-0.60)
	0.728	0.693	0.753	0.734	0.710	0.489	0.510	0.354	0.462	0.548
Religious attitudes	0.266***	0.265***	0.228***	0.267***	0.263***	0.182***	0.182***	0.185***	0.185***	0.186***
	(3.94)	(3.91)	(3.43)	(4.01)	(3.86)	(2.85)	(2.82)	(2.70)	(2.90)	(2.81)
	0.000	0.000	0.001	0.000	0.000	0.006	0.007	0.009	0.006	0.007
Accountability	-0.197	-0.195	-0.210	-0.190	-0.204	-0.290*	-0.288*	-0.276*	-0.267	-0.312*
	(-1.41)	(-1.41)	(-1.45)	(-1.39)	(-1.49)	(-1.77)	(-1.76)	(-1.69)	(-1.63)	(-1.96)
	0.164	0.164	0.153	0.171	0.143	0.083	0.084	0.097	0.110	0.056
Household migration history	0.016	0.016	0.007	0.018	0.009	-0.116	-0.115	-0.124	-0.108	-0.122
	(0.16)	(0.16)	(0.08)	(0.19)	(0.09)	(-1.42)	(-1.38)	(-1.63)	(-1.44)	(-1.44)
	0.874	0.875	0.940	0.852	0.930	0.161	0.173	0.110	0.156	0.155
Extended family exposure	-0.201	-0.212	-0.185	-0.192	-0.204	-0.348**	-0.359**	-0.367***	-0.319**	-0.361**
	(-1.51)	(-1.55)	(-1.27)	(-1.44)	(-1.53)	(-2.63)	(-2.68)	(-2.71)	(-2.49)	(-2.66)
	0.136	0.128	0.212	0.157	0.133	0.012	0.010	0.009	0.016	0.010
Education	-0.034	-0.051	-0.034	-0.029	-0.032	-0.022	-0.038	-0.013	-0.006	-0.015
	(-0.53)	(-0.80)	(-0.52)	(-0.49)	(-0.50)	(-0.28)	(-0.51)	(-0.17)	(-0.08)	(-0.20)
	0.598	0.425	0.608	0.624	0.622	0.778	0.610	0.869	0.937	0.845
Household assets (index)	-0.152*	-0.155*	-0.170**	-0.148*	-0.142*	-0.138*	-0.140*	-0.137	-0.125	-0.125
	(-1.96)	(-1.99)	(-2.06)	(-1.80)	(-1.75)	(-1.69)	(-1.74)	(-1.60)	(-1.47)	(-1.49)
	0.056	0.053	0.045	0.078	0.086	0.098	0.089	0.116	0.147	0.142
Occupation	-0.171	-0.164	-0.157	-0.178	-0.197	-0.087	-0.080	-0.086	-0.109	-0.143
	(-1.07)	(-1.01)	(-1.02)	(-1.10)	(-1.25)	(-0.54)	(-0.49)	(-0.51)	(-0.67)	(-0.91)
	0.289	0.317	0.312	0.279	0.219	0.593	0.629	0.610	0.505	0.369
Age	0.007	0.006	0.005	0.006	0.002	0.007	0.007	0.007	0.007	-0.001
	(1.19)	(1.17)	(0.80)	(1.15)	(0.10)	(1.32)	(1.29)	(1.04)	(1.24)	(-0.07)
	0.240	0.249	0.425	0.255	0.920	0.193	0.204	0.304	0.220	0.942
Male	-0.136	-0.144	-0.122	-0.126	-0.204	-0.129	-0.137	-0.103	-0.098	-0.300
	(-0.86)	(-0.89)	(-0.80)	(-0.79)	(-1.04)	(-0.96)	(-0.98)	(-0.72)	(-0.72)	(-1.51)
	0.392	0.380	0.430	0.435	0.303	0.343	0.332	0.474	0.475	0.137
Community resources	-0.406***	-0.410***	-0.452***	-0.404***	-0.413***	-0.299***	-0.303***	-0.296***	-0.294***	-0.303***
	(-4.90)	(-4.99)	(-5.30)	(-4.89)	(-4.98)	(-3.45)	(-3.52)	(-3.10)	(-3.47)	(-3.43)
	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.003	0.001	0.001
Ease of getting job	0.180**	0.178**	0.176**	0.176**	0.188**	0.137	0.135	0.160*	0.126	0.138
	(2.36)	(2.33)	(2.17)	(2.32)	(2.36)	(1.62)	(1.57)	(1.77)	(1.50)	(1.53)
	0.022	0.024	0.035	0.025	0.022	0.112	0.123	0.082	0.141	0.132
Climate change knowledge		0.041					0.041			
		(0.51)					(0.52)			
		0.609					0.604			
Migrant wealth			0.057					0.092		
			(0.65)					(0.89)		
			0.517					0.375		
Migration size				-0.072					-0.233*	
				(-0.46)					(-1.91)	
				0.647					0.062	
Household land owner					-0.102					0.031
					(-0.75)					(0.14)
					0.459					0.886
Born in community					-0.053					-0.099
					(-0.17)					(-0.21)
					0.867					0.834
Residency time					0.004					0.006
					(0.29)					(0.30)
					0.775					0.762
Household head					0.134					0.313
					(0.89)					(1.65)
					0.376					0.104
Observations	314	314	288	314	313	314	314	288	314	313
Clusters	0.353	0.354	0.331	0.354	0.354	0.363	0.364	0.343	0.373	0.369
R-squared	50	50	49	50	50	50	50	49	50	50

OLS estimations with robust t-statistics in parentheses, clustering in enumerator-union
*** p<0.01, ** p<0.05, * p<0.1

Countries in Latin America, Asia, and Africa exposed to the environmental consequences of climate change are predicted to see voluntary and forced internal migration on an unprecedented scale in the coming decades. This will likely put a great strain on host communities receiving the internally displaced. In many communities, the long-term residents may be skeptical toward the internal climate migrants, creating grounds for heightened tensions and even violent conflict. To alleviate such tensions, it is important to understand how attitudes toward internal climate migrants among host community members form, an issue that has thus far received little attention in climate research. To promote research on host communities receiving internal climate migrants in developing countries, this article develops a conceptual framework which seeks to map key factors influencing attitudes toward climate migrants. It proposes that distance between migrants and host community members along multiple dimensions is central to understanding how such attitudes form. The framework categorizes the different dimensions of distance into spatial, attitudinal, experiential, and social proximity. The article applies the framework to a survey conducted among over 630 long-term host community residents in the climate exposed Satkhira District of Bangladesh and finds evidence that variables reflecting these categories of proximity shape attitudes toward internal climate migrants.

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