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Climate refugees or labour migrants? climate reductive translations of women's migration from coastal Bangladesh

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ABSTRACT

Climate reductive translations of migration attract international attention, but result in three problematic misreadings of Bangladesh's socioecological landscape. First, attributing migration to climate change misreads coastal vulnerabilities and the importance of migration as a gendered livelihood strategy to deal with rural precarity and debt- both in the past and present. Second, misreading migration caused by brackish tiger-prawn cultivation, infrastructure-related waterlogging and riverbank erosion as 'climate-induced' hinders a discussion of long-term solutions for rural underemployment, salinisation, siltation and land loss. Lastly, framing climate change as causing 'gendered displacement' ignores the importance of affective kinship relations in shaping single women's migration choices.

KEYWORDS

Climate adaptation; development; migration; South Asia; floods; female-headed households

Introduction: beyond climate reductive translations of migration

In 2014, I met with Bangladeshi migration researchers in Dhaka who had gained significant funding for a project on 'climate-related migration' following Cyclone Aila in 2009. I asked [in Bangla] how migration was related to climate change. The researchers replied that since their main focus is on migration, they could continue their work by using climate change as a *masala* to attract funding. They further pointed out that shrimp farming was the main cause of outmigration:

> The main reason why the flooding was so devastating during Aila was due to the damages shrimp farms [*ghers*] made on flood-protection embankments. The devastation was caused by a cyclone, but its impact would have been less had it not been for *ghers*.[1]

Yet an increasing number of papers frame such migration as climate-related (Kartiki 2011; Saha 2017; Ahsan 2019) or even climate-induced (M. R. Islam and Shamsuddoha 2017; R. Islam, Schech, and Saikia 2021) while also creating a false binary of internal migration as 'climate-induced' vs. 'non-climate-induced' (Adri and Simon 2018) in ways

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[1]Words in italics are in Bangla unless otherwise indicated.

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HUFFINGTON POST

Haunting Photos Show Effects Of Climate Change In Bangladesh

The number of climate change refugees in Bangladesh is expected to increase dramatically in the coming decades.

Stefanos Nikitas HuffPost Greece
01/28/2016 04:32 pm ET

Probal Rashid

Figure 1. Huffington Post article on 'Climate Change Refugees'. Source: Nikitas (2016). Photo courtesy Probal Rashid.

that removes from view political problems of land use that make rural livelihoods even more precarious (Figure 1).

Bangladesh is often portrayed as a 'climate hotspot' where its coastal migrants are described as victims of climate change who are 'forced' to migrate due to climate change, or else risk drowning in rising sea levels or in cyclonic events (Collectif Argos 2010; Stellina Jolly and Ahmad 2019; McDonnell 2019). Such recasting of migrants in Bangladesh and other regions of the world as 'climate refugees' ignores how migration was, and continues to be, a central part of agrarian lives (Farbotko and Lazrus 2012) where causes of migration are multifaceted and contradictory, as are the motivations of those who move (Amrith 2014).

Striking images of Bangladeshis as 'climate refugees' can be seen as an attempt to advocate for global climate justice, but they are also anchored in a longer history of Bangladesh being a key destination of international aid. As donors are increasingly allocating funds to climate change, development brokers engage in 'climate reductive translations', that is they create a causal narrative that links their particular activities to the policy theory of climate change, in order to continue with their ongoing activities (Dewan 2021b; 2020).[2] 'Climate reductionism' refers to 'the increasing trend to ascribe all changes in environment

[2]By translation I refer to the processes by which development brokers produce coherence [make projects real] by stabilising representations so as to match causal events to the prevailing policy theory (Mosse and Lewis 2006, 13; Mosse 2005, 9) This draws on Latour's use of translation 'as a relation that does not transport causality but induces two mediators into coexisting [with each other]' (Latour 2005, 108).

and society to climate change' (Hulme 2011, 255–256) – a climate reductive translation of migration represents migration as *caused by* climate change. While contemporary capitalism fuels the climate crisis (Borras Jr. et al. 2022), capitalist actors increasingly draw on climate reductive translations to reframe flood-protection embankments, brackish aquaculture and capital-intensive high-yield agriculture as *climate adaptation solutions* and misread the Bengal delta (Dewan 2021b). Climate reductive translations of migration may attract international attention for Bangladesh's plight, but it misreads coastal vulnerabilities while normalising a victimising discourse where there is no space to discuss *political solutions* that could alleviate agrarian livelihoods such as rural employment schemes, silt management and freshwater agriculture.

The current framing of migration as caused by climate change deflects attention away from how coastal vulnerabilities are fundamentally entwined with political structures of social and economic inequalities. Similar to how policymakers have misread Kissidougou's forest landscape by reading history backwards and wrongly blaming local villagers for deforestation and environmental destruction in the present (Fairhead and Leach 1996, 3), attributing migration from Bangladesh's coastal zone to climate change alone misreads the socio-environmental landscape and the multi-faceted drivers of migration. As the 2022 floods in Pakistan highlight, devastation is often accepted as largely unavoidable and unpredictable when blamed on climatic change rather than poor governance (Kelman 2022). Misreadings of environmentally related migration (e.g. salinisation, floods and riverbank erosion) as 'climate-induced' removes existing structural socio-economic push factors of migration and potential ways to address agrarian struggles from public debate. Even so, 'push' dimensions of migration do not help to fully explain why some women in similar socio-economic positions are unable to migrate, while others can. Climate reductive translations of migration not only misread socio-environmental and gendered vulnerabilities, but also ignore the historical importance of migration for agrarian livelihoods while removing women's agency to choose to migrate.

Women in the Global South are constructed as more 'vulnerable' to climate change (Arora-Jonsson 2011) in ways that tends to obfuscate their agency (Cuomo 2011, 695). Bangladeshi women are assumed to be more likely to suffer in climate-related events due to being restricted by patriarchal rules of female seclusion (Cannon 2009), that they do not migrate on their own (Poncelet et al. 2010) or that they are extra vulnerable to trafficking (Stellina Jolly and Ahmad 2019). This stereotyping of gendered vulnerabilities homogenises Bangladeshi women in a way that ignores how class, education, urban-rural lifestyle, and kinship networks shape different migration possibilities (Lahiri-Dutt and Samanta 2004; Mehta 2018). Paying attention to the migration decisions of landless single mothers in coastal areas highlights the differential agentive capacity of women migrants and how this is entangled with kinship-based reproductive support.

A historically grounded ethnographic account of migration shows how such processes are embedded in environmental and socio-economic vulnerabilities rooted in political structures of gendered inequality. Through its close attention to the intimate everyday migration decisions of landless single mothers in coastal areas, this ethnography critiques how 'coastal vulnerabilities' conflates the vulnerability of a particular place to climatic risk with the socioeconomic constraints of the people living there (Dewan 2021b, 18–20). It reveals the importance of kinship relations in shaping the differential agentive capacity

of women in choosing to migrate and argues that climate reductive translations of migration obfuscate the affective relations that sustain agrarian livelihoods. This historical and ethnographically grounded account of 'climate reductive translations of migration' thus contributes to critical debates on the increasingly politicised knowledge production of climate change (Barnes and Dove 2015; Eriksen, Nightingale, and Eakin 2015) and climate displacement in an agrarian world already on the move (Kelley, Shattuck, and Thomas 2021).

Three problematic misreadings of the socioecological landscape arise from 'climate reductive translations' of migration. First, attributing migration to climate change misreads coastal vulnerabilities and the importance of migration as an agrarian livelihood strategy to deal with rural precarity and debt both in the past and – also for single women (divorced, widows). Second, misreading migration caused by saline tiger-prawn cultivation, infrastructure-related waterlogging and riverbank erosion as 'climate-induced migration' or 'climate displacement' hinders a discussion of long-term solutions that may remediate such damaging anthropogenic floods. Lastly, ideas of climate change causing 'gendered displacement' misread gendered vulnerabilities. Landless women consider various aspects of reproductive kinship support intimate relations and social reputation as they choose whether or not to migrate to brick kilns, Dhaka garments industry and the Gulf for domestic work. Misreading causes of migration based on tropes of Bangladesh as a 'climate change victim' hinders public debate on solutions for rural underemployment, floods, land loss and salinisation by aquacultures. Crucially, it misses how migration is constrained/enabled by affective kinship relations to sustain social reproduction at home.

The article draws on 12 months of multi-sited qualitative research from August 2014 to July 2015. I conducted forty in-depth, unstructured interviews with development professionals in Dhaka and Khulna cities and nine months of ethnographic fieldwork in south-west coastal Bangladesh, mainly in the embanked floodplain of 'Nodi'[3] in Khulna District. This included participant observation of village life in the two unions of Nodi: 'Lonanodi' were brackish tiger-prawn cultivation was dominant, and 'Dhanmarti' where a grassroots movement ended such saline shrimp farming. My main interlocutors were two groups of women doing 'earthwork' – repairing small roads in a donor-funded rural employment scheme targeting landless 'female-headed' households (equated with the 'poorest of the poor' See Kabeer 1991; Lewis 1993). I met the twenty women regularly at their work sites, and they soon invited me home to meet their families. I hired some of them as my field assistants to go door-to-door and carry out a qualitative household survey (*jorib*) in Nodi with what ended up as approximately four hundred households. NGOs starting new projects often carry out a *jorib*, resulting in villagers being accustomed to talking to outsiders about their livelihoods and this helped legitimate my presence. Spending whole days with the women further facilitated participant observation, where I immersed myself into rural life, to 'as far as possible, to think, see, feel and sometimes act as a member of its culture' (Powdermaker 1966, 9).

[3]All names have been changed to protect the anonymity of my interlocutors. I obtained oral informed consent by explaining to each interlocutor the purpose of my work, who I am, what my affiliations were, the nature of my research, that I was not part of a project that they could benefit from and that all information would be anonymised. I asked open-ended questions about environmental change and livelihood strategies and qualitatively analysed the transcripts of these conversations. I obtained ethics approval for this fieldwork from the Department of Social Anthropology, SOAS (University of London).

Misreading coastal vulnerabilities

Rural precarity and agrarian debt

It was payday during one of the last months of the donor-funded rural employment scheme in Nodi. I sat with the landless women labourers outside the local government building in Shobuj town as they waited for their salaries. When they received news that they would not receive the two-year extension to their existing four-year contract, they were visibly upset and disappointed. Riparna, married with two children exclaimed:

> [After two years], we are barely stepping out of the poverty we're in and now we're going to fall straight back down again. If we only got two more years, we would have been able to secure our livelihoods.

The women expressed anxiety over finding a new income that would enable them to repay microcredit debt used to keep their children in school, to save up money for their daughters' marriages, and – for some of the women – their ill husband's healthcare costs.

All these expenditures are internalised as individual private costs in the absence of state-entitlements for Bangladeshi citizens (Dewan 2021b). This reflects another key finding from my survey: the large amount of agrarian debt accumulated through women household members taking four to six microcredit loans from different NGOs (Dewan 2021b; See also Karim 2011; Paprocki 2016; S. B. Banerjee and Jackson 2017). Nodi comprises of Dhanmarti union where a grassroots movement ended tiger-prawn cultivation in 2008 in favour of freshwater crop cultivation, and Lonanodi union where the movement failed. In both unions, households used microcredit to pay for healthcare, education, dowry and fees/bribes to labour brokers, illustrating the importance of debt for agrarian formation (Fairbairn et al. 2014)

Development projects and NGOs, both through the access to microcredit and to various development projects targeting the 'poor', constitute an important element of the political economy in Bangladesh's southwest coastal zone, considered to be the most poor and vulnerable in the country. My *jorib* in Nodi revealed that there were significantly more landless women (without capital or male adult earners in the household) that coveted these short-term rural employment schemes despite low wages and no social or health insurance: they provided an income for a fixed duration. The project-mentality of the development industry serves to perpetuate a system that only provides temporary patches to large-scale problem of structural rural un(der)employment and sustain a form of labour market based on precarious, low-cost labour (Dewan 2021a; See also Qureshi 2014). Coastal vulnerabilities here are fundamentally tied to socio-economic inequalities.

Migration as an agrarian livelihood strategy

High levels of out-of-pocket expenses incentivised people in Nodi to migrate – but not only among those facing the livelihood hardships of living in saline barren deserts of shrimp farms (see Feldman and Geisler 2012; Paprocki 2019b). Local work was mostly available during the planting of monsoon rice in July–August and during its harvest in the Bengali month of *Poush* (mid-December to mid-January). Seasonal labour migration

provides an important source of income for Bangladeshi villagers (Afsar 2003; Toufique 2002). Able-bodied male daylabourers migrated for a month during the dry season to harvest *goromer dhan* [dry season rice] in the northern parts of Khulna district and received rice as payment, sustaining a family of four for six months. Other forms of circular migration among men in Nodi include crab fishing in the Sundarbans in the winter months at risk of being held at ransom and beaten up by gangs of *dacoits* [pirates], earthwork in labour markets or rickshaw pulling in Khulna or Dhaka.

Climate reductive translations of migration thus fail to capture the importance of seasonal labour migration as an agrarian livelihood strategy in South Asia – both historically and in the present (Rogaly et al. 2002). With the 1947 partition of India, 'internal' seasonal migration was obstructed through artificial borders; separating the local people of coastal Bengal despite affinal and cultural ties (Van Schendel 2001). Now that global warming is increasingly framed through security and borders (Cons 2018), Indian geopolitical fears of Bangladeshi climate refugees are increasingly used to legitimise further securitisation and tightening of border control (Chaturvedi and Doyle 2010, 207). For my interlocutors, India – *Bharat* – was just across the river and not *bidesh* [abroad]. Working in factories or in regionally located rice mills or brick kilns even across the border were typical forms of season-based migration for landless when local labour opportunities are scarce (Mahbubar Rahman and Van Schendel 2003; Samaddar 1999). Such circularity enables migrants to remain deeply embedded in rural social networks (Mosse et al. 2002), a form of translocal householding (Etzold and Mallick 2016; Jacka 2017; Gidwani and Ramamurthy 2018).

Historical migration among 'female-headed households'

The historical equivalents of my interlocutors, working-class divorced women and young widows ('female-headed households') in Bengal, also migrated as a livelihood strategy (Sen 1999; Engels 1996). Mughal Bengal's famous muslin textile industry was an important employer of women spinners in the eighteenth century – they were often widows from all castes and classes (N. Banerjee 1990). Bengal's textile industries were de facto deindustrialised under East India Company rule (Chattopadhyay 1990; Faraizi 1993). A Dhaka resident described how 'The import of the cotton thread from England into the country at a low price threw the Bengal spinners out of employment. Hapless widows, who subsisted on spinning were the hardest hit' (20th August 1831 in *The Samachar Sarpan*).[4]

For women, cottage-based subsistence crafts remained as an important source of income outside of the rice harvesting season – these were no different from ordinary household chores; any woman of any background could resort to them in circumstances of distress. Examples include animal husbandry, making dairy products like clarified butter [*ghee*], preserving and processing grains and pulses, making puffed rice [*muri*], preparing vegetable oil, as well as collecting, processing and selling forest produce. They also pounded rice, ground flour, produced rock salt, collected and sold fuel and fodder, as well as made leaf plates, baskets, mats, nets and brooms (N. Banerjee 1990, 284). Until the 1880s, 20% of Bangladesh's workforce comprised of women who were primarily engaged in these food processing industries that they could do from home (Sen 1999).

[4]Cited from B.N Banerjee op.cit, Vol II, pp. 336–337 in Chattopadhyay (1990).

In the 1890s, the jute industry in Bengal grew rapidly and saw a mass movement of migrants to Calcutta and its vicinities; by 1912, there were 61 jute factories in this region employing nearly 200,000 workers (Basu 2008). Like today's pattern of circular migration, adult males migrated to urban industries, while periodically returning to their wives and children in the villages (Basu 2008). Women from Bihar and Uttar Pradesh denied support from kin (widows, deserted by husbands) – also migrated to the jute mills (Sangari and Vaid 1990; N. Banerjee 1990; Sen 1999). The colonial expansion of jute exports saw the sector becoming male-dominated, where women were gradually subjected to irregular hiring and informal recruitment (Sen 1999).

By the 1920s, Bengal's jute industry was in turmoil and this was compounded by a major agrarian crisis in Bengal. Rising prices, the commercialisation of the rice trade, changing forms of rent collection, declining agricultural yields, a decrease of arable land due to British-planned public works contributed to rural indebtedness that caused three million peasant families to become functionally landless (Chatterjee 1982, 122; Engels 1996, 198). Furthermore, the introduction of mechanised rice huskers and the opening of male-operated rice mills in the 1920s impacted women workers disproportionately. While 270,000 women registered rice manual husking as their key occupation in 1911, this number dropped to 136,000 in 1931 (Engels 1996).[5] With further decline in cottage-based incomes and the lowered demand for women in jute mills, the 1920s saw landless women leaving their villages to work as domestic servants in the cities; migrating with their families or leaving with single women villagers. The number of women domestics increased by 300% within a decade (Engels 1996, 198).

These historiographies of working-class women in Bengal illustrate how the penetration of capitalism and its restructuring of subsistence economies often increased gender-based disadvantages (Momsen 2003). They also show the importance historically of migration as a key livelihood strategy that enabled women to adapt to changing circumstances: from reduced reliability of the land due to environmental stressors and shocks to the loss of family/kin support, to remediating debt and the lack of rural income opportunities. Both in the past and present, rural indebtedness serves as a push factor for migration. Yet viewing migration as an outcome mainly of uneven capitalist economic change may be limited. In the remaining paper, I discuss the importance of environmental factors for sustained agrarian livelihoods and the complexity of migration decisions made actively by women who dare to work outside the home and the social stigma they may face for doing. Drawing on ethnographic insights, I argue for the importance of kinship support for social reproduction and intimate relations in enabling landless divorced single mother's to migrate.

Misreading 'climate-induced migration'

Shrimp-related migration

Like in the past, most women in Nodi prefer local, cottage-based work that enable them to live at home and take care of their children and still have an income source. After the grassroots movement to end brackish tiger-prawn cultivation, Dhanmarti women were

[5]With the rapid mechanisation of the 1970s Green Revolution, landless women lost their main income source from processing rice (Greeley 1987).

able to yet again engage in subsistence cottage crafts (weaving palm leave mats and making fuel sticks of cow dung). In contrast, women in Lonanodi lamented that saline aquaculture degrades soil fertility and damages water quality in ways that reduces their ability to gain income from cottage-based crafts and to conduct homestead activities that rely on freshwater domestic ponds (Dewan 2021b). Since the 1990s, tiger-prawn cultivation expanded through land grabbing (Adnan 2013) and changed agrarian structures (Ito 2002). It contributed to a 'fake Blue Revolution' (Deb 1998) that reduced local labour opportunities and contributed to outmigration from rural coastal areas (Swain 1996; Guhathakurta 2003; Samaddar 1999).

Rural livelihoods thrive on fertile agricultural soils and the original purpose of flood-protection embankments in this region was to keep out saline intrusion in the rivers during the dry season (Dewan 2021a). Shrimp businessmen drill unauthorised pipes and cut embankments in order to flood these arable lands with brackish waters – rendering them structurally unstable (de Silva 2012). Such forced salinisation of the soil reduces local food production and increases the cost of food and other household items (Paprocki and Cons 2014; Swapan and Gavin 2011), worsening rural livelihood opportunities (Pouliotte, Smit, and Westerhoff 2009). Salinisation negatively affects reproductive activities (cooking, cleaning, housekeeping, crafts) as well as mental and bodily wellbeing (Dewan 2021b) – illustrating the gendered workings of aquaculture extractivism (Ojeda 2021). Based on these socio-environmental effects, the International Organisation of Migration (2010) states that even without the projected impacts of climate change, increasing salinity and population pressure will escalate emigration pressures in Bangladesh's coastal zone. This illustrates how the vulnerability of agrarian livelihoods in this delta is shaped by a complex interplay of land use practices.

Such an ecological vulnerability is compounded by the lack of state provision in an aid-dependent landscape where discourses of climate change obscures the unequal access to water-land resources held by the more powerful (Dewan 2021b). Considering this historical and political context of inequality, climate reductive translations of migration that represent people migrating from tiger-prawn producing villages in the wake of cyclones as 'climate migrants' (Lovatt 2016) are deeply problematic. A reframing of shrimp-induced migration as 'climate migration' could be perceived as part of a grander scheme of depeasantization through 'anticipatory ruination' by an 'adaptation regime' (Paprocki 2019a), where agrarian dispossession fuels migration supporting urban expansion (Paprocki 2018). In addition, a climate reductive translation of migration from tiger-prawn producing areas obfuscates the environmental degradation that exacerbates structural socio-economic push factors of migration. It is therefore important to separate migration caused by environmental degradation and broken embankments resulting from shrimp farming from 'climate-induced' migration.

Flood-related migration

As shrimp-induced migration suggests, floods in Bangladesh are not solely about climatic change. Furthermore, not all kinds of floods must be prevented. Monsoon *borsha* floods have long been integral to agricultural activities when silt-laden river water mixed with rain and inundated these deltaic wetlands, this fertilised the soil and irrigated rice

fields while providing essential breeding ground for fish (Zaman 1993). The construction of donor-funded 'flood-protection' embankments in the 1960s obstructed these *borsha* floods and trapped silt in the outside river (Dewan 2021a). The difference in elevation of a raised riverbed and a sunken floodplain resulted in rainwater being unable to drain and caused damaging *jalabaddho* floods [drainage congestion, waterlogging] (Iqbal 2010) that we often see in media portrayals of 'flooded Bangladesh' (Dewan 2021b) (Figure 2).

Embankments contribute to waterlogging and obstruct the delta's ability to raise its land levels through sediment deposits, and therefore pose greater flood risks than rising sea levels (Auerbach et al. 2015). Indeed, the unembanked Sundarbans have gained 1–1.5 m of elevation, while embanked floodplains (like Nodi) are sediment deprived (van Staveren, Warner, and Shah Alam Khan 2017). A reductive translation of migration as caused by climate-related floods removes attention from the fact that 'flood-protection' embankments – through a century of poor infrastructure design by colonial powers and western donors – actually worsen *jalabaddho* floods (Dewan 2021b). Migration due to waterlogging is not 'climate-induced'.

Embankments further contribute to the silting up several important water bodies, rivers and canals (Dewan, Mukherji, and Buisson 2015). This further exacerbates Bangladesh's climatic risks as the monsoon is expected to shift and this poses a grave threat to lives and livelihoods in South Asia (Amrith 2018). Silted waterbodies have less capacity to retain freshwater monsoon rains over the dry season and this hampers their ability to counter the salinity of the yearly dry saline season (Dewan 2020).

This siltation and salinisation is also affected by India's diversion of freshwater through the Farakka barrage that has increased salinity of Ganges flows since the 1970s (Government of Bangladesh 1976; Khan et al. 2015) and the conversion of agricultural land into saltwater tiger-prawn farms that salinize soil and water since the 1980s (Bernzen, Jenkins, and Braun 2019). In order to address flooding as the monsoon rains and dry seasons are expected to shift with climatic change, silt management of the delta and long-term solutions against waterlogging that increase the water-retention capacities of rivers and canals is of urgent importance to help sustain agrarian livelihoods.

Displacement from riverbank erosion

Floods and silt capture the geological feature of the Bengal delta that accretes and erodes. The Ganges River has meandered eastwards for millennia eroding land,

Figure 2. Embankment and raised banks due to siltation. Photo by Author.

riverbanks and now flood-protection embankments as it changes its course while creating new lands (Brammer 2012). This held an important role in shaping land revenue policies from Mughal to colonial times (Dewan 2021b). O'Malley (1908) writes '… the streams are constantly eating away on one bank and depositing on the other, until the channel in which they formerly flowed becomes choked up'. Riverbank erosion swallows up land into the river. This is not a new phenomenon causing vulnerability in the Bengal delta, recognising how land was swallowed up by the rivers. As a senior government official in Bangladesh's water sector stated: 'you cannot correlate climate change [directly] with riverbank erosion … The delta is in a formation stage, it eroded in the past, it's eroding now, and it will continue to erode in the future as well'[6] (Figure 3).

Riverbank erosion (*nodi bhangon*) is damaging and disruptive; ruining water-sided road cum embankments causing those who live on top, or outside, the embankment to lose their homes and move away. My interlocutors in Nodi perceived riverbank erosion as part of the course of the river – this displacement is one they had seen for generations, resulting in people having to migrate. Such erosion is increasingly cast as being *caused by* climate change where Western media and the aid industry portray these erosion-displaced peoples as 'climate refugees' (McDonnell 2019; Nikitas 2016), their land 'swallowed by the river' (Montu 2020). A short-term environmental shock like riverbank erosion does not itself constitute climatic change (Bernzen, Jenkins, and Braun 2019) nor are riverbank displaced peoples necessarily climate migrants (Lewis 2010). Such a climate reductive translation of migration deflects attention away from the fact that riverbank-induced displacement forms part of a wider political problem of regular land loss in a context of land fragmentation and a growing population. Labelling this as 'climate-induced' makes it difficult to properly discuss the long-term political solutions of equitable and pro-poor land settlement that forms part of contemporary agrarian struggles in Bangladesh.

Misreading gendered vulnerabilities

Reproductive support, intimate relations and migration to brick kilns

Lipi is a divorced single mother living with her elderly mother and adolescent daughter in Lonanodi. She was particularly upset over the roads project ending since migration was not an option for her. Her elderly mother could not take care of her daughter on her own, nor could she rely on her older brothers' wives who lived in the same homestead compound. She also expressed strong fear of migrating:

> I have never migrated. I'm too afraid to go to an unknown place as a lone woman. *Kharap* [bad, spoiled] things can happen to me. I will never do it! What if someone kidnaps me or if I get lost and cannot find my way back again? It's too terrifying, I won't do that, I'd rather die poor, at home.

Thus, she tried to get irregular work in Lonanodi, struggling to ensure that her daughter could continue studying rather than being married off.

[6]Bangladeshi researchers I met stated that up until 2015 there had been no conclusive study confirming that climatic change is exacerbating *nodi bhangon*.

Figure 3. Riverbank erosion in Satkhira district January 2015. Photo by Author.

Lipi lives in southwest coastal Bangladesh – a region portrayed by donors and NGOs as a place where migration is 'climate-related' and where women are particularly vulnerable to 'displacement' (World Bank 2009; UNDP 2019). In this section, I critically examine this misreading of gendered vulnerabilities by discussing how Nodi women's ability and motivations to migrate differ based on affective and intimate relations that help them navigate social reproduction in a context of both socio-economic and environmental vulnerabilities.

Furthermore, Lipi referred to brick kilns as places of illicit extramarital relationships and stated that she was above *kharap* behaviour. Her colleague Yasmine, on the other hand, regularly migrated to the brick kilns each year, spending six months there at a time. She was relaxed about the contract ending stating, 'Once the project ends, I will go to the brick kilns. I can earn a lot of money'. It was only after I left Bangladesh that she introduced me to her *bariwallah* [colloq. husband] on the phone. As a divorced single mother, she was now in a new relationship in a society that condemns extra-marital romantic relations. In the brick kilns, she and her partner could live as 'husband and wife' – a practice of 'temporary marriages' also common in the Bengal jute factories of Calcutta more than a century ago, where women would symbolically marry a man as protection from other men (Curjel 1923). Similar to how migration to brick kilns may be romantically motivated in India (Shah 2006), the privacy of remote brick kilns in Bangladesh provide the opportunity for an alternative life. For Yasmine, who was married off when she was twelve and divorced when her daughter was only a few months old, this romantic relationship was one that she chose for herself as an adult woman. It provided an important incentive for migration, while ensuring personal security among strangers in patriarchal spaces – her choice to

migrate was affective and thus not 'climate-induced' or due to environmental pressures caused by shrimp farming.

While Lipi had no female relatives to leave her daughter with, and did not want to migrate alone, Yasmine lived with her mother in a female-headed household along with her many sisters and younger brothers' wives that could take care of her now adolescent daughter while she worked with her 'husband'. This illustrates how women's choices to migrate depends on their access to kinship-based reproductive support at home to take care of their children as well as personal contacts (incl. intimate relations) to facilitate migration.

The pull of Dhaka ready-made garments

Both Lipi and Yasmine in Lonanodi lacked educational qualifications and were limited to the informal sector, such as brick kilns. Dhaka's global textile industry, on the other hand, only employs workers above the age of eighteen with a secondary school certificate, incentivising villagers to allow their daughters to study longer. While landless families in Dhanmarti also migrated to brick kilns, villagers in Dhanmarti knew more people who could help them get jobs in Dhaka's Ready-Made Garment's industry. Bangladesh's garments industry received much negative attention after the 2013 Rana Plaza fire, but it remains one of the popular migration destinations in Bangladesh especially for poor women attracted to the higher urban wages (Seeley et al. 2006). They account for nearly two-thirds of the total employment (R. I. Rahman and Islam 2013; Jamaly and Wickramanayake 1996; Kabeer 2000). Dhaka RMG employs more than four million people and accounts for eighty per cent of Bangladesh's exports (Gardner and Lewis 2015, 177). In contrast to migration to the garment industry being a response to capitalist displacement like in the Caribbean (Werner 2016), landless women workers in Nodi, perceived work in Dhaka's RMG industry to hold a higher status compared to seasonal brickwork. Garments work is an employment (*chakri*) that requires full-time work throughout the year, where they can choose to earn more through paid overtime.

In Nodi, labour migration to Dhaka's RMG industries provided a stable, not-too-expensive, higher income opportunity to repay large microcredit debt, especially for families whose small businesses or migration abroad had failed. For example, Sunil is a young boy staying with his maternal grandparents in a village in Dhanmarti while his parents migrated to Dhaka RMG to pay off a microcredit loan for a failed poultry business. Rather than such rural-to-urban migration being climate-induced, or that these women workers are necessarily environmental migrants (McDonnell 2019; Evertsen and van der Geest 2019), this was a much coveted migration destination. Indeed, some of the landless single mothers in Lonanodi asked if I could help their daughters get work in the Dhaka RMG sector.

But these migration choices were not only economic. Salma was one of my closest interlocutors. At the time of my fieldwork, she was a divorced single mother in her mid-twenties living with her young daughter and divorced mother. Salma's father left them at an early age, and she grew up in the lush homestead compound of her maternal grandparents in Dhanmarti. At the age of 16, Salma went with a distant female 'relative' to work in the Dhaka RMG industry. As the earthwork project was ending, she was

considering re-migrating to Dhaka RMG, but this time with her new secret partner. Like in Yasmine's case, intimate relations shaped Salma's desire to migrate, while her kinship relations provided her with the reproductive support to raise her child in Nodi while she was working in Dhaka.

Migration to the gulf: social stigma as a key gendered vulnerability

These romantic choices are kept highly secret also due to the wider societal stigmatisation of working-class women without husbands, be they young and single, widows or divorcés/abandoned. In the past and present, unmarried/divorced/widowed women of poorer classes often faced social stigma when working outside side of the home. Women workers in the jute mills were increasingly seen as breaking rules of conduct for women and received negative treatment by their male colleagues (Engels 1996). By the 1920s, these women workers were deemed as social outcasts (Sangari and Vaid 1990) and were negatively described as 'disease-ridden', 'degraded' and engaging in open prostitution (Curjel 1923). Similarly, women migrating to Dhaka or the Middle East today are perceived to be engaging in sexual work/relations. Salma, who met her ex (and father of her child) while working in Dhaka, emphasised that she lived with a family with strict controls, not at girls' hostels:

> When you have six to seven girls living together in a *mess* [hostel], they can go wherever they want. They have too much freedom; they can go to parks and live like bachelors. No one asks what they are doing. They can stay out late at night, meet boys. There are various problems with these things; they can have [extra-marital] affairs.

Whether women migrate to brick kilns, to Dhaka's Ready Made Garment's sector or the Gulf, women who enter new spaces or leave home to work without a formal 'male guardian' are often perceived as *kharap* as they break social conventions of women's purity. Several of my interlocutors, including Lipi, described this type of normative stigma as a reason for why they would not leave Nodi for work.

Yet, Salma told me how three women from their village had already gone to the Middle East for domestic work via a locally based labour broker. The broker approached Salma and offered a two-year work contract in Oman. She knew the families receiving remittances were doing well. Despite her good relations to her maternal uncles and their wives, Salma pointed out: 'It is uncommon that brothers allow their sisters to inherit. We must plan for the day my grandfather is no longer here … we must save up money to buy our own homestead land we can live on'. Salma's 40-year-old divorced single mother Jhorna, worried about the [sexual] risks and Salma's safety, stating that Salma was too young and beautiful and that she would rather go in her place. The broker agreed and said the fee would only be 30,000 taka. Afterwards, Salma regretted the decision:

> Once we started the process of training, tickets and applying for passports, the cost went up to 50,000 taka. We have spent 80,000 taka in total. We feel cheated. We borrowed 60,000 taka and I used 20,000 taka of my own savings. Now my mother is crying daily. They're making her work in two homes rather than just one.

Jhorna struggled for the first few months and homesickness was a common issue for many of the men and women going to work abroad as they struggled to adapt, without

their kin, in a foreign country, surrounded by a foreign language and foreign foods. Salma confided that she will not recommend any woman to work in the Middle East as a domestic worker: 'It's better to be a beggar in Bangladesh, than indebted there'. Salma pleaded with Jhorna to stay another six months so that they could at least repay the loans taken to migrate. If Jhorna broke her contract and returned earlier, the journey to Oman would have been for nothing; they would not have acquired the savings needed to buy land and would be forced to migrate elsewhere (such as the Dhaka RMG sector) to repay their loans.

Among my interlocutors, climate or environmental reasons were never given as a cause of migration to the Gulf. Prior to my fieldwork, I mistakenly assumed that extreme poor women and female-headed households would not have the financial resources to migrate internationally as domestic workers.[7] Yet Salma and her colleagues did consider such options, borrowing from brokers to migrate. For example, Sahira a youthful and attractive divorced single mother living in her brother's homestead compound in Lonanodi village was considering an offer from her cousin's friend in Dhaka to help her get a job in Saudi Arabia after her earthwork project ended: 'I only have to pay 30,000 taka for a two-year contract, they will arrange the rest'. I recalled Salma and her mother's experience and the costs of visas and flights, none of which could be covered by a 30,000-taka fee.

Her colleagues pointed out that she did not know this *dallal* [broker] and began to discuss the risks of sexual exploitation of domestic workers abroad covered in the newspapers. Afrina, the oldest, was the most critical:

> We do not want to send our daughters/girls to Arab countries. They [the brokers] only want young and beautiful girls. We have read in the papers that these returned girls were tortured. Did you know that one of our Ministers said that when Bangladeshi girls are being exploited in Bangladesh, they might as well be exploited in Saudi and earn good money?

Arguably, concerns of sexual exploitation of women migrant workers can easily be co-opted where negative representations of women's sexuality as *kharap* collude with patriarchal framings that support the policing of women (see Bakare-Yusuf 2013). However, as out-of-pocket expenses for healthcare, education, labour broker and marriage/dowry costs increase and microcredit debt with it in a context of structural underemployment and inequitable access to land (Dewan 2021b), women must look farther afield. Such options include migration to seasonal brick kilns and rice mills, the Dhaka garment factories, as domestic workers both in urban areas and to the Middle East to provide for themselves and their families where romantic relations and kinship support both motivate and shape migration decisions.

Discussion and conclusion

Countries of the Global South have been subject to colonial powers and external actors (donors, corporations) intervening in their societies, economies – and their environments – for centuries. Development interventions such as embankments, brackish

[7]Research on Bangladeshi domestic workers migrating to the Middle East and South East Asia has already been long established (Gardner 1995; Siddiqui 2001). In recent years, the Government of Bangladesh has implemented incentives to recruit women to work abroad as domestic workers (Migrant Rights 2016).

tiger-prawn cultivation for exports and agrochemical-dependent high-yield agriculture fundamentally change and renders more vulnerable Bangladesh's deltaic wetlands, exacerbating risks to climatic change (Dewan 2021b). Development interventions supposed to help Bangladesh adapt to climatic change may actually worsen the social vulnerability that they are supposed to address by removing focus from how such socio-ecological vulnerabilities are compounded by the lack of state provision in an aid-dependent landscape. This in turn results in high out-of-pocket expenditure for healthcare, education and labour brokering costs – fuelling rural indebtedness.

Combining environmental history, political economy and historiographies of working class women in Bengal with long-term ethnography with landless single mothers in the southwest coastal zone of Bangladesh reveal how longstanding agrarian injustices and gender-based constraints contribute to migration choices. Such historically anchored ethnography yields insights into agrarian political economy which can be leveraged against simplified understandings of contemporary migration being *caused by* climate change. Any discussion on 'climate displacement' in agrarian worlds drastically changing due to environmental degradation and climatic change must also therefore take into account changing political economies and the importance of migration as a rural livelihood strategy. Labour migration continues to be important for Bangladeshis. Contrary to beliefs that Bangladeshi [Muslim] women are more sedentary and extra 'climate vulnerable', working-class women in Bengal have a history of migrating for work, especially divorcées and widows.

Attention to environmental history further sheds light on various forms of misreading of 'climate displacement' in Bangladesh, an iconic symbol of a 'climate change victim' that is portrayed as drowning in rising sea levels. Firstly, the long-term salinisation of arable lands by brackish aquaculture has contributed to rural hardship and outmigration since it was introduced to the coastal zone already in the early 1990s as its damages to embankments have further contributed to cyclone-related migration. Secondly, waterlogging floods are deeply entangled with man-made infrastructure impeding the drainage of monsoon rains. Thirdly, land being 'swallowed by the river' is due to river-bank erosion (rather than floods) and is a geological feature of the Ganges. By portraying river-bank displaced peoples, migrants from tiger-prawn producing villages and people suffering from waterlogging as 'climate refugees'-political solutions are ignored such as land-compensation schemes, stopping shrimp farming, and remediating the flaws of flood-protection embankments through tidal river management and regular canal excavation through rural employment schemes.

A healthy ecology is crucial for cottage-based crafts and rural livelihoods, where women in saline Lonanodi faced greater hardship than those in freshwater Dhanmarti. Yet, due to debt and high costs of living, women were migrating from both these unions. Like rural women in colonial times, lack of rural income motivated them to work outside the home and village. Though the jute industry is no longer as important as it once was, Dhaka's export-oriented garment industries resembles the Mughal textile industries by being one of the main employers of working class women, particularly those without adult male earners. In the 1920s and 1930s, agrarian crisis resulted in many women working as domestic workers in Bengali cities, today they go to the Middle East. But as this ethnography shows, women migrated not only due to environmental degradation, debt or aspirations to increase incomes but to also be with their

secret romantic partners. The ability of landless, divorced single mothers to migrate depended on their reproductive kinship support and their social relations that could help them migrate safely. Indeed, some women chose not to migrate due to the social stigmatisation of migrant women, especially those migrating to the Middle East as domestic workers or to Dhaka RMG – both high-income destinations.

To conclude, climate reductive translations of migration misread coastal vulnerabilities and the push factors of migration and ignore the heterogeneity of women and their differential agentive capacities, thereby failing to address policy solutions that remediate rural underemployment, floods, riverbank erosion and salinisation by aquaculture. By highlighting the disconnect between development policy discourses with everyday gendered lived experiences of socio-environmental agrarian vulnerabilities, this article contributes to the growing critical scholarship on climate adaptation, migration and development and 'agrarian worlds on the move'.

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