The right to ecology: Rohingya refugees and citizens contest over natural resources in Bangladesh

Md Reza Habib

Published online: 11 Apr 2023.

Submit your article to this journal ↗

View related articles ↗

View Crossmark data ↗

Routledge
Taylor & Francis Group

Check for updates

The right to ecology: Rohingya refugees and citizens contest over natural resources in Bangladesh

Md Reza HABIB

Doctoral School of Sociology, HSE University, Moscow, Russia

ABSTRACT

More than a million Rohingya have fled Myanmar to live in Bangladesh, mostly in Cox's Bazar district. The government has been praised worldwide for sheltering them, but this enormous influx has strained its limited resources. As the host communities struggle with the Rohingya for control over and access to the scarce natural resources they depend on for their livelihood — land, water, agriculture, and forests — tension and conflict arise. The host community members perceive that the government and aid agencies prioritize the Rohingya over the host communities in allocating resources, exacerbating their resentment. I argue that although both the locals and the Rohingya are poor and marginalized, as citizens, the locals have a stronger claim to environmental citizenship and rights to state resources. Any ecological policies taken towards the safeguarding of resource usage rights of the Rohingyas should also be inclusive and should give equal consideration to the local host community members.

Introduction

Discriminatory legislation, communal conflict, and violations of human rights have forced the Rohingya, an ethnic Muslim minority group in Myanmar, to seek refuge in the Middle East and Asian countries such as Thailand, Malaysia, India, Indonesia, and Bangladesh (Roy Chowdhury 2021). The Rohingya have crossed the border into Bangladesh on several occasions, including in 1978, 1991–1992, 2012, 2016, and 2017 (Kader and Choudhury 2019; Roy Chowdhury 2019). Although the country successfully carried out mass repatriations in 1978 and 1993–1997. Since the influxes in 1991–1992, approximately 33,000 Rohingya people have been officially recognized as refugees by the government of Bangladesh (Ahmed 2017), and have been housed in two registered camps in Cox's Bazar district (UNHCR 2007). In addition, around 100,000–200,000 unregistered Rohingya were reported to be residing among the host communities (UNHCR 2007). The Rohingya, who were living in and outside the camps, have been accused of degrading the environment and natural resources. A study demonstrates that about 80% of Rohingya were blamed for resource depletion either in the sea or hills (Rahman et al. 2013).

However, in August 2017, over 700,000 Rohingya arrived at Cox's Bazar, a southeastern district of Bangladesh (Roy Chowdhury 2020; Habib 2021). Bangladesh responded promptly; but the domestic policy advisory system for managing refugees in the country has encountered many obstacles as a result of the sudden and enormous arrival of Rohingyas (Roy Chowdhury 2019); several

---

makeshift camps were constructed by clearing huge amounts of forest land and vegetation nearby the existing refugee settlements of Kutupalong and Nayapara for newly arriving refugees (UNHCR 2022). The Bangladesh government allocated over 6,500 acres of land in the Ukhiya and Teknaf sub-districts of Cox's Bazar for settling them (ISCG et al. 2018). But Bangladesh identifies the Rohingya as "Forcibly Displaced Myanmar Citizens (FDMNs)[1]" instead of registering them as refugees (Hammer and Ahmed 2020; Roy Chowdhury and Abid 2022).

The arrival of the Rohingya radically changed the demographics of the Teknaf and Ukhiya sub-districts in Cox's Bazar district: the population of the Rohingya is now three times that of the locals, who feel like a minority in their own land (Yasmin and Akther 2019). The residential satisfaction of the host communities near the camps fell to 30.17%; they are unhappy that their neighborhood and society are crowded, polluted, unsafe, and insecure, and that the quality of public services has deteriorated (Biswas et al. 2021). The presence of the Rohingya has adversely affected farming and also environmental and natural resources like forests, land, water, wildlife, flora and fauna (Korobi 2021). The degradation and depletion of environmental and natural resources have been massive, threatening the livelihood and health of both host and refugee communities (UNHCR 2016).

The arrival of the Rohingya in Bangladesh has created a large-scale humanitarian crisis and drawn global attention and response (Mukul et al. 2019), but the international aid agencies and the Bangladesh government focus on the refugees (Khaled 2021) rather than the poor host community: they allocate 75% of life-saving assistance to refugees and 25% to locals. The Rohingyas are suffering more than the host communities and need more support. However, there are many more locals who live in poverty and they need assistance as well (Habib 2022). However, disparities in humanitarian benefits can exacerbate inter-group conflict (Anderson 1999). The host government plans to relocate about 100,000 Rohingya to Bhasan Char (a low-lying island)[2] to ease tensions between the two communities, around 28,000 Rohingyas have been relocated so far (UNHCR 2022).

Forced migration is not only a result of conflict; it is also a source of conflict between refugees and host communities (Martin 2005). The sudden establishment of refugee camps in an area leads to land degradation, clearing of forest vegetation, conversion of agricultural land to habitat, collection of firewood, surface and groundwater depletion, fishing, and hunting (Martin 2005). This environmental impact, and the competition over natural resources, has a socio-economic impact, and it constrains peace and cohesion in society (Gaffar 2018) and eventually deteriorates the relationship between the host community and refugees (Berry 2008).

In this paper, I investigate the emerging conflict between the refugee and host communities over natural resources in Cox's Bazar and how conflicts arise and destabilize society. The Bangladesh government has been praised worldwide for its prompt response to the Rohingya crisis, but aid agencies do not pay enough attention to the impact of the refugees' presence on local environmental and natural resources in the short or long term (Hammer and Ahmed 2020). Because the land on which the Rohingya live is not theirs, they do not share the concern of host communities for preserving environmental and natural resources. The impact of refugees on the environment and other resources has received little academic discussion, but the issue must be addressed (Black 1994). I argue that, therefore, there is a need to focus on refugee-host community resource conflict and related issues before designing any refugee policy about the rights to access resources. Any right to access and use of natural resources for the refugees should also benefit the local host community. I argue that although both the locals and the Rohingya are poor and both depend on scarce natural resources, the locals are citizens and therefore, ideally, should have an equal if not

stronger claim to these resources. Therefore, the ecological and environmental citizenship rights of the rural poor of Cox's Bazar should also be included and upheld in policy and practice.

Study area and methods

A million Rohingya now live in 34 temporary camps (including 2 registered camps) in, and within the host communities of Ukhiya and Teknaf, in the southeastern coastal area of Bangladesh. Refugees are physically enclosed by barbed wire fences and are not permitted to go out of the camps. The Rohingya population in these two upazilas (sub-districts) is now substantially higher than the local population (Sakamoto, Ullah, and Tani 2021). By October 2022, Ukhiya and Teknaf sub-districts were hosting over 943,000 Rohingya refugees (OCHA 2022). According to the 2014 Bangladesh Bureau of Statistics report, Ukhiya has a local population of 207,379, while Teknaf has 264,389. Both sub-districts are socio-economically challenged, with 33% of the population living in poverty (ISCG 2018). The influx of the Rohingya has increased poverty in Cox's Bazar by roughly 52%, according to a report of World Bank (2019).

The Kutupalong–Balukhali Rohingya camp, known as "Mega Camp," is the world's largest refugee camp, extending up to 1313 hectares (Hassan et al. 2018). The camp area is bounded on the north by Ramu and Naikhongchhari upazilas (sub-districts), on the east by the Rakhine state of Myanmar, and on the west and south by the Bay of Bengal (Ministry of Environment and Forests, UNDP Bangladesh, and UN WOMEN Bangladesh 2018). Ukhiya-Teknaf is made up of 147 villages, organized into 11 unions and one municipality (paurashava) spread over 557 square kilometers (55,700 hectares) (Karim and Zhang 2021; Ullah et al. 2021).

Furthermore, Cox's Bazar is vulnerable to natural calamities such as cyclones, sea storms, and tidal bores (Karim and Zhang 2021). Due to the limited space and local geological formations, the Rohingya are settled in hilly areas, which are extremely vulnerable to landslides and flash floods (Hammer and Ahmed 2020).

I collected the primary data for this paper from Ukhiya and Teknaf. I used a qualitative approach and purposive sampling to pick the respondents. A purposive sampling technique was applied to identify eligible respondents, and to deliberately select specific characteristics or situations of interest. In 2021, between July and October, I conducted about 20 in-depth interviews with members of the host communities, Rohingyas, government and non-government officials, local journalists, environmentalists, and community leaders. All respondents' names are mentioned anonymously in this study, along with demographic data and organizational affiliation.

To understand the recent settings and evidence, I reviewed and analysed several secondary sources, such as the academic literature, news articles, policy documents, online news portals, other relevant online sources, and project reports published by the UNHCR, Office for the Coordination of Humanitarian Affairs (OCHA), and local NGOs.

Natural resource conflicts and environmental rights of citizens

Natural resource conflicts

Material and natural resources are finite in every society; "conflict results from purposeful interaction among two or more parties in a competitive setting" (Oberschall 1978, 291), and the struggle for access to and control over limited resources results in conflict between and among groups, institutions, organizations, and communities (Johnson 2008). Elen Turner defines the struggle of

ethnically different communities to gain access to natural resources as "resource conflicts" (Martin 2005). Resource conflicts arise when a group that controls a resource deprives other groups of access to that resource or damages the resources those groups rely on for their livelihood (Le Billon 2008). Disputes over environmental and natural resources are called "environmental social conflicts."

Both the abundance and scarcity of resources contribute to violence, inequality, conflict, and instability in society (Bayramov 2018). Resource scarcity has a positive and contested relationship with conflict. Malthus claimed that the human population grew rapidly, while food production increased only at a linear rate (Mildner, Lauster, and Wodni 2011). Neo-Malthusians argue that the gap between population growth and natural resources is unusual, and this unusual gap ultimately leads to despair, rebellion, and conflict (Bayramov 2018). Following the neo-Malthusian perspective, and if the demand of the larger population exceeds the supply of natural resources, population growth is assumed to contribute to decreasing access to natural resources, eventually boosting competition over resources and leading to conflict for survival (Mildner, Lauster, and Wodni 2011).

Homer-Dixon (1999) points out that resource scarcity can cause three forms of conflict: inter-state (conflict between states over limited resources), group identity (scarcity leading to migration, causing ethnic conflict and competition with the host community), and insurgency (scarcity that creates economic deprivation and triggers conflict). The struggle for limited natural resources may strengthen group identities and trigger hatred against out-groups (Martin 2005). Refugees have little access to income-generating activities and they utilize natural resources unsustainably (Jacobsen 1997). The resources in Cox's Bazar were limited even before the Rohingya arrived, and the host communities in Teknaf and Ukhiya feel that their government ignores them and forces them to compete with the refugees (Khaled 2021). This feeling has strengthened the communities' own identity, stirred up anti-refugee sentiment, and led them to regard themselves as a group (the in-group or citizens) distinct from the refugees (the out-group or non-citizens) despite their cultural, linguistic, and religious similarities.

Refugees are frequently regarded differently within the framework of citizenship. The term "citizenship" is defined in the Marshallian sense, encompassing the three core components: civil, political, and social rights. According to Marshall (1992, 28), "Citizenship is a status bestowed on those who are full members of a community. All who possess that status are equal with respect to the rights and duties with which the status is endowed …" In Marshall's theory, "community" was just as significant in this way as citizenship. In the case of Cox's Bazar, the host communities consist of the Bengali Muslim community, the religious minorities, and the indigenous people, all of whom are considered to be citizens of Bangladesh under the constitution (Kamal 2022).

In Western liberal democratic countries, refugees and immigrants are treated equally with citizens; but, in the majority of developing nations, many citizenship rights are withheld from refugees, who are also labeled as "other" (Kibreab 2003). According to Tully (2003, 517), "'identity politics' refers to comprises struggles over the appropriate forms of legal, political, and constitutional recognition and accommodation of the identities of individuals, immigrants and refugees … ;" this recognition and accommodation of identity are connected to the larger principles of justice, freedom, human rights, and democratic citizenship (Eisenberg and Kymlicka 2011). A wide variety of identity groups are politicized on the basis of gender, color, language, ethnicity, indigeneity, religion, and sexual orientation (Gamson 2009; Eisenberg and Kymlicka 2011). Tully (2003) further states that struggles can take many different forms. Along with the recognition of their identity, minorities often struggle against exploitation, dominance, and inequality to protect their languages,

cultures, ethnicities, and religions. Appiah (2005, 2006) outlines various ways of "identity politics," the most important of which are: political disputes over who is in and who is out; identities can be mobilized by politicians; states can treat people differently depending on their identity; people can engage in recognition politics, and more. Laclau (1994, 2) claims that all social conflicts must be taken into account not only from the standpoint of competing claims but also from the viewpoint of the social identity loss that the conflict would bring about.

The government of Myanmar has politicized the Rohingya people's identity based on their culture, language, ethnicity, and religion, which has led to their exclusion from citizenship rights since 1982; every ethnic group is free to choose its name and means of self-identification (Washaly 2019); a Muslim minority group living in Rakhine state calls themselves "Rohingya," despite allegations from Buddhist nationalists. However, the state treats Rohingyas as "them" or "other," outsiders or illegal Bengali immigrants; in contrast, the Rohingya refugees in Bangladesh are labeled as "Myanmar nationals" (Farzana 2016). The denial of legal and constitutional recognition by the state has rendered the Rohingya population stateless, undermining their sense of identity. The Rohingyas still struggle over their identity and to regain their citizenship rights through legal and constitutional recognition from the government of Myanmar.

Millions of people in developing and less developing nations rely on environmental products and services for their economic well-being, and they often lack the financial, material, and human capital resources to mitigate the effects of environmental scarcities (Homer-Dixon 1999). By analysing sixteen cases, Homer-Dixon (1994) developed a theoretical model that claims scarcity is caused by three factors: degradation and depletion of natural resources such as agro-land, forests, water, and fish stocks; population growth and/or high living standards, which contribute to rising demand; and unequal distribution of resources. All three elements have the potential to cause conflict amongst groups. In the context of Bangladesh, it is evident that Cox's Bazar district has experienced significant demographic pressures due to the influx of Rohingyas, including national and international organizations in 2017. A lot of arable lands, hills, and forests are occupied to build housing, roads, drainages, sewerage facilities, local markets, and administrative facilities. As a result, a vast number of lands, forests, mountains, and water sources have been destroyed, considerably increasing the scarcity of natural resources (Rashid et al. 2021); the demands of both refugees and local groups on the scarce natural resources resulted in disparity in their distribution. As a result of such disparity, conflict inevitably emerges between two or more groups.

A number of studies have reviewed the impact of refugees on natural resources and the resulting conflicts with the host community, mostly in African countries (Black 1994; Maxwell and Reuveny 2000). In the context of South Asia and particularly Bangladesh, however, there is no significant study on these issues.

Environmental citizenship and environmental rights

Environmental citizenship, Dobson (2003) argues, needs to be defined in terms of the state-citizen relationship. Citizenship refers to a feeling of belonging to a particular group of people or geographically defined territory, and which comes with a series of rights and duties (Pallett 2017). Citizens exercise their rights and duties to conserve and improve the environment because they have a profound connection to it. Environmental citizenship is concerned with contractual rights and entitlements in the public sphere, which necessitates the expansion of rights-based discourse to incorporate environmental rights. According to Dobson (2010, 6) "environmental citizenship behavior can be defined as a pro-environmental behavior in public and private, driven by a belief

in the fairness of the distribution of environmental goods, in participation, and in the co-creation of sustainability policy." The concept of environmental citizenship can be viewed as a subset of environmental rights demands. There is a form of reciprocal relationship between citizens who recognize a responsibility to protect the environmental rights of others (Humphreys 2009). According to Julian Agyeman and Bob Evans' (2005, 186) viewpoint, environmental citizenship is not an especially helpful term for political action. They say that the only way for the concept of environmental citizenship to gain ground is to place it in the context of environmental justice (Latta 2006). The notion of environmental justice mainly focuses on the issue of distributive justice. Bullard and Johnson (2000, 559) describe as follows: "The environmental justice framework rests on developing tools and strategies to eliminate unfair, unjust, and inequitable conditions and decisions … " The entire population is impacted when the natural environment is degraded, not just the citizens or refugee community. Refugees frequently experience the same struggles as other marginalized populations in their new host countries (Darling 2017). Environmental justice-based policies and practices should be based on the idea that everyone has an equal right to protection, and that environmental burdens should be distributed equally. Then, when we acknowledge that everyone is at risk, we must attempt to pinpoint the social groups that are most adversely affected (Yildiz 2022).

Ecological citizenship, on the other hand, is founded on the concept of the ecological footprint and deals with non-contractual responsibilities, as Dobson explains. Citizens who occupy an unsustainable quantity of other people's ecological space owe it to them to lessen their ecological footprint (Humphreys 2009). When legal rights and principles are utilized to legitimize the demands of individuals and groups for a fair share of ecological space, these types of citizenship strengthen each other (Humphreys 2009).

Environmental rights are rights that communities have over natural resources. The environment plays an important part in the lives of communities. The connection between the environment and human rights is undeniably important, and humans may be privileged to a certain level of environmental well-being as a fundamental right (Lewis 2012). Human rights and the environment are linked, resulting in a rights-based approach to environmental protection that prioritizes the individuals impacted by environmental degradation. Environmental protection is mentioned as a potential means of achieving human rights (Pathak 2014). The right to a clean and safe environment, the right to act to protect the environment, and the right to information, access to justice, and involvement in environmental decision-making are all covered by environmental rights. There is no universal definition of environmental rights. Environmental rights are defined from an eco-centric (environment first) standpoint, whereas human rights are mostly anthropocentric (humans first) (Otubu 2010). Environmental degradation is a violation of human rights, because the environment directly influences human conditions (Otubu 2010). Article 11 of the International Covenant on Economic, Social and Cultural Rights ICESCR (1966) guarantees to all individuals the right to "an adequate standard of living … including adequate food, clothing and housing, and the continuous improvement of living standards." However, environmental degradation such as pollution, deforestation, and land degradation may create a shortage of clean water sources and inadequate food and nourishment. This deterioration can lead to a violation of the social and cultural rights of a community or individual (Lewis 2012). The environment's preservation, conservation, and restoration are essential components of a safe and healthy environment that can be incorporated into the core of human rights protection (Cullet 1995).

Another important principle is the right of people to self-determination, which concentrates on the rights to govern lands and natural resources in their ancestral territories as well as the right to

determine how they use them. People under colonial occupation, indigenous peoples, and all inhabitants of an independent state are all recognized as having rights to natural resources under international law. Local communities have the right to determine and set priorities for the use of their lands, territories, and other resources, according to the principle. The state's decisions on land allocation and natural resource development may have a negative impact on local communities (Wenar and Gilbert 2021). Therefore, the rights of the poor citizens of Cox's Bazar are equally important to that of the refugees, and in the case of Bangladesh, it is per-haps (or should it be) more important than the rights of the Rohingya, as Bangladesh does not recognize refugees.

Global refugee – host community conflicts over natural resources

A wide range of studies has reviewed the impact of refugees on natural resources and the resulting conflicts with the host community. Migration may trigger tensions and conflict between locals and outsiders over limited natural resources (Black 1994; Maxwell and Reuveny 2000). The severity of the environmental impact of refugees is determined by the type of settlement they make at a given location; and their settlement patterns establish the parameters of the relationship developing between the locals and refugees (Jacobsen 1997). The arrival of a massive number of refugees degrades the environment and depletes natural resources (Clark 2008; World Bank 2010).

Locals in Kenya reported that refugees cut down forest trees to build shelters and for firewood (Kumssa et al. 2014). Refugees are responsible for deforestation and the extinction of tree species on farms in Ethiopia's northwestern Tigray region (Mekonen and Muluberhan 2020). The existence of Nigerian refugees in northern Cameroon's Minawao camp contributes to increased deforestation; nearly 43 tons of wood are used per day. To encourage communities and refugees to use alternative energy cookstoves, the UNHCR has initiated a reforestation campaign both inside and outside of the camps. As a result, only 2.8 percent of refugees have access to such alternative energy sources, implying a low success rate (Groupe URD 2017).

By policy, refugees in Nakivale, Uganda, have merely user rights to land, but boundaries are unclear, land ownership is undecided, and refugee land allotment is badly handled. The refugees displace the residents and settle in their gardens, where they collect firewood and crop remains to serve as home energy sources (Ronald 2020), and they want to farm the ground where the locals' cows and goats graze (Frank 2013).

In Ghana, the host communities accuse the refugees of cultivating their land and collecting firewood, thus destroying the environment. The host communities assert that the land belongs to them, not to the refugees. Using environmental resources is the root of more than half the conflicts. Conflicts over transport fares and service costs, as well as anti-social behavior such as smoking in public areas, are becoming more common in the region (Agblorti and Grant 2021).

Water shortages for both refugees and the host population may occur as a result of increased demand for water in refugee camps; this influence on water supply and quality might have serious health consequences for both communities, as well as pollute groundwater and soils (Black 1994). Refugees in western Tanzania are blamed for destroying the environment and natural resources; water supplies are being depleted, the land is being eroded, and agricultural production is being damaged as a result of the rising demand for surface and groundwater (Berry 2008). The inflow of Syrian refugees has boosted the demand for water by 40% in Jordan's northern governorates, resulting in a severe water shortage. Sewage networks and treatment plants are also under strain (Breulmann et al. 2021). In Lebanon, for example, most NGOs are allowed only to carry water

in on trucks, not connect the Syrian refugees to the existing water network. The refugees receive 2.4 million gallons of water every day. The wastewater is discharged directly into rivers and the soil, contaminating it significantly and depleting the water table (Groupe URD 2017).

Wild animals have moved away from their natural habitats due to deforestation in and around the camps (Berry 2008). To supplement the little food they receive, refugees have been known to indulge in large-scale hunting and, in some cases, poaching wildlife (Chitereka 2008). In East Africa, a lack of meat in refugee rations has sparked a thriving illegal trade in wild meat, endangering the wildlife population and posing a food security challenge for rural areas. In many refugee camps, illegally procured wild meat is exchanged and cooked after dark, and is referred to as "night-time spinach" (Traffic 2008).

Rohingya – host community conflicts over natural resources

The locals of Cox's Bazar used to depend exclusively on agriculture and forest resources for their livelihood, but the Rohingya are accused of destroying the diversity of natural resources and increasing the population. However, the locals' perception is that the host government and aid agencies support the Rohingya much more than the locals, and this disparity leads to conflict between the two communities.

The presence of the Rohingya refugees in the camps and surrounding areas negatively affects the environment and natural resources, including deforestation, land degradation, water resource depletion, rapid biomass reduction, loss of vegetation and species, damage to wildlife habitats and increased mortality risks of wildlife, cutting of hills, and soil erosion (Hammer and Ahmed 2020; Khaled 2021). The poorest residents of the host communities, who depend on these resources, are damaged by the numerous relief operations and refugee camps established by aid organizations, in addition to the usage of natural resources by the refugees (Khaled 2021). The host community will be burdened by any form of environmental damage. The Rohingya refugees were blamed for causing issues in the host communities, reported by 94% of households in the host areas (Ullah et al. 2021). Over 70% of locals think Rohingyas are causing environmental problems (Jerin and Mozumder 2019).

Forests

Ukhiya and Teknaf are biodiverse areas; gurjan (Dipterocarpus turbinatus) trees dominate the tropical evergreen and semi-green forests in deep and shaded valleys (Mowla and Hossain 2021). Most of the large makeshift camps were established in Kutupalong and Balukhali, and other areas in Cox's Bazar, by clearing over 3,000 hectares in Ukhiya, Whykong, and Teknaf of vegetation and trees and using these to build settlements and for fuelwood. Between 2017 and 2019, thirty-four camps were set up; nearly 79.57% of the vegetative cover was lost in the area, and 14% of the vegetative cover in Ukhiya-Teknaf vanished overall, according to satellite-based monitoring results (Karim and Zhang 2021).

About 92% of the local households in Cox's Bazar rely solely on firewood for cooking (UNDP 2018a) and on forest resources for firewood, medicine, and food. The Rohingya, particularly women and children, collect fuelwood from the forests and sell it at the local market (Ministry of Environment and Forests, UNDP Bangladesh, and UN WOMEN Bangladesh 2018); only 1% obtain fuelwood from aid agencies and 33% purchase it from local marketplaces – 65% collect it from the surrounding forests (International Organization for Migration [IOM] 2017). It is claimed

that almost 1.67% of the forest area in Cox's Bazar, and 0.05% of the total national forest area, have been destroyed (Ansar and Md. Khaled 2021; Babu 2020; Khatun and Kamruzzaman 2018). Teknaf Wildlife Sanctuary, Himchari National Park, and Inani National Park — all biodiversity areas popular in Cox's Bazar — are threatened on account of population growth, the movement of the Rohingya, and the construction of housing, schools, water supply, and sanitation facilities (Ministry of Environment and Forests, UNDP Bangladesh, and UN WOMEN Bangladesh 2018; Dekrout 2018). Assistant Forest Officer, Teknaf sub-district, says:

> Since the arrival of the refugees, the forest classification has changed, and the water level has also dropped a lot, and the canals have been filled to make way for new houses. The environmental system has been destroyed. Nearly 8,000 acres of land in Teknaf and Ukhia have been occupied and destroyed. Rohingya cattle are damaging local gardens, causing locals to quarrel with them. (Interview, July 21, 2021)

Many poor locals have lost their livelihoods and have had to change them. The tension between the two communities over forest resources is escalating. A Rohingya (camp 17, block-A) says:

> Since we had no land to live on after we came from Burma (now Myanmar), we had to cut trees and hills to build our houses, for which the locals now blame us. Where do we go with the family? We stay here because we have nowhere else to go. It is true that many trees and hills have been cut down because of us, but now, people from the CIC office and NGOs are encouraging us to plant trees next to houses instead of cutting down hills. (Interview, August 13, 2021)

Land and agriculture

About 40% of the entire land area of Bangladesh is forested, and unsuitable for farming; the corresponding figure for Cox's Bazar is more than 60% (UNDP 2018a). The terrain in Bangladesh may be wet, forested, mountainous, coastal, flat land, and all types may be found over a small area (Mowla and Hossain 2021). The cultivable land was insufficient even before the refugees arrived, and agricultural production was low, food prices high, and the economy insecure (Khaled 2021).

The Bengalis, Rakhaines, Chakmas, and Rohingyas co-exist in this region. The main sources of income for locals were collecting forest resources, fishing, agriculture, business, and daily labor work (Mowla and Hossain 2021). The system of land ownership in the forest and mountain areas of Bangladesh is distinctive: the poor local people can often lease these plain forest lands from their respective government offices at a minimal price. Residents are unable to utilize their agricultural land, particularly those living nearby the camps. Arable lands have been encroached upon by the rapid expansion of settlements across the refugee camps. Locals initially believe that the refugees will stay on their arable land just temporarily. However, they are now unable to drive the refugees from their lands. Marginalized people rely heavily on these lands for their livelihood. According to a study, around 20% of those who once earned from the local forest have changed their livelihood options (Ansar and Md. Khaled 2021).

But within six months of the arrival of the Rohingya in 2017, nearly 100 hectares of cropland in Teknaf and Ukhiya were spoilt. Humanitarian agencies have occupied almost 76 hectares of arable land (UNDP 2018a) for establishing warehouses, branch offices, and relief operations. Hotels and resorts have been constructed on much arable land, as well as urban and tourism facilities, aquaculture and salt farming, human settlements, shrimp hatcheries, and facilities for fishing and processing dry fish (Ministry of Environment and Forests, UNDP Bangladesh, and UN WOMEN

Bangladesh 2018). According to a study, the built-up/disturbed areas (artificial and natural events such as construction, logging, and landslides) in the whole Teknaf peninsula increased by 6825 ha until May 2021, especially in comparison to the 2015–2017 period (Sakamoto, Ullah, and Tani 2021).

Earlier, the people of the host communities, especially those living near camps, could use this land for small-scale crop production, betel nut/leaf cultivation, and other homestead agroforestry. But now they have lost ownership and cannot cultivate their land anymore, and many agricultural workers are forced to work for low wages at local markets and in the camps. An inhabitant of Ukhiya, says:

> "We gave our land to the Rohingya, but they cut down our trees. Additionally, we can't now cultivate these lands. Earlier we could raise cattle; now we can't. If we keep our cattle for grazing, they are stolen." (Interview, August 15, 2021)

Water (ground and surface) resources

Cox's Bazar district is a dry zone and has low water resources. The groundwater contains a high level of arsenic and salinity (Ministry of Environment and Forests, UNDP Bangladesh, and UN WOMEN Bangladesh 2018). The locals rely on little streams of water that flow from the region's hills and terrain.

Over 5,700 deep tube wells were installed in the camps after the arrival of the Rohingya in 2017 (UNDP 2018a), but the excessive drawing of groundwater by locals and refugees for drinking and washing has increased the water crisis in Teknaf and Ukhiya, and the shortage of groundwater may increase the conflict over the use of water resources. The excessive dependency on groundwater has depleted the water resources in Ukhiya and Teknaf. The water level around the camp areas is reported to have fallen 5–9 meters (UNDP 2018a). A Community leader says:

> The water levels in our Teknaf and Ukhiya upazilas have significantly decreased. Water from tube wells is no longer available. Water from surrounding canals is also no longer drinkable and has been polluted owing to camp waste. (Interview, Teknaf, September 10, 2021)

The construction of camps and new roads has clogged the canals and streams, and the locals cannot use the surface water to irrigate their land; besides, the drainage facilities are insufficient, and the surface water is contaminated. Local environmental activist says:

> The environment in Ukhiya and Teknaf has been disrupted by excrement, rubbish, and various types of waste from the Rohingya camp. Many canals have been filled. There is no solution to this situation, even after informing the local administration many times. If Rohingya camp waste is not properly managed now, more than half of the land in this area will become uncultivable. (Interview, Ukhiya, October 15, 2021)

The improper disposal of solid waste is a severe strain; the nearly 10,000 tons of surplus solid waste a month is contaminating the surface water and polluting the air (UNDP 2018b; ISCG et al. 2018). An NGO official says:

> The large number of Rohingya people living together is definitely affecting the environment. We are making the Rohingyas aware not to live in dangerous places and working with the Rohingyas to keep the camp environment clean and healthy. (Interview, Ukhiya, September 26, 2021)

Heavy rainfall pollutes the surface water sources and spreads waterborne diseases as both communities depend on ponds, canals, small water streams, and the Naf river for their daily activities.

There are few sources of fresh water in the Teknaf area, increasing the tension (Halim et al. 2021). A Rohingya (camp 8, block-B) says:

> When we came here, there was no designated place to dump the garbage; we could not keep this garbage in the house, and next to the house, we were forced to throw it in canals, drains, and on other people's land. Because of this, we used to quarrel with the locals; the locals blamed us for destroying their land, but we had no choice. (Interview, October 10, 2021)

Wildlife resources

In Ukhiya-Teknaf, 11,615 hectares of forest land have been designated as a wildlife sanctuary (Karim and Zhang 2021). More than 63.8% of the wildlife — wild elephants, deer, wild boar, monkeys, birds, squirrels, red jungle fowl, and many types of snake — live in the Teknaf peninsula and Ukhiya forest area (Ministry of Environment and Forests, UNDP Bangladesh, and UN WOMEN Bangladesh 2018). Teknaf Wildlife Sanctuary (TWS) is home to 538 plant and wildlife species (Mannan 2017), including a huge number of Asian elephants from Bangladesh, as well as other endangered species that often contact refugees (Dekrout 2018). Over 25% of the country's elephants live here. But the presence of the Rohingya is a problem because the construction of camps creates food shortages, reduces their habitats, and disturbs breeding. There is a high possibility of conflict between humans and wildlife (Rashid et al. 2021; Mowla and Hossain 2021). The wildlife is at risk of being hunted by the locals and the Rohingya. A local journalist says:

> Teknaf's Nature Park used to be home to a wide variety of wildlife, many locals and tourists from outside used to come here to see them, but now they are gone. Due to overcrowding, the animals have become unsuitable for living and roaming here. (Interview, Teknaf, September 14, 2021)

Important elephant pathways have been destroyed as a result of the arrival of the Rohingya and the subsequent human settlements at Cox's Bazar (Sakib 2021). Around 14 elephants slipped into traps and died, or were electrocuted to death, according to forest officials and reports, and another three were killed in unclear circumstances. On one occasion, elephants entered the camps and devastated the settlements; 13 Rohingya died and almost 50 were injured (Rahman 2019).

Hill cutting, soil erosion, and stream congestion

Hills are degraded when hills or slopes are cut, forests cleared, roads developed at mountainous locations, and jhum (Agriculture practice of slash and burn) agriculture practised. The Rohingya, NGOs, and government agencies cut most of the hills over 4,000 acres of land in Teknaf and Ukhiya to build houses at the camps (Quader et al. 2021; Ministry of Environment and Forests, UNDP Bangladesh, and UN WOMEN Bangladesh 2018). A local government representative says:

> Although the Rohingyas have been given shelter here for humanitarian reasons, it has become unbearable in the current situation. Land is being grabbed and hills are being cut down every day for housing construction. No one is accepting any complaints from the locals. (Interview, Ukhiya, August 25, 2021)

A Rohingya (camp 17, block-D) says:

> My family has a total of 10 members, but the accommodations we were given only allowed for 3, which was insufficient. The majhi (community leader) didn't let us cut the mountain, but I had no choice. (Interview, September 10, 2021)

The vegetation was found in the Teknaf-Ukhiya-Himchhari area (Halim et al. 2021). Cutting the hills has eroded the soil and caused sedimentation and siltation; the eroded soil may hamper streamflow, increase water pollution and water scarcity, and result in the loss of habitats (Dekrout 2018). Almost 21 canals and streams in the area are now fully polluted (Hammer and Ahmed 2020). Vegetation cannot grow on the hills, and deforestation has exacerbated the risk of landslides and inland floods in the camp areas (Mahmud 2017; Quader et al. 2021).

Out of 27.76% of the settlements in the Kutupalong RC and Kutupalong extension campgrounds, 0.35% are at risk of landslides and 9.61% are at risk of floods (Quader et al. 2021). The foothills, where the poor and landless live, are especially prone to landslides (Ahmed et al. 2020). Around a million people in the Chittagong Hill Districts (CHD) are at risk of landslides, including Rohingya refugees, their host communities and urbanized hillside populations (Ahmed 2017).

Discussion and conclusion

Over a million Rohingya live in Bangladesh, most in camps at Cox's Bazar district. Their presence has increased the demographic pressure, particularly in the Ukhiya and Teknaf sub-districts, and raised the demand for resources and livelihoods. But the supply is extremely limited, and the competition for control over and access to resources has accelerated the conflict between the host communities and the Rohingya. This struggle for limited natural resources reinforces local communities' identities while also inciting anti-Roghingya animosity. The Bangladesh government and aid agencies provide the Rohingya protection, food, shelter, and other life-saving assistance — more than the locals — and this inequity escalates tension between them and ultimately leads to conflict.

Most locals depend on natural resources for their livelihood. Natural resource scarcity has been created in Cox's Bazar for several reasons, including degradation of forest, land, and agriculture, rising demand of an additional population, and finally, unequal distribution of resources. The competition for natural resources — fuelwood, land, construction materials, clean water, and wild food — is a matter of immediate concern. The well-being of both the host and Rohingya populations is at risk from deforestation and firewood depletion, land and vegetation degradation, unsustainable groundwater exploitation, water pollution, hunting and killing species, cutting hills, and converting agricultural land to habitat, resulting in conflict between two communities, as explained by Homer-Dixon.

The concepts of "citizenship" and "environment" might be related. Ecological or environmental citizenship can be defined by the combination of the claiming of rights and the fulfilling of duties in order to secure justice. In addition, it is related to the development of ecological and political identities. Citizens have the right to take part in the environmental policy-making process as well as the right to access and consume environmental resources. Citizens are therefore regarded as the main actors who can play an important role in reducing the abuse of the resources that they inherited; but their environmental rights can be threatened by the state and powerful interest groups.

Locals' rights are being violated as a result of deterioration. Locals of Cox's Bazar believe that it is their obligation as citizens of this country to protect their environment and natural resources from degradation and depletion, as well as to provide a safe and clean environment for their communities that addresses environmental and human rights. Furthermore, local communities also have the right to select and determine priorities for the use of their lands, territories, and other resources in accordance with international law's rights to self-determination. But most aid agencies

focus more on life-saving programs rather than on the adverse effects on the environment and natural resources that threaten the livelihoods of the poor locals.

There is a gap in the execution of the policy that has been made to control the movement of Rohingyas. New strategies are required to address the stress on the environment and its implications for the refugee and host communities. The host government and its international aid partners should propose a medium- and long-term plan and allocate resources to address these issues. UN agencies and INGOs should assist the host government in determining how refugees can fit into their national environmental policy.

I recommend several actions:

(1) Determine the most severely affected locations and strive to restore them.
(2) Involve both communities in social forestry, reforestation, and soil and mountain management activities, and link these activities to livelihood programs.
(3) Ensure the engagement of Rohingyas in environmental and natural resource awareness activities.
(4) Embed environmental education into the curricula of capacity-building programs.
(5) Local environmental and natural resource protection groups must ensure active participation and cooperation in the formulation and implementation of environmental policies.
(6) Community vigilance teams run by local governments, citizens, and organizations should be set up to protect the environment and natural resources.
(7) Provide an adequate supply of alternative sources of fuel.
(8) Improve sanitation, drainage, and soil restoration initiatives.
(9) The canals and drains that have been clogged with waste and trash from the Rohingya camps must be cleaned up.
(10) Set up water treatment plants to make the Naf River's water more accessible to both communities.
(11) To establish a favorable environment for wildlife habitat and movement, as well as to enforce the Wildlife Conservation Act.
(12) Appropriate funding and allocation to give local farmers a boost.
(13) To take an active role of local government and the civil societies in preventing hill cutting and upholding effective law enforcement.
(14) To protect the local environment and natural resources, the UN and international organizations must take on more projects and increase funding.
(15) Improve group consultation and coordination.
(16) Persuade all the stakeholders to resolve conflict and promote social cohesion.

Every citizen's environmental rights are extremely vital. Citizens have a unique knowledge of the environmental concerns that affect their communities. Degradation of a community's environment and natural resources is regarded as a violation of human rights. They have the right to safeguard the environment since they are citizens. Despite limited resources, both locals and refugees are dependent on them because they are economically poor. The host government and UN agencies must adopt policies that preserve locals' environmental rights while still allowing refugees to access natural resources. At the same time, caring for the human rights of the refugees is also of supreme importance. The government must find a balance between these two in policy and practice so that discontent and conflict between these groups can be mitigated.

Notes

1. Despite not being a signatory to the 1951 Geneva Convention on Refugees and its 1967 Protocol, Bangladesh has adopted ad hoc policies to handle the humanitarian crisis and manage the Rohingya refugees. According to its national policies, the Bangladesh government registered these Rohingya as "Forcibly Displaced Myanmar Nationals (FDMNs)" after the influx in 2017. The UN agencies refer to this community as Rohingya refugees in accordance with the relevant international convention, including the responsibilities for the countries of origin and asylum (Inter Sector Coordination Group [ISCG], 2018).
2. Bashan Char is a large silt island in the Bay of Bengal and belongs to Noakhali district. According to the plan, a total of 1,440 buildings, including 120 cyclone shelters, have been constructed to relocate refugees from Cox's Bazar (The Business Standard 2019). It is claimed that the island is vulnerable to cyclones and flooding. Initially, the United Nations was concerned about the safety of refugees, their access to necessities, and the sustainability of the socioeconomic system and its environment; however, they are now aiding refugees.

Notes on contributor

Md Reza Habib is a PhD research student in sociology at the Doctoral School of Sociology of the HSE University in Moscow, Russia. He worked with several national and international research organizations. In addition, he has taken part in a variety of national and international conferences, workshops, and seminars. His main research interests are migration, refugees, gender, the environment, and community media. He holds an MPhil degree in Anthropology from the University of Dhaka, Bangladesh.

References

Agblorti, Samuel K. M., and Miriam Grant. 2021. "Revisiting the Host–Refugee Environmental Conflict Debate: Perspectives from Ghana's Refugee Camps." *Canadian Journal of African Studies / Revue Canadienne Des Études Africaines* 55 (1): 141–159. doi:10.1080/00083968.2020.1799830.

Agyeman, J., and B. Evans. 2005. "Justice, Governance, and Sustainability: Perspectives on Environmental Citizenship from North America and Europe." In *Environmental Citizenship*, edited by A. Dobson, and D. Bell, 185–206. Cambridge, MA: MIT Press.

Ahmed, Bayes. 2017. "Community Vulnerability to Landslides in Bangladesh." PhD diss., UCL (University College London). https://discovery.ucl.ac.uk/id/eprint/1572567/.

Ahmed, Bayes, Md. Shahinoor Rahman, Peter Sammonds, Rahenul Islam, and Kabir Uddin. 2020. "Application of Geospatial Technologies in Developing a Dynamic Landslide Early Warning System in a Humanitarian Context: The Rohingya Refugee Crisis in Cox's Bazar, Bangladesh." *Geomatics, Natural Hazards and Risk* 11 (1): 446–468. doi:10.1080/19475705.2020.1730988.

Anderson, Mary B. 1999. *Do No Harm: How Aid Can Support Peace–or War*. London: Lynne Rienner Publishers.

Ansar, Anas, and Abu Faisal Md. Khaled. 2021. "From Solidarity to Resistance: Host Communities' Evolving Response to the Rohingya Refugees in Bangladesh." *Journal of International Humanitarian Action* 6 (1): 16. doi:10.1186/s41018-021-00104-9.

Appiah, Anthony. 2005. *The Ethics of Identity*. Princeton: Princeton University Press.

Appiah, Kwame Anthony. 2006. "The Politics of Identity." *Daedalus* 135 (4): 15–22. https://www.jstor.org/stable/20028068

Babu, Kudrat-E-Khuda. 2020. "The Impacts and Challenges to Host Country Bangladesh Due to Sheltering the Rohingya Refugees." *Cogent Social Sciences* 6 (1): 1–16. doi:10.1080/23311886.2020.1770943.

Bangladesh Bureau of Statistics. 2014. *Bangladesh Population and Housing Census 2011: Community Report (Zilla: Cox's Bazar)*. Dhaka: Statistics and Informatics Division (SID), Ministry of Planning.

Bayramov, Agha. 2018. "Dubious Nexus between Natural Resources and Conflict." *Journal of Eurasian Studies* 9 (1): 72–81. doi:10.1016/j.euras.2017.12.006.

Berry, Leah. 2008. "The Impacts of Environmental Degradation on Refugee-Host Relationships." *African Security Review* 17 (3): 125–131. doi:10.10520/EJC47448.

Biswas, Bangkim, Bishawjit Mallick, Nasif Ahsan, and Rupkatha Priodarshini. 2021. "How Does the Rohingya Influx Influence the Residential Satisfaction and Mobility Intentions of the Host Communities in Bangladesh?" *Journal of International Migration and Integration* 23: 1311–1340. doi:10.1007/s12134-021-00886-2.

Black, Richard. 1994. "Forced Migration and Environmental Change: The Impact of Refugees on Host Environments." *Journal of Environmental Management* 42 (3): 261–277. doi:10.1006/jema.1994.1072.

Breulmann, Marc, Manfred van Afferden, Anwar Al-Subeh, and Roland Müller. 2021. *Influx of Syrian Refugees in Jordan | Effects on the Water Sector.* https://www.researchgate.net/publication/349141468_Influx_of_Syrian_Refugees_in_Jordan_Effects_on_the_Water_Sector.

Bullard, Robert D., and Glenn S. Johnson. 2000. "Environmentalism and Public Policy: Environmental Justice: Grassroots Activism and Its Impact on Public Policy Decision Making." *Journal of Social Issues* 56 (3): 555–578. doi:10.1111/0022-4537.00184.

Chitereka, Christopher. 2008. "The Impact of Regurees on the Environment: The Case of Africa." *Rajagiri Journal of Social Development* 4 (1): 1–14.

Clark, William A V. 2008. "Social and Political Context of Conflict | Forced Migration Review." *Climate Change and Displacement.* https://www.fmreview.org/climatechange/clark.

Cullet, Philippe. 1995. "Definition of an Environmental Right in a Human Rights Context." *Netherlands Quarterly of Human Rights* 13 (1): 25–40. doi:10.1177/016934419501300103.

Darling, Jonathan. 2017. "Forced Migration and the City: Irregularity, Informality, and the Politics of Presence." *Progress in Human Geography* 41 (2): 178–98. doi:10.1177/0309132516629004.

Dekrout, A. 2018. "A Precarious Environment for the Rohingya Refugees." *UNEP.* http://www.unep.org/news-and-stories/story/precarious-environment-rohingya-refugees.

Dobson, Andrew. 2003. *Citizenship and the Environment.* Oxford: OUP Oxford.

Dobson, Andrew. 2010. "Environmental Citizenship and Pro-Environmental Behaviour Rapid Research and Evidence Review." London: Sustainable Development Research Network. https://silo.tips/download/environmental-citizenship-and-pro-environmental-behaviour-rapid-research-and-evi.

Eisenberg, Avigail, and Will Kymlicka. 2011. *Identity Politics in the Public Realm: Bringing Institutions Back In.* Vancouver: UBC Press.

Farzana, Kazi Fahmida. 2016. "Life along the Naf Border: Identity Politics of Rohingya Refugees in Bangladesh." In *Myanmar's Mountain and Maritime Borderscapes: Local Practices, Boundary-Making and Figured Worlds*, edited by Su-Ann Oh, 283–305. Singapore: ISEAS.

Frank, Ahimbisibwe. 2013. "The Effect of Land Conflicts on the Livelihoods of Refugees: Implications for Refugee Protection in Uganda." *Research Journal of Social Science and Management* 3 (6): 19–28.

Gaffar, A. B. D. U. L. 2018. "Approaching The Rohingya Crisis: CALLING FOR A SECURITY GOVERNANCE FRAMEWORK." *World Affairs: The Journal of International Issues* 22 (1): 98–121.

Gamson, Joshua. 2009. "The Dilemmas of Identity Politics." In *The Social Movements Reader: Cases and Concepts*, edited by Jeff Goodwin, and James M. Jasper, 354–362. Chichester: Wiley-Blackwell.

Groupe, U. R. D. 2017. *Implications of Refugee Settlements on the Natural Environment and on Refugee and Host Community Resilience - Summary Case Studies: Lebanon and Cameroon (August 2017) - Cameroon.* https://reliefweb.int/report/cameroon/implications-refugee-settlements-natural-environment-and-refugee-and-host-community.

Habib, Md Reza. 2021. "The 'Stateless' Rohingya in Bangladesh: Crisis Management and Policy Responses." *Asian Politics & Policy* 13 (4): 577–596. doi:10.1111/aspp.12611.

Habib, Md Reza. 2022. "Rohingya Refugee–Host Community Conflicts in Bangladesh: Issues and Insights from the 'Field.'" *Development in Practice* 1–11. doi:10.1080/09614524.2022.2090516.

Halim, Md. Abdul, Sumiya Majumder Rinta, Md. Al Amin, Azmira Khatun, and Adnan Habib Robin. 2021. "The Environmental Implications of the Rohingya Refugee Crisis in Bangladesh." *Asian Journal of Environment & Ecology* December: 189–203. doi:10.9734/ajee/2021/v16i430269.

Hammer, Leonard, and Saleh Ahmed. 2020. "Environmental Responsibility and Rohingya Refugees: Potential Grounds for Justice." *Local Environment* 25 (11–12): 1021–1031. doi:10.1080/13549839.2020.1849078.

Hassan, Mohammad Mehedy, Audrey Culver Smith, Katherine Walker, Munshi Khaledur Rahman, and Jane Southworth. 2018. "Rohingya Refugee Crisis and Forest Cover Change in Teknaf, Bangladesh." *Remote Sensing* 10 (5): 689. doi:10.3390/rs10050689.

Homer-Dixon, Thomas F. 1994. "Environmental Scarcities and Violent Conflict: Evidence from Cases." *International Security* 19 (1): 5–40. doi:10.2307/2539147

Homer-Dixon, Thomas F. 1999. *Environment, Scarcity, and Violence. Environment, Scarcity, and Violence.* Princeton: Princeton University Press. doi:10.1515/9781400822997.

Humphreys, David. 2009. "Environmental and Ecological Citizenship in Civil Society." *The International Spectator* 44 (1): 171–183. doi:10.1080/03932720802693101.

ICESCR. 1966. "International Covenant on Economic, Social and Cultural Rights." OHCHR. https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights.

Inter Sector Coordination Group (ISCG). 2018. *JRP for Rohingya Humanitarian Crisis—March to December 2018 HumanitarianResponse.* https://www.humanitarianresponse.info/en/operations/bangladesh/document/jrp-rohingya-humanitarian-crisis.

International Organization for Migration (IOM). 2017. *Bangladesh: Needs and Population Monitoring - NPM R7 Report, December 2017 - Bangladesh.* https://reliefweb.int/report/bangladesh/bangladesh-needs-and-population-monitoring-npm-r7-report-december-2017.

ISCG. 2018. *Support to Bangladesh Host Communities and Institutions in the Joint Response Plan for the Rohingya Humanitarian Crisis.* https://reliefweb.int/sites/reliefweb.int/files/resources/20180526_host_communities.pdf.

Jacobsen, Karen. 1997. "Refugees' Environmental Impact: The Effect of Patterns of Settlement." *Journal of Refugee Studies* 10 (1): 19–36. doi:10.1093/jrs/10.1.19.

Jerin, Mst Ismat, and Muhammad Kamruzzaman Mozumder. 2019. "Exploring Host Community Attitudes Towards Rohingya Refugees in Bangladesh." *Intervention* 17 (2): 169–173. doi:10.4103/INTV.INTV_27_19

Johnson, Doyle Paul. 2008. "Conflict and Competition: Analytical Conflict Theories at the Macro Level." In *Contemporary Sociological Theory: An Integrated Multi-Level Approach*, edited by Doyle Paul Johnson, 367–395. New York, NY: Springer. doi:10.1007/978-0-387-76522-8_14.

Kader, Mohammad Fazlul, and Anwar Hossain Choudhury. 2019. "Historical Background Of The Rohingya Refugee Crisis And The Implication Of Their Statelessness." *International Journal of Social Sciences and Economic Review* 1 (1): 8–15. doi:https://doi.org/10.9116/ijsser.2019.1.1.02.

Kamal, Mrittika. 2022. "Rohingya Influx: Impacts on Environment and Local Host Communities in Bangladesh." In *The Bangladesh Environmental Humanities Reader: Environmental Justice, Development Victimhood, and Resistance*, edited by Samina Luthfa, Mohammad Tanzimuddin Khan, and Munasir Kamal, 87–104. London: Rowman & Littlefield.

Karim, Md Fazlul, and Xiang Zhang. 2021. "Analysis of Vegetative Cover Vulnerability in Rohingya Refugee Camps of Bangladesh Utilizing Landsat and Per Capita Greening Area (PCGA) Datasets." *Remote Sensing* 13 (23): 4922. doi:10.3390/rs13234922.

Khaled, Abu Faisal Md. 2021. "Do No Harm in Refugee Humanitarian Aid: The Case of the Rohingya Humanitarian Response." *Journal of International Humanitarian Action* 6 (1): 7. doi:10.1186/s41018-021-00093-9.

Khatun, Fahmida, and Md Kamruzzaman. 2018. "Fiscal Implications of Rohingya Crisis for Bangladesh," October. https://think-asia.org/handle/11540/9494.

Kibreab, Gaim. 2003. "Citizenship Rights and Repatriation of Refugees." *International Migration Review* 37 (1): 24–73. doi:10.1111/j.1747-7379.2003.tb00129.x.

Korobi, Sadia. 2021. "Understanding Relationship between Host Community and Refugees: A Case Study of Brewing Environmental Conflict in the Cox's Bazar Rohingya Camps." *Academia Letters*., Article 2001. (https://www.burmalibrary.org/sites/burmalibrary.org/files/obl/2021-07-00-Understanding-relationship-between-host-community-and-refugees-en.pdf).

Kumssa, Asfaw, James Herbert Williams, John F. Jones, and Eric A. Des Marais. 2014. "Conflict and Migration: The Case of Somali Refugees in Northeastern Kenya." *Global Social Welfare* 1 (4): 145–156. doi:10.1007/s40609-014-0006-9

Laclau, Ernesto. 1994. *The Making of Political Identities.* London: Verso.

Latta, P. Alex. 2006. "Reading Environmental Justice as Citizenship." In *Annual Conference of the Canadian Political Science Association.* York University. https://www.cpsa-acsp.ca/papers-2006/Latta.pdf.

Le Billon, Philippe. 2008. "Diamond Wars? Conflict Diamonds and Geographies of Resource Wars." *Annals of the Association of American Geographers* 98 (2): 345–372. doi:https://doi.org/10.1080/00045600801922422.

Lewis, Bridget. 2012. "Environmental Rights or a Right to the Environment: Exploring the Nexus Between Human Rights and Environmental Protection." *Macquarie Journal of International and Comparative Environmental Law* 8: 36–47.

Mahmud, Faisal. 2017. "For the Rohingya in Bangladesh's Refugee Camps, Living Is Surviving." *The Wire*. https://thewire.in/rights/rohingya-bangladesh-refugee-camps.

Mannan, Abdul. 2017. "Saving Our Forests, and All Creatures Who Dwell in Them." *Dhaka Tribune*, sec. Op-Ed. https://archive.dhakatribune.com/opinion/op-ed/2017/02/03/saving-forests-creatures-dwell.

Marshall, T. H., and T. Bottomore. 1992[1950]. *Citizenship and Social Class*. London: Pluto Press.

Martin, Adrian. 2005. "Environmental Conflict Between Refugee and Host Communities." *Journal of Peace Research* 42 (3): 329–346. doi:10.1177/0022343305052015.

Maxwell, John W., and Rafael Reuveny. 2000. "Resource Scarcity and Conflict in Developing Countries." *Journal of Peace Research* 37 (3): 301–322. doi:10.1177/0022343300037003002.

Mekonen, Aregai, and Bedemariam Muluberhan. 2020. "Socio-Environmental Conflicts between the Refugee Populations and Their Host Communities: The Case of Eritrean Refugees in North Western Tigray, Ethiopia." *Environmental & Socio-Economic Studies* 8 (2): 54–62. doi:10.2478/environ-2020-0012

Mildner, Stormy-Annika, Gitta Lauster, and Wiebke Wodni. 2011. "Scarcity and Abundance Revisited: A Literature Review on Natural Resources and Conflict." *International Journal of Conflict and Violence (IJCV)* 5 (1): 155–172. doi:10.4119/ijcv-2852.

Ministry of Environment and Forests, UNDP Bangladesh, and UN WOMEN Bangladesh. 2018. *Report on Environmental Impact of Rohingya Influx*.

Mowla, Qazi Azizul, and Sharif Tousif Hossain. 2021. "Rohingya Settlements in Ukhia and Teknaf and Its Impact on the Ecosystem." *International Journal of Society Systems Science* 08 (01): 62–82.

Mukul, Sharif A., Saleemul Huq, John Herbohn, Ainun Nishat, A. Atiq Rahman, Raquibul Amin, and Farid Uddin Ahmed. 2019. "Rohingya Refugees and the Environment." *Science* 364 (6436): 138–138. doi:10.1126/science.aaw9474.

Oberschall, A. 1978. "Theories of Social Conflict." *Annual Review of Sociology* 4 (1): 291–315. doi:10.1146/annurev.so.04.080178.001451.

OCHA. 2022. *Rohingya Refugee Crisis*. https://www.unocha.org/rohingya-refugee-crisis.

Otubu, Akintunde Kabir. 2010. "Environmental Protection and Human Rights: An Overview of Current Trends." *SSRN (Social Science Research Network) Scholarly Paper*, Nigerian Journal of Public Law, 208–225. doi:10.2139/ssrn.1718380.

Pallett, Helen. 2017. "Environmental Citizenship." *In International Encyclopedia of Geography*, 1–10. doi:10.1002/9781118786352.wbieg0474.

Pathak, Puneet. 2014. "Human Rights Approach to Environmental Protection." *International Journal of Sustainable Development* 7 (1): 17–24. https://papers.ssrn.com/abstract = 2397197.

Quader, Mohammad Abdul, Hemal Dey, Md Abdul Malak, and Abdul Majed Sajib. 2021. "Rohingya Refugee Flooding and Changes of the Physical and Social Landscape in Ukhiya, Bangladesh." *Environment, Development and Sustainability: A Multidisciplinary Approach to the Theory and Practice of Sustainable Development* 23 (3): 4634–4658. doi:https://doi.org/10.1007/s10668-020-00792-0.

Rahman, Md. 2019. "Rohingya Refugee Crisis and Human vs. Elephant (Elephas Maximus) Conflicts in Cox's Bazar District of Bangladesh." *Journal of Wildlife and Biodiversity* 3 (3): 10–21. doi:10.22120/jwb.2019.104762.1057.

Rahman, M. Z., M. Tani, A. Z. M. M. Uddin, and S. M. A. Ullah. 2013. "Use of Information Sources in Maintaining Livelihoods by Rohingya Refugees around Teknaf Wildlife Sanctuary." *Journal of Agroforestry and Environment* 7 (2): 15–18.

Rashid, Kazi Jihadur, Md. Atikul Hoque, Tasnia Aysha Esha, Md. Atiqur Rahman, and Alak Paul. 2021. "Spatiotemporal Changes of Vegetation and Land Surface Temperature in the Refugee Camps and Its Surrounding Areas of Bangladesh After the Rohingya Influx from Myanmar." *Environment, Development and Sustainability* 23 (3): 3562–3577. doi:10.1007/s10668-020-00733-x.

Ronald, Mwangu Alex. 2020. "An Assessment of Economic and Environmental Impacts of Refugees in Nakivale, Uganda." *Migration and Development* 11 (3): 433–449. doi:10.1080/21632324.2020.1787105.

Roy Chowdhury, Arnab. 2019. "International-Domestic Linkages in a Developing-Country Context: The Case of the Rohingyas in Bangladesh." *Policy Studies* 40 (3–4): 303–319. doi:10.1080/01442872.2018.1557623.

Roy Chowdhury, Arnab. 2020. "An 'Un-Imagined Community': The Entangled Genealogy of an Exclusivist Nationalism in Myanmar and the Rohingya Refugee Crisis." *Social Identities* 26 (5): 590–607. doi:https://doi.org/10.1080/13504630.2020.1782731.

Roy Chowdhury, Arnab. 2021. "Against Unjust Laws: Civil Society Activism for the Rights of the Stateless Rohingya 'Boat People' in Bangladesh." *South Atlantic Quarterly* 120 (3): 670–676. doi:10.1215/00382876-9155381.

Roy Chowdhury, Arnab, and Ahmed Abid. 2022. "Treading the Border of (Il)legality: Statelessness, 'Amphibian Life,' and the Rohingya 'Boat People' of Asia." *Inter-Asia Cultural Studies* 23 (1): 68–85. doi:10.1080/14649373.2022.2026595.

Sakamoto, Maiko, Shah M. Asik Ullah, and Masakazu Tani. 2021. "Land Cover Changes after the Massive Rohingya Refugee Influx in Bangladesh: Neo-Classic Unsupervised Approach." *Remote Sensing* 13 (24): 5056. doi:10.3390/rs13245056.

Sakib, SM Najmus. 2021. "Settlements, Construction Threaten Bangladesh's Wild Elephants with Extinction." https://www.aa.com.tr/en/asia-pacific/settlements-construction-threaten-bangladeshs-wild-elephants-with-extinction/2332620.

The Business Standard. 2019. *An Inside Look at Bhashan Char – The New Home for Rohingyas*. https://www.tbsnews.net/rohingya-crisis/inside-look-bhashan-char-new-home-rohingyas.

Traffic. 2008. "Lack of Meat for Refugees Causing Large Scale Poaching - Burundi." Relief Web. https://reliefweb.int/report/burundi/lack-meat-refugees-causing-large-scale%C2%A0poaching.

Tully, James. 2003. "Identity Politics." In *The Cambridge History of Twentieth-Century Political Thought*, edited by Terence Ball, and Richard Bellamy, 517–533. Cambridge: Cambridge University Press.

Ullah, S. M., Kazuo Asahiro, Masao Moriyama, and Masakazu Tani. 2021. "Socioeconomic Status Changes of the Host Communities after the Rohingya Refugee Influx in the Southern Coastal Area of Bangladesh." *Sustainability* 13 (8): 4240. doi:10.3390/su13084240

UNDP. 2018a. *Impacts of the Rohingya Refugee Influx on Host Communities*. https://www.humanitarianresponse.info/en/operations/bangladesh/assessment/impacts-rohingya-refugee-influx-host-communities.

UNDP. 2018b. *Solid Waste Management Essential to Save Cox's Bazar [EN/BN] - Bangladesh*. https://reliefweb.int/report/bangladesh/solid-waste-management-essential-save-cox-s-bazar-enbn.

UNHCR. 2007. *Bangladesh: Analysis of Gaps in the Protection of Rohingya Refugees*: 8–38.

UNHCR. 2016. *A Critical Time for Refugees and Their Environment (Again)*. https://www.unhcr.org/innovation/critical-time-refugees-environment/.

UNHCR. 2022. *UNHCR's Grandi Urges Redoubled Support for Rohingya Refugees, Host Communities in Bangladesh*. https://www.unhcr.org/news/press/2022/5/628e04824/unhcrs-grandi-urges-redoubled-support-rohingya-refugees-host-communities.html.

Washaly, Najeeb. 2019. "Rohingya: The Identity Crisis." Ceutal: Ecos de La Academia.

Wenar, Leif, and Jeremie Gilbert. 2021. "Fighting the Resource Curse: The Rights of Citizens Over Natural Resources." *Northwestern Journal of Human Rights* 19 (2): 30–79.

World Bank. 2010. *The Impacts of Refugees on Neighboring Countries: A Development Challenge*. https://elibrary.worldbank.org/doi/abs/10.159627710.

World Bank. 2019. *Bangladesh Poverty Assessment Facing Old and New Frontiers in Poverty Reduction*. Washington: World Bank Group. https://documents1.worldbank.org/curated/en/793121572582830383/pdf/Bangladesh-Poverty-Assessment-Facing-Old-and-New-Frontiers-in-Poverty-Reduction.pdf.

Yasmin, Lailufar, and Sayeda Akther. 2019. "The Locals and the Rohingyas: Trapped with an Uncertain Future." *Asian Journal of Comparative Politics* 5 (2): 104–120. doi:10.1177/2057891119865021.

Yildiz, John Hasan. 2022. "Environmental Justice for Refugees in Host Countries: How Syrian Refugees Are Disproportionately Harmed by Air and Water Pollution in Lebanon." CMI - Chr. Michelsen Institute. https://www.cmi.no/publications/8403-environmental-justice-for-refugees-in-host-countries.