

Rohingya Refugee Presence Makes the Environment Fragile in Cox's Bazar District

By Nour Mohammad

Policy Brief Series No. 121 (2020)

1. Introduction

Refugee-related environmental impact is an emerging threat to environmental sustainability and development. In Bangladesh, the recent influx of Rohingya refugees from Rakhine State has led to an over-exploitation of the local environment and biodiversity that is bound to reduce the natural resources to the detriment of local communities. This policy brief explores viable solutions to protecting the environment and natural resources from this harm which has negatively affected both the protected critical forest area, and the livelihood of the host communities in Cox's Bazar. The presence of the displaced Rohingyas poses a grave threat to the ecological balance in the region of Cox's Bazar.

Every South Asian country is familiar with the displacement of Rohingyas. Its impact is not limited to a particular country – it will also affect the other countries in the wider region. In light of this, states should work collectively and share the burden of this unprecedented crisis to minimize its impact to a level that could be controlled by any individual state. In this situation, the international community could play a major harmonising role, encouraging states to protect and prevent environmental decay caused by the massive concentration of Rohingya refugees in one small geographical area. For example, Bangladesh has struggled to do so, and has followed the principle of *non-refoulement* with regards to assisting Rohingya refugees and offering them protection, despite awareness of the negative effects of this refugee flow on the country now and in the near-future.

2. The Impact of Rohingya Refugees and Environmental Vulnerability in the Border Areas of Bangladesh

The Rohingyas – whose most recent collective flight to Bangladesh began on 25 August 2017, in response to the brutal use of armed force by the Myanmar military – have created an extra burden on the local communities and the environment. In the beginning, local people were sympathetic towards Rohingya refugees. But it seems that the situation is gradually changing due to the encroachment on the local population's lives, resources, livelihood and environment. The displaced Rohingyas have an impact on declining environmental stability, national security, and the socio-economic order of the country. These problems are commonly observed throughout Bangladesh, especially in the areas of Teknaf and Ukhiya pen-

insula of the Cox's Bazar District where the highest concentration of refugees is found.

Cox's Bazar is popular for its long sea beach and ecological atmosphere. Every year, tens of thousands of tourists visit this place to observe the beauty of the nature and nightfall. The two sub-districts Teknaf and Ukhiya are both ecologically sensitive and important areas. They are protected as wildlife sanctuary, where we find the oldest reserved forests of Bangladesh.¹ The wildlife sanctuary's forests have maintained the ecological balance in this region. Importantly, they contribute to the climate change mitigation process. The effects of any adverse environmental impact originating in the refugee camps therefore have a much wider reach than the local community.

Three years after the latest influx of Rohingyas from northern Rakhine, we cannot see any significant development as regards camp construction, infrastructure development, and basic service facilities. Over time, discontent has grown towards the Rohingyas related to their activities inside and outside the camps. The reasons voiced for such discontent are primarily indiscriminate destruction of public forests, land crops, and a sprawling refugee settlement in an environmentally sensitive area. The razing down of 4,300 acres of forest has severely affected ecologically critical areas of Bangladesh, as well as the welfare of the host communities.²

3. Positive and Negative Effects of the Refugee Influx

The rapid influx of Rohingyas has had both positive and negative effects on the host country, but the negative impact outweighs the positive. The positive effects relate to the economic assistance received, additional financial support, and infrastructure development. Importantly, the presence of the refugees has created employment opportunities for local people, that is, those who can speak the Chittagonian dialect.

The negative impacts are enormous, and relate to environmental security, national security, and crime such as human trafficking, prostitution, and production of fake travel docu-

¹ Unión Internacional para la Conservación de la Naturaleza ('IUCN'), "Community-based adaptation in the ecologically critical areas of Cox's Bazar: Teknaf Peninsula and Sonadia Island – through biodiversity conservation and social protection", 2011-2014 (available on its web site).

² "4,300 acres of hills, forests razed for Rohingya shelters", *The Daily Star*, 29 August 2019.

ments to enter other countries as Bangladeshi citizens.³ The prolonged presence of Rohingyas has significantly aggravated numerous environmental problems, such as shortage of food and water, lack of sanitation, desertification, soil erosion, loss of wildlife habitat, and loss of traditional livelihoods that increase the ecological risks from forest disintegration. These impacts will severely impinge on the local inhabitants and the socio-economic condition of the country.⁴

Refugee-related environmental problems are commonly seen in the refugee living areas due to the overcutting of trees for cooking, destruction of the landscape for settlement, and over-exploitation of agricultural lands. If the situation continues, unmitigated, in the same direction, it will become a serious challenge for Bangladesh. A report on the “Environmental Impact of Rohingya Influx”⁵ studied the critical impact of the 2017 influx of Rohingya refugees on the environmental security in Teknaf and Ukhiya of the Cox’s Bazar forest division area. The report recommended immediate mitigation, restoration and conservation in order to save the ecology and natural forestation. The report also identified eleven environmental impacts, of which six are physical and five are biological.⁶ The environmental effects related to the refugee presence are more severe and cumulative than the physical ones. These impacts could have long-term consequences and could constitute impediments to achieving sustainable development goals by 2030, rural development, and economic strengthening of the country.⁷ However, these consequences could be prevented by acting immediately, adopting an inclusive approach such as realistic planning and better site selection, and developing information, preparedness and consultation for the better safety of local and Rohingya people in the foreseeable future.

The vast majority of Rohingyas have been living in 34 congested camps at Taknaf and Ukhiya in the Cox’s Bazar District. The Kutupalong Balukhali expansion camp is the largest site, in which approximately 626,500 Rohingya are living. Most of them arrived between August and December 2017.⁸ The influx has deteriorated the environment as well as the human-wildlife balance, especially the wildlife sanctuary, Himchari National Park, the Inani protected area, and the Ukhiya forest area.⁹ Importantly, wild Asian elephants previously inhabited the Rohingya settlement areas, which is now barren and has lost this wild animal. The green hilly areas are probably going to turn into flattened stretches of red soil, capped by strap tents.¹⁰

Some scholars, such as Mbakem, has investigated the impact in light of the environmental and socio-economic spheres

between the local population and refugees.¹¹ Others, like Janny and Islam, have focused on the deforestation, inadequate living space for the Rohingyas, destruction of the forests for makeshift camps, collection of firewood for daily cooking, and on how these issues make the environment unstable and unhygienic for both human beings and animals.¹² The outcomes of deforestation, in the area of Ukhiya and Teknaf, include water deficiency, soil erosion, natural disasters and decreased forest wood.¹³ Deforestation also increases the risks for agricultural food production, natural resources and landslides in the region of Cox’s Bazar. The need to provide accommodation and other daily necessities and facilities for the refugees has created an extra burden on the host communities and the adjoining area.¹⁴ Adrian Martin’s¹⁵ view is that if the Rohingyas settle down in the area, the demand for essential commodities will increase, leading to demolition of agricultural land, lowering of the water level, negative impacts on fishing and hunting, and extra waste.

4. A More Detailed View of the Environmental Harm

Bangladesh has had the ultimate experience of climate change and displacement over several years. After the massive refugee influx of 2017, Rohingyas built temporary camps on 6,000 acres of government land that were areas of reserved forests and hills. According to Cox’s Bazar forest department, nearly 4,818 acres of reserved forest have been destroyed by the 2017 influx of Rohingyas. The damaged area includes both natural forests (58.5 %) and artificial forests (41.5 %).¹⁶ The environment of Bandarban district has been profoundly impacted by destruction of public forestation since 2017.

The primary reason has been the use of trees as firewood for daily household activities. Rohingya refugees collected more than 750,000 kg of timber,¹⁷ shrubbery and tree roots from the forest for their daily cooking fuel. The other two areas, the Teknaf and Ukhiya sub-district of Cox’s Bazar, where the majority of the Rohingyas live, require 700 tons of firewood per day. This wood is collected from the forest, leading to the loss of huge forest assets.¹⁸ Unless the question of energy supply is changed, the long-term presence of Rohingya refugees in this area is not suitable for Bangladesh.¹⁹ Table 1 shows the level of relevant deforestation.

¹¹ Evarist Anu Mbakem, “Population Displacement and Sustainable Development: The Significance of Environmental Sustainability in Refugee Host Relationship in Congo-Brazzaville Crises”, in *Journal of Asian and African Studies*, 2017, vol. 52, no. 3, pp. 363-377.

¹² Nahid Sultana Janny, and Mazharul Islam, “An Analysis of Refugee Problem in Bangladesh”, in *Asian Journal of Multidisciplinary Studies*, 2015, vol. 3, no. 3, p. 97.

¹³ MASAKAZU Tani *et al.*, “Characterization of Dwellers as a Major Agent of Deforestation in a Reserved Forest in Bangladesh”, in *International Journal of Environment*, 2014, vol. 14, no. 2, p. 26.

¹⁴ Sujit Kumar Datta, “Rohingya’s Problem in Bangladesh”, in *Himalayan and Central Asia Studies*, 2015, vol. 19, nos. 1-2, p. 136.

¹⁵ Adrian Martin, “Environmental Conflict between Refugee and Host Communities”, *Journal of Peace Research*, 2005, vol. 43, no. 3, p. 329.

¹⁶ Report, 2018, p. 68, see *supra* note 5.

¹⁷ *Ibid.*, p. 6.

¹⁸ S.M. Asik Ullah Tani Masakazu, “Fuelwood Consumption and Its Impact on Forests in the Teknaf Peninsula on the Southern Coast of Bangladesh”, in *American Journal of Environmental Sciences*, 2017, vol. 13, no. 3, p. 230.

¹⁹ Utpala Rahman, “The Rohingya Refugee: A Security Dilemma for Bangladesh”, in *Journal of Immigrant and Refugee Studies*, 2010, vol. 8, no. 2.

³ Didier Chaudet, “The Rohingya Crisis: Impact and Consequences for South Asia”, in *Journal of Current Affairs*, 2018, vol. 2, no. 2, p. 3.

⁴ *Ibid.*

⁵ See United Nations (‘UN’) Development Programme, UN Women, Ministry of Environment and Forests of Bangladesh, “Report on Environmental Impact of Rohingya Influx”, 2018, p. 19 (‘Report, 2018’).

⁶ *Ibid.*

⁷ Abdul Aziz, “Locals unhappy as Rohingya population grows in Cox’s Bazar”, *Dhaka Tribune*, 27 August 2017.

⁸ IUCN Bangladesh, “Community based adaptation in the ecologically critical areas of Cox’s Bazar – Teknaf Peninsula and Sonadia Island – through biodiversity conservation and social protection”, 2018 (available on its web site).

⁹ *Ibid.*

¹⁰ Mayesha Alam, “How the Rohingya Crisis is Affecting Bangladesh and Why it Matters”, *The Washington Post*, 12 February 2018.

Location	No. of refugees at site:	Occupied land (acres):	Destroyed project forest area (acres):	Destroyed natural forests (acres):	Losses in forest-ation projects:	Losses in natural forests:	Total loss (BDT mil.):
Kutupalong, Ukhiya	218,000	1,767.5	570.0	1197.5	508.9	1,019.1	1,528.0
Balukhali 1 and 2 Ukhiya	126,900	1,114.0	550.0	564.0	704.5	480.0	1,184.5
Balukhali Dhala, Ukhiya	63,000	310.0	152.7	167.3	136.3	13.4	149.7
Tajnimar Kholā, Ukhiya	56,250	451.0	192.5	258.5	199.1	220.0	419.1
Hakimpara Mokkarbeel, Jamtolce, Begghoa, Ukhiya	93,550	516.0	281.0	135.0	333.4	200.8	534.3
Shofillyakata (East and West), Ukhiya	13,000	201.2	92.5	108.7	96.2	92.5	188.7
Kerontoli, Chakmarkul, Teknaf	16,020	79.8	78.8	100.0	60.5	0.9	61.3
Putibunia, Teknaf	30,000	88.6	0.0	88.6	0.0	75.4	75.4
Nayapara, Teknaf	20,100	245.0	82.0	163.0	100.0	138.7	238.7
Leda, Teknaf	15,000	45.0	0.0	45.0	0.0	38.3	38.3
	651,820	4,818.1	1,999.5	2,917.6	2,139.0	2,279.1	4,472.7

Table 1: Deforestation due to large presence of Rohingya refugees.²⁰

The government of Bangladesh has not been able to provide all the necessary items and support to the overwhelmingly large Rohingya population at this time. Foreign and international aid agencies have helped Bangladesh to support and provide essentials to the Rohingyas since 2017. This has not extended to alternative fuel for daily cooking. The government of Bangladesh should try to provide alternative fuel to prevent the deforestation in the areas where Rohingya refugees are living, which can cause serious landslides.²¹

According to the Inter Sector Coordination Group report,²² local people undertook forestation for 10–50 years on a contract basis. They earned money from this, and also contributed to protecting the environment and ecological diversity. Since the refugees arrived, planted trees have been scraped off for shelter and cooking. Local people have not obtained any compensation from the government for their loss. The natural destruction naturally makes the local people unhappy and indignant towards the refugees. The pressure on the forests is detailed in Table 2.

Upazila:	Land acquired:	Lost forest assets:	Created forest assets lost:	Daily firewood need (in camps):
Taknaf	125 acres	BDT 50 Crore	BDT 3 Crore	50 tons
		USD 6 mil.	USD 0.36 mil.	
Ukhiya	5000 acres	BDT 500 Crore	BDT 235 Crore	650 tons
		USD 60.2 mil.	BDT 28.3 mil.	

Table 2: Impact on forests in Taknaf and Ukhiya Upazilas.²³

5. The Response of the United Nations High Commissioner for Refugees to Environmental Harm

The primary responsibility to minimize adverse environmental impact associated with refugees lies with the host country. National and international NGOs can integrate environmen-

tal concern into their policies, programmes and projects, and ensure that these are compatible with relevant international standards.²⁴ The United Nations High Commissioner for Refugees (‘UNHCR’) is the central international organization dealing with the well-being of refugees, including related environmental issues. Host governments and the UNHCR can work together to promote environmental protection and rehabilitation of refugee-populated areas by setting objectives, priorities and policies, by overseeing the design and implementation of environmental projects, through monitoring, and by co-ordinating the efforts of all concerned parties.²⁵

The UNHCR’s Environmental Guidelines²⁶ constitute a non-binding legal framework. The guidelines identify six categories of environmental impact in the host region, especially on the host communities. For instance, such impact can be ecological degradation, irreparable loss of forest resources, social impact, economic impact as well as impact on public health. These phenomena slowly make the region unstable and unhygienic, ultimately causing climate vulnerability. The Guidelines provide four basic principles: an integrated approach, fostering prevention before cure, cost-effectiveness, and local participation.

How these principles can work in a developing country such as Bangladesh, and what would be barriers for their effective implementation and adjustment in the host country, are matters of concern. Bangladesh should develop its policy to prevent damage and save the environment and natural resources from the consequences of hosting a very large refugee population.

6. Legal Perspectives on the Refugee-Related Environmental Crisis

There is no specific legal instrument to prevent the environmental damage due to refugee presence in a host country. At the national level, states adopt policies to comply with international agreements to prevent the environmental damage caused by their citizens. To prevent refugee-related environmental problems, all national and international environmental agencies need to be committed to working together with national governments to develop environmental policies that would not deprive refugees their basic rights.

The Convention on Biological Diversity²⁷ is the first global

²⁰ Forest Department, Cox’s Bazar; UN Development Programme, ‘Impacts of the Rohingya Refugees Influx on Host Communities’, November 2018.

²¹ Muhammad Zukhrufuz Zaman *et al.*, ‘Occurrence of Biogenic Amines and Amines Degrading Bacteria in Fish Sauce’, in *Czech Journal of Food Sciences*, 2010, vol. 28, no. 5, p. 443.

²² Inter Sector Coordination Group, ‘The Joint Response Plan for the Rohingya Humanitarian Crisis – Mid Term Review – March to December 2018’, 7 October 2018 (‘ISCG Report’).

²³ Forest Department, Cox’s Bazar; UN Development Programme, ‘Impacts of the Rohingya Refugees Influx on Host Communities’, *supra* note 20.

²⁴ UN High Commissioner for Refugees (‘UNHCR’), ‘UNHCR Environmental Guidelines’, June 1996.

²⁵ *Ibid.*, p. 13.

²⁶ *Ibid.*, p. 14.

²⁷ Convention on Biological Diversity, 5 June 1992 (<https://www.legal-tools.org>).

legally binding instrument that broadly addresses the preservation of biological diversity. States Parties can contribute well beyond their national jurisdictions. Based on this convention, Bangladesh could arguably seek international co-operation through regional and global channels to try to alleviate the serious environmental and biological damage caused by the presence of the massive presence of Rohingya refugees in the Cox's Bazar region.²⁸

States Parties have an obligation to “cooperate with other Contracting Parties, directly or, where appropriate, through competent international organizations” for the conservation and sustainable use of biological diversity.²⁹ Myanmar and Bangladesh are both States Parties to the convention, so Myanmar should offer to make an equitable contribution for the restoration of the biological and environmental damage caused by the Rohingyas arriving from Rakhine State as a result of the internal armed conflict there. However, this contribution probably could not meet the irreparable loss of the environment in Bangladesh, but could help to support reforestation in the same place. Both governments should be sincere and build a dialogue to come up with ways to reduce such impacts to a minimum acceptable level. Otherwise, Bangladesh will have to suffer in the long run, and Myanmar will not be able to escape its liability for the future degradation of the planet.

Besides this, a robust and long-term recovery plan will require minimizing the problem and saving the environment with support from the international community, international NGOs, and local administrations, as well as host communities and Rohingya refugees. The international community has so far seen the Rohingya crisis within an exclusively humanitarian context, not adequately considering the refugees' impact in the host country.

Article 18A of the Constitution of Bangladesh provides that the “state shall endeavour to protect and improve the environment and preserve and safeguard the natural resources, biodiversity, wetlands, forest and wildlife for the present and future citizens”.³⁰ This constitutional guarantee ensures the protection and preservation of the environment and natural resources in

the country. Besides this constitutional safeguard, the government of Bangladesh adopted some environmental policies and established the Environmental Court in every division to deal with the environmental offence under the Environment Conservation Act of 1995. Now the question is how these policies would be applied to the non-citizens or the forcibly displaced Rohingyas whose arrival poses a threat to the environment of the receiving country. In this regard, Bangladesh should be careful, pursuant to the humanitarian spirit in which it has received nearly one million Rohingya refugees on its territory, and not take any action against Rohingya refugees beyond what is provided for in international law and refugee law.

7. Conclusion

Refugee-related environmental problems are not a new thing that took place for the first time in Bangladesh. The same situation happened in eastern Democratic Republic of the Congo, in North and South Kivu, with the large influx of Rwandan refugees in 1994. Afghan refugees heavily impacted the environment in north-western Pakistan. Bangladesh has faced the same problem since 2017, after the arrival of a very large number of refugees on its territory. It is difficult to resolve refugee-related issues as an individual state, without involving international and regional actors. Appropriate and corrective measures should be taken to minimize environmental harm where refugees live, to make the areas liveable for future generations.

Bangladesh is trying to pursue a peaceful settlement of the Rohingya crisis through diplomatic channels, including bilateral, multilateral and regional approaches. It would be better for both Myanmar and Bangladesh to settle the issue for the sake of their economic stability, national security, and the environmental happiness of the region of South and Southeast Asia. It is high time to protect biodiversity and human lives in the areas of refugee camps in Cox's Bazar. The two governments and the UNHCR should work together to take adequate measures to settle down the Rohingya issue, and to save biodiversity and the natural resources of Bangladesh, regardless of the geopolitical interests in the background.

Nour Mohammad is Assistant Professor of Law at the Premier University of Chittagong, Bangladesh. He is also researcher and Ph.D. fellow at Western Sydney University, Australia. This policy brief reflects parts of the author's ongoing Ph.D. research project.

ISBN: 978-82-8348-159-4.

TOAEP-PURL: <http://www.toaep.org/pbs-pdf/121-mohammad/>.

LTD-PURL: <https://www.legal-tools.org/doc/ghzh9o/>.

[org/doc/oqo8f4/](https://www.legal-tools.org/doc/oqo8f4/)).

²⁸ Md. Mahatab Uddin, “Addressing Environmental Degradation caused by Rohingya Influxes in light of International Environmental Law”, *Dhaka Tribune*, 4 September 2019. The objects clause of the convention ensures the “fair and equitable sharing benefits arising from the genetic resources” (Conference of the Parties to the Convention on Biological Diversity, “Fair and Equitable Sharing of Benefits Arising from the Use of Genetic Resources”, UNED/CBD/COP/3/Inf.53, 15 November 1996). The Convention clearly stated the state responsibility “to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction” (Article 3).

²⁹ Convention on Biological Diversity, *supra* note 27, Article 5.

³⁰ The Constitution of the Peoples' Republic of Bangladesh 1972, Article 18A (introduced with the fifteenth Amendment in 2011) (<https://www.legal-tools.org/doc/ba1182/>).



Torkel Opsahl Academic EPublisher (TOAEP)

Via San Gallo 135r, 50129 Florence, Italy

URL: www.toaep.org

TOAEP reserves all rights to this publication. You may read, print or download the publication from www.toaep.org for personal use. You may not in any way charge for its use by others, directly or indirectly. Please ask if in doubt.