



# **Greening in Crisis: NGO Brokerage in a Depoliticised Humanitarian Space in Cox's Bazar**

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# Greening in Crisis: NGO Brokerage in a Depoliticised Humanitarian Space in Cox's Bazar

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## Abstract

Environmental degradation in the Rohingya refugee camps of Cox's Bazar has prompted extensive afforestation and reforestation initiatives led by NGOs and UN agencies. Yet the factors shaping the success or failure of these nature-based solutions (NbS) remain poorly understood. This study examines the challenges organisations face in implementing NbS in a highly regulated humanitarian setting and analyses how political, institutional, and social dynamics influence environmental interventions. Drawing on document analysis and semi-structured interviews with employees of the NGOs and UN agencies, the research explores the obstacles encountered, the strategies used to navigate constraints, and the role of government authorities in shaping project outcomes.

Findings show that the challenges are not generic forestry problems such as soil degradation, species-survival issues or technical planting failures. These problems arise from humanitarian governance structure of the camps. Limited land availability, overlapping mandates, short-term funding cycles and bureaucratic approval processes reflect deeper resource governance problem that undermine the long-term sustainability. NGOs and UN agencies employ coordination platforms, community engagement and cash-for-work schemes to address these constraints. But their efforts are shaped by donor-priorities, host-refugee tensions and political sensitivities surrounding extended refugee encampment specifically, government concerns that long-term environmental projects may be interpreted as supporting the long-term settlement of Rohingya refugees. Government institutions particularly the Bangladesh Forest Department, plays a vital role in determining species selection, regulatory compliance and project legitimacy.

Using the concepts of brokerage and the Anti-Politics Machine, the study shows how NGOs act as intermediaries negotiating among donors, authorities, and refugee communities, while political issues such as land scarcity and mobility restrictions are reframed as technical challenges. This depoliticization enables interventions to proceed but limits their transformative potential, reinforcing short-term, output-driven programming.

The research contributes to rural development and natural resource management by demonstrating how NbS are negotiated, constrained, and depoliticised in crisis-affected environments. It highlights the need for long-term funding, stronger coordination, meaningful participation, and recognition of the political dynamics that shape environmental interventions. These insights are relevant for designing more sustainable and context-sensitive NbS in humanitarian settings worldwide.

*Keywords:* NGOs, UN agencies, Reforestation, Rohingya Refugee, Cox's Bazar.

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# Abbreviations

Abbreviation	Description
NGO	Non-Governmental Organization
INGO	International-Nongovernmental Organization
UN	United Nations
FAO	Food and Agriculture organization
IOM	International Organization for Migration
WFP	World Food Program
UNHCR	United Nations high Commissioner for Refugees
LPG	Liquified Petroleum Gas
WASH	Water, sanitation and hygiene
MODM	Ministry of Disaster Management
PDC	Para Development Committee
NGOAB	NGO Affairs Bureau
GOB	Government of Bangladesh
ISCG	Inter Sector Coordination Group
CIC	Camp in charge
EEN	Energy and Environment Network
RRRC	Refugee Relief and Repatriation Commissioner
SEG	Strategic Executive Group
JRP	Joint Response Plan
CCCM	Camp Coordination and Camp Management

# 1. Introduction

Forced migration is widely recognised for its social and political significance and its ability to reshape environments (Castles, 2003). The gap between the scale of environmental degradation observed in Cox's Bazar Rohingya refugee camps and the limited understanding of how humanitarian actors navigate the complex institutional, political and ecological constraints on the ground has motivated the research. While refugees are often portrayed as resource degraders for their dependence on local forests for fuelwood and construction materials (Jacobsen, 1997), the governance structure, bureaucratic restrictions and power relations that shape environmental interventions in refugee settings are overlooked.

Since 2017 the Rohingya influx has intensified environmental pressures in Cox's Bazar Rohingya refugee camps. As rapid deforestation, land degradation and resource scarcity have been widely documented in Cox's Bazar Rohingya camps (Ahmed et al., 2018 & Dampha et al., 2022). These ecological impacts relate to regulatory barriers, movement restrictions and differing accountability requirements among UN agencies and NGOs, which complicate the implementation of environmental projects (USCRI, 2023 & Khan, 2023). These constraints show that the environmental crisis is not only ecological but also institutional and political.

Therefore, this research is important because it shifts attention from describing environmental decline to examining why environmental interventions particularly afforestation or reforestation as NbS (Nature-based Solutions) struggle to succeed in humanitarian contexts. The problem on the ground is not only the loss of forest covers but the obstacles that shape how environmental projects are negotiated, funded and sustained. As it is argued in the study that, the challenges are not technical or generic forestry issues such as soil degradation, seedling mortality or species-selection difficulties. These challenges are produced by the humanitarian governance structure that regulates land mobility and organisational mandates. By illuminating the everyday focus of the NGO and UN agency employees, this study seeks to reveal the practical, relational and

governance-level challenges that affect environmental restoration efforts in the Rohingya refugee camps, Cox's Bazar.

## 1.1 Research Problem and Aim of the Study

Humanitarian organisations are the primary actors responding to crises in refugee settings (Chkam, 2016), still they face numerous challenges including limited financial and technical resources (Khan et al. 2019) and the need to navigate interactions with actors at multiple levels (Clark, 2021). In Cox's Bazar Rohingya refugee camps, these challenges are compounded by bureaucratic restrictions and regulatory barriers (USCRI, 2023) that shape the implementations of afforestation or reforestations initiatives.

Therefore, this research addresses the complex social, political and institutional dynamics that influence the environmental conservation efforts in Rohingya camps Cox's Bazar. Although significant resources have been invested in restoration initiatives, NGOs and UN agencies continue to encounter obstacles that hinder effective and suitable implementation. Understanding these challenges is essential for improving environmental governance in refugee settings and for informing future response to sudden mass displacement elsewhere.

The aim of the study is to examine the hurdles faced by NGOs and UN agencies in implementing afforestation and reforestation projects in the Rohingya refugee camps, Cox's Bazar, Bangladesh. The thesis argues that the challenges faced by NGOs and UN agencies are not generic to afforestation or reforestation projects but are specific to the political and institutional structure of humanitarian governance in the particular context of Cox's Bazar Rohingya refugee camps, where interventions are shaped by regulatory constraints, donor priorities and complex power dynamics among stakeholders. It seeks to identify the institutional, social and ecological factors that shape these interventions and to explore the strategies used by practitioners to navigate constraints and engage communities. Thus, the research is guided by the following research questions-

1. What obstacles do NGO and UN agency workers face when initiating and sustaining afforestation projects in Cox's Bazar Rohingya camps?

2. What strategies do NGO and UN agency workers employ to overcome challenges and foster community engagement in reforestation at the camps in Cox's Bazar Rohingya camps?
3. How do the perception and involvement of local authorities influence the success or hindrance of NGO and UN agency-driven reforestation endeavours in Cox's Bazar Rohingya camps?

## 1.2 Literature Review:

Research consistently shows that forced migration has significant ecological consequences. The sudden arrival of large refugee population intensifies deforestation, soil erosion and water scarcity. Studies in Indonesia and Tanzania show that displacement accelerates deforestation through demand for fuelwood, shelter and agricultural land (Darmawan et al., 2016 & Berry, 2008). In Cox's Bazar the settlement of Rohingya refugees led to the clearance of more than 4,300 acres of forest, triggering biodiversity loss, rising surface temperatures and landslide risks (Abdul Halim et al., 2021 & Showmitra et al., 2023).

Environmental degradation in Cox's Bazar extends to water systems and soil quality. Groundwater depletion of up to nine meters has been recorded due to camp water extraction (Salam et al., 2012). On the other hand, severe soil erosion has caused over 700 landslides between 2019 and 2022 (Maksud et al. 2022). Vegetation loss has also intensified human-wildlife conflict particularly with elephants, resulting in fatalities among refugees (UNEP, 2018). These patterns underscore the interaction between forced migration and fragile ecosystems, highlight the need for both immediate humanitarian support and long-term ecological restoration.

Owen et al. (2023) argue that refugee camps are frequently located in environmentally marginal borderlands creating structural conditions that heighten climatic and environmental exposure. They also argue the widely used vulnerability frameworks (Lavell et al., 2012; Peduzzi et al., 2009; Cardona et al., 2012) may misrepresent the magnitude, timing and manner of a population's vulnerability when applied in a highly localised camp environment. This challenge

is intensified by limited data availability which constraints precise hazard assessment. Drawing on advances in multi-hazard and geospatial analysis (Kappess et al., 2012; Harjeet et al., 2017; de Sherbinin et al., 2014), Owen et al. (2023) develop a camp level exposure index integrating temperature extremes, soil moisture, precipitation anomalies, surface water dynamics and environmental performance indicators. Their result show that seven of seventeen refugee camps are within the upper quartiles of exposure meaning that more than six-hundred thousand refugees face elevated exposure. These findings align with documented environmental degradation around camps in Sudan (Hagenlocher et al., 2018) South Sudan (Leiterer et al., 2018), Uganda (Kaiser, 2006), and Cox's Bazar (Ahmed et al., 2018). Such exposure directly shapes the feasibility of Nature-based Solutions (NbS) as environmental instability and resource pressure complicate restoration efforts. Owen et al. also note that climate risk remains insufficiently integrated into humanitarian planning being only briefly mentioned in UNHCR's camp site planning minimum standards (UNHCR, 2022), while climate information is often under-utilised in responses such as the Rohingya crisis (IRI, NASA & UNDP, 2019).

The climate displacement literature emphasizes that climate change already a major driver of human mobility with the UNFCCC recognising that the increased frequency of human migration can be directly linked to climate change and environmental phenomena such as environmental degradation and natural disaster (Mativo, 2023). In 2018 alone approximately 17.2 million people worldwide were displaced by climate related disasters (Mativo, 2023). Both rapid onset processes including desertification, ocean acidification, loss of biodiversity and intensify vulnerability (Mativo, 2023). It is also highlighted that existing refugee law frameworks do not adequately protect people displaced by climate impacts creating a legal and policy gap that leaves environmentally vulnerable populations without long-term protection (Mativo, 2023). This framing reinforces the relevance of NbS which can mitigate environmental risks while supporting adaptation in highly exposed settings such as Cox's Bazar Rohingya camps. Njoroge (2025) similarly examines how climate change reshapes human mobility through changes in frequency, intensity and location of weather events like

storms, floods and droughts. Sudden onset processes often force migration under very poor conditions and without time for preparations (Castle & Rajah, 2010), while slow onset processes gradually erode livelihoods. Climate induced displacement increases exposure to poverty, conflict and human rights risks as migrants face socio-economic deprivation, conflict occasioned by competition for resources and human rights abuses (Njoroge, 2015). Despite policy progress a gap remains between policy making and implementation in protecting populations (Njoroge, 2015) These insights are directly relevant to Cox's Bazar Rohingya refugee camps where environmental pressures intersect with governance constraints reinforcing the importance of resilience-focused interventions such as NbS.

### 1.2.1 Humanitarian and NGO Responses

In response to environmental degradation in Cox's Bazar camps, international agencies and NGOs have implemented various interventions. For example, the SAFE plus program led by UNHCR and partners distributed liquefied petroleum gas (LPG) to reduce firewood collection. They achieved an 80% reduction in demand for timber fuel (UNHCR,2020c; 2023). Afforestation initiatives, slope-stabilization with vetiver grass and watershed management projects have also sought to mitigate risks of flooding and landslides (UNHCR,2022).

Livelihood oriented programs illustrate how humanitarian and environmental goals can be combined including homestead gardening, plastic recycling and composting projects (FAO)/WFP, 2022). However, persistent challenges such as short-term funding cycles, weak coordination among NGOs and host community resistance due to fears of permanent refugee settlement continue to undermine these efforts (Hasan et al., 2021& Sajib et al., 2022). These barriers reinforce broader limitations identified in the literature particularly the insufficient integration of climate risk into humanitarian planning and decision-making.

### 1.2.2 Afforestation and Nature-Based Solutions (NbS)

Literature increasingly emphasises NbS- particularly afforestation or reforestation as strategies to address ecological degradation while also delivering social

benefits. Comparative studies from India and the Philippines highlight the potential of community-led forestry and restoration projects to support both ecological recovery and local empowerment (Sakai et al., 2021). In Cox's Bazar Rohingya Camps, these initiatives face structural obstacles including land scarcity, political sensitivities around refugee permanence and inter-community tensions (Mahmud, 2019 & Hasan et al., 2021).

A consistent theme across studies is the importance of community engagement for sustainability. Projects that involve refugees and host communities in planting and maintenance tend to achieve higher survival rates and foster a sense of ownership (Tallis et al., 2019). Yet participation is often constrained by limited livelihood opportunities, restricted mobility and competition over resources (Shawon et al., 2022). Within this context, NbS must be understood not only as ecological interventions but as strategies shaped by structurally vulnerable camp environments and ongoing resource pressures.

### 1.3 Research Gap:

While existing literature documents the environmental impacts of the Rohingya influx and evaluates restoration efforts, there are still severe gaps. First, most studies emphasise ecological outcomes such as forest loss or soil degradation without systematically analysing the institutional and operational challenges faced by NGOs and UN agencies. This is significant as refugee camps are often situated in environmentally marginal settings where climate exposure is strictly heightened. Still, these dynamics are rarely incorporated into assessment of implementation challenges.

Second, although community engagement is widely recognised as essential, there is limited research on how NGOs navigate power dynamics with host authorities, donors and refugee populations in practice. Existing literature identifies a persistent gap between policy making and implementation in climate-related displacement contexts (Njoroge, 2015) but this has not been sufficiently examined in relation to NbS interventions in Cox's Bazar Rohingya camps.

Third, refugee settlements are frequently characterised by data scarcity and widely used vulnerability frameworks. These frameworks may misrepresent

localised exposure. Despite this, most studies continue to rely on broad environmental indicators rather than camp-specific metrics such as temperature extremes, soil moisture anomalies or surface water dynamics.

Fourth, although climate change is increasingly recognised as a driver of displacement with approximately 17.2 million people worldwide displaced by climate related disasters in 2018 alone (Mativo, 2023) but existing research does not fully connect these global dynamics to the specific environmental vulnerabilities of refugee camps.

Finally, adaptive strategies employed by NGOs to translate global NbS frameworks into the realities of Cox's Bazar Rohingya camps remain underexplored. Although NbS are widely promoted as resilience building tool, there is limited empirical research on how organisations navigate environmental constraints, climate exposure and governance challenges in practice. This thesis addresses these gaps by focusing on the challenges NGOs and UN agencies face in implementing NbS afforestation or reforestation projects in Cox's Bazar Rohingya camps with particular attention to funding, coordination, climate exposure and community engagement, rather than on generic afforestation or reforestation challenges.

The thesis therefore contributes to a deeper understanding of why environmental restoration efforts, particularly afforestation or reforestation efforts as NbS struggle within the humanitarian governance structure of Cox's Bazar Rohingya camps. By shifting attention from ecological outcomes to the institutional, political and operational constraints shaping implementation, the study highlights the everyday realities faced by NGOs and UN agencies. This chapter has outlined the problem context, reviewed the relevant literature and identified the key gaps that justify the research. The next chapter presents the theoretical frameworks used to investigate these challenges.

## 2 Theoretical Frameworks

Although NbS (Nature-based Solution) is widely promoted in global policy discourse, it does not constitute a single coherent operational framework. Instead, it functions as an umbrella concept encompassing diverse practices such as afforestation, watershed management and fuel transition programmes. This conceptual flexibility means that NGOs and UN agencies must interpret and translate NbS principle into highly constrained humanitarian settings. Thus, often resulting in fragmented or partial implementation.

The implementation of nature-based solutions (NbS) such as afforestation or reforestation at Cox's Bazar, Rohingya camps particularly within the humanitarian settings of the Rohingya refugee camps, originates from a complex interplay of social, political and environmental forces. Understanding the tensions and challenges faced by NGOs and UN agencies in this context requires an analytical framework that captures both their intermediary roles as well as the ways political constraints shape how global environmental agendas are implemented on the ground level. To address this, the study draws on two key theoretical concepts: brokerage and Anti-politics Machine.

Both of these concepts are essential because the challenges surrounding NbS in Cox's Bazar Rohingya camps are not generic environmental problems but are produced through the political and institutional structures of humanitarian governance.

Embedded in development anthropology and political ecology, the concept of brokerage highlights how NGOs act as intermediaries navigating among donors, government authorities, implementing partners, refugees and host communities. Through this mediating role NGOs translate competing expectations into operational decisions, often negotiating trade-offs that reflect uneven power relations (Bierschenk, Chauveau & Olivier de Sardan, 2000; Lewis & Mosse 2006; Mosse 2005).

On the other hand, Anti-politics Machine, drawing on Ferguson's critique of development practice, illustrates how deeply political issues in Cox's Bazar Rohingya camps such as land scarcity, mobility restrictions of refugees, host

community-refugee tensions and the securitised governance of the camps are reframed as technical, logistical or environmental problems. This kind of depoliticization shapes how NbS interventions are justified, designed and evaluated by narrowing the scope of what NGOs or UN agencies can publicly acknowledge or address.

Together, brokerage and the anti-politics Machine provide a robust framework for analysing how humanitarian and environmental interventions are negotiated, constrained and contested. They help to reveal not only how NGOs and UN agencies mediate among multiple stakeholders but also how political structures are obscured through technical framings that limit the transformative potential of NbS in the Rohingya refugee camps in Cox's Bazar, Bangladesh.

## 2.1 Brokerage in Development and Humanitarian Context

Brokerage refers to the role of intermediaries who facilitate interactions between otherwise disconnected groups. In development contexts, brokers mediate between donors, implementing agencies, governments, and local communities, often playing a decisive role in shaping how projects are framed and implemented (Bierschenk, Chauveau & Olivier de Sardan, 2000). They are not neutral conveyors of information but active agents with the power to influence outcomes. Bierschenk et al. (2000) describe “development brokers” as individuals or organizations who connect global institutions with local communities, enabling the flow of resources and projects while also filtering these according to their own interests. NGOs and UN agencies in the Rohingya camps play precisely this role, they stand among international donors, who provide funding, the Bangladeshi government, which regulates camp activities and the Rohingya refugees, who are both beneficiaries and constrained actors.

Development brokers constitute a distinctive group of actors. Not only that development brokers are never neutral; but carry their own interests with entering the field, while their objectives often deal with navigating power dynamics among development actors.

As Mosse (2005) notes, development projects are often shaped not simply by community needs but by the requirements of maintaining donor relationships. NGOs may prioritize projects that appear politically safe or environmentally visible, such as tree-planting campaigns, because they align with donor expectations or secure future funding. This can result in interventions that do not fully address refugees' urgent needs, such as livelihoods or access to resources, but instead satisfy external stakeholders. For instance, while donors may highlight climate resilience or carbon sequestration, refugees may prioritize firewood collection or small agricultural plots. The brokerage role compels NGOs to negotiate these competing demands, often leading to compromises that please donors but leave beneficiaries underserved.

Lewis and Mosse (2006) emphasize that brokers operate in arenas of negotiation, where they must continuously manage competing interests and power asymmetries. In the Rohingya camps, this negotiation is further complicated by the politicized nature of the refugee crisis, where the Bangladeshi government's security concerns and international donors' humanitarian agendas often clash. NGOs and UN agencies thus face the dual challenge of maintaining legitimacy with local actors while ensuring accountability to donors, highlighting brokerage as both a facilitative and contested role.

## 2.2 Anti-politics Machine in Development and Humanitarian Interventions

The concept of Anti-politics Machine, developed by Ferguson (1990) is central to understanding how humanitarian and development interventions often depoliticise the structural conditions that shape people's lives. Ferguson (1990) argues that development projects routinely transform political problems into technical ones, presenting issues rooted in power, conflict and state authority as matters of logistics, management or expertise. This process does not eliminate politics rather obscures it by allowing interventions to proceed without confronting the underlying political dynamics that produce vulnerability.

In Cox' Bazar Rohingya camps, the challenges surrounding land scarcity, host-refugee tensions and restrictions on refugee mobility are deeply political.

They emerge from the Bangladeshi government's security concerns, fears of refugee permanence and the contested legal status of the Rohingya population. Yet the NGOs and UN agencies working in the camps cannot frame these issues as political. Instead, they must describe them as coordination challenges, lack of suitable land or operational constraints. This framing reflects what Ferguson (1990) describes as the anti-political environment in which development actors operate. By presenting political barriers as technical problems, NGOs and UN agencies can continue implementing projects without appearing to challenge state authority or national policy.

Anti-politics Machine also shapes how NbS (Nature-based solution) are designed and justified. Interventions such as tree-planting, slope stabilisation or watershed rehabilitation are framed as technical responses to environmental degradation, though the drivers of degradation are forced encampment, restricted movement and limited access to natural resources which are political in nature. The anti-political framing allows NbS to be promoted as neutral, apolitical and universally beneficial, even though they cannot address the structural causes of environmental vulnerability. As a result, NbS risks becoming the technical fixes that improve visible environmental conditions without altering the political constraints that shape refugee lives.

In this context, Anti-Politics Machine helps to explain why NGOs and UN agencies often avoid addressing sensitive issues such as land rights, refugee participation or long-term settlement planning. These topics fall outside of what is considered as humanitarian space. Therefore, they are reframed as beyond the mandate of environmental programming. So, the Anti-Politics Machine lens helps to reveal how humanitarian governance limits the scope of action available to NGOs, shaping not only what kind of interventions are possible but also how problems are defined, and solutions are imagined (Ferguson, 1990).

### **2.3 Why Brokerage and Anti-politics Machine are Appropriate for this Study**

Brokerage and anti-politics machine are especially relevant for understanding how NGOs implement NbS in Cox's Bazar Rohingya camps.

Brokerage highlights how NGOs navigate competing interests and power dynamics (Bierschenk et al., 2000 & Mosse, 2005). As intermediaries, they must satisfy donor expectations, comply with government regulations and respond to refugees' needs while managing their institutional agenda as well. This helps explain why certain interventions are prioritised over others and why compromises often lead to partial or dissatisfactory outcomes. This confirms that the obstacles surrounding NbS implementation in Cox's Bazar Rohingya camps are not neutral technical issues but are produced through the political and institutional dynamics of humanitarian governance. Brokerage therefore sheds light on the everyday negotiations work that shapes which NbS projects are implemented, how they are framed and whose interest they ultimately serve.

Anti-Politics Machine illuminates how political issues in the Rohingya camps are reframed as technical or operational challenges. Structural problems such as land scarcity, host-refugee tensions and restrictions on refugee mobility are deeply political. Yet, NGOs and UN agencies must present them as logistical constraints or coordination issues (Ferguson, 1990). This kind of depoliticization limits the transformative potential of NbS by obscuring the political conditions that produce environmental vulnerabilities. As a result, NbS interventions risk becoming technical fixes that improve visible environmental conditions without addressing the underlying political drivers of degradation.

Together these two concepts provide a nuanced understanding of NGO practice in humanitarian environmental governance. Brokerage underscores the intermediary role of NGOs in multi-stakeholders' arenas while anti-politics Machine reveals how political constraints are obscured through technical framing. Altogether they offer a robust theoretical foundation for analysing the tensions and challenges NGOs and UN agencies face when implementing NbS in the Rohingya refugee camps in Cox's Bazar. The next chapter presents the environmental and institutional background of the camps, situating the study within its broader contextual setting.

### 3 Background

Cox's Bazar hosts the world's largest refugee settlement, with more than one million Rohingya refugees who fled persecution in Myanmar's Rakhine State. The rapid and concentrated influx since 2017 transformed the area from a sparsely populated forested landscape into a densely inhabited humanitarian zone. This sudden demographic shift placed exceptional pressure on an ecologically fragile region characterised by steep hills, monsoon-prone soils, and protected forest reserves (Hasan et al., 2021).

The environmental consequences of this transformation have been substantial. Large areas of forest were cleared to accommodate shelters, infrastructure, and basic services, accelerating soil erosion and destabilising slopes. These changes have increased both the frequency and severity of landslides during the monsoon season, creating significant risks for refugees living on exposed terrain (Maksud et al., 2022). The loss of vegetation has also altered local microclimates, contributing to rising surface temperatures and reduced ground cover.

The water system has come under strain as well. Intensive groundwater extraction to meet daily needs has lowered water tables in parts of the district, raising concerns about long-term water security for both refugees and host communities (Salam et al., 2012). Waste management remains a persistent challenge. Limited collection capacity and inadequate disposal systems have contributed to contamination of surface water and localised air pollution, particularly where firewood is still used for cooking or where waste is burned in open areas.

Human-wildlife interactions have intensified as well. Cox's Bazar contains critical wildlife habitats, including corridors used by endangered Asian elephants. Habitat fragmentation and human encroachment have increased human and elephant encounters, creating safety risks for both refugees and wildlife (UNEP, 2018). Seasonal hazards such as cyclones, heavy rainfall, and flooding further compound the precarious living conditions in the camps.

Humanitarian agencies and government authorities have introduced a range of mitigation measures to address these environmental pressures. Initiatives include the distribution of alternative cooking fuels to reduce pressure on remaining forests, slope-stabilisation works to prevent landslides, watershed management to improve drainage, and livelihood programmes that promote environmentally sustainable practices (UNHCR, 2022; FAO/WFP, 2022). While these interventions have contributed to short-term risk reduction, they operate within a complex humanitarian setting shaped by limited land availability, competing priorities among refugee and host communities, and the protracted nature of the crisis.

These conditions form the environmental backdrop against which the interventions examined in this study take place. The next chapter outlines the methodological approaches used to investigate these challenges.

## 4 Methodology

I conducted a mixed-methods study which is moored on pragmatic worldview. Pragmatism provides a philosophical basis for research by focusing attention on the research problem in social science research and then using pluralistic approaches to derive knowledge about the problem (Morgan 2007, Creswell & Creswell 2018). Moreover, for mixed methods research pragmatism opens the door to multiple methods, different worldviews, and different assumptions, as well as different forms of data collection and analysis (Creswell & Creswell 2018). Therefore, it is appropriate for this thesis to identify the challenges development organizations are experiencing in the environmental rehabilitation of Rohingya camps in Cox's Bazar, Bangladesh.

### 4.1 Mixed-Method Data Collection

Two complementary methods were used to collect data:

- a. Document analysis (initial exploratory phase)
- b. Semi-structured interviews (primary qualitative data)

These methods allowed for both contextual understanding and in-depth exploration of organisational experiences.

#### 4.1.1 Document Analysis:

Document analysis was used as the first stage of data collection to familiarise myself with the institutional, environmental, and operational landscape surrounding reforestation and Nature-based solutions (NbS) in the Rohingya camps, Cox's Bazar. Document analysis is a systematic procedure for reviewing and evaluating documents to extract meaning, gain understanding, and develop empirical knowledge (Bowen, 2009). The purpose of this phase was not to conduct full critical discourse analysis, but to identify key actors, policy frameworks, and recurring themes that shape how NGOs and UN agencies describe their work. This preliminary mapping informed the development of the interview guide and ensured that the interviews were grounded in an understanding of existing organisational narratives (Creswell & Creswell, 2018).

However, the document analysis was not used as a source of empirical data; its role was solely to inform the development of the research questions and the semi-structured interview guide.

*Table 1 Documents that were analysed for document analysis*

1. Official directives and regulations	Online copies of directives issued by governmental bodies such as the NGO Affairs Bureau (NGOAB) regarding the use of volunteers, cash payments and other regulations impacting the NGO operation
2. NGO Reports and Publications	Reports and publications produced by NGOs operating in Cox's Bazar including project updates, environmental assessments and documentation of community engagement.
3. Stakeholder's perspectives	Obtained from published interviews, meeting and official documents including NGOs' viewpoint and all other relevant actors.
4. Environmental assessments	Documentation of environmental assessments conducted by NGOs and other external agencies.
5. Academic literature and research studies	Relevant academic articles, research studies and scholarly publications providing background information and empirical findings related to refugee camps' environments, environmental management and community participation.
6. Miscellaneous documents	Any other relevant documents such as news articles, press releases and project updates providing additional context and opportunities associated with reforestation efforts at Cox's Bazar Rohingya camps.

I collected publicly available documents from organisations working in environmental management and reforestation in Cox's Bazar Rohingya camps. These included official directives, NGO reports, environmental assessments, published interviews, and relevant academic literature. Table 1 summarises the types of documents reviewed. To ensure credibility, I examined the authorship,

institutional source, and publication context of each document (Wodak & Meyer, 2015).

The analysis focused on identifying how organisations framed challenges, priorities, and operational constraints. By examining patterns in language use, I identified recurring themes such as environmental degradation, community engagement, coordination, power dynamics, and stakeholder communication. These themes did not constitute discourse categories in the strict sense of critical discourse analysis but served as a practical foundation for designing the semi-structured interviews' guide.

This document analysis therefore functioned as a preparatory step-it clarified the institutional context, informed the interview questions, and ensured that the subsequent qualitative data collection was grounded in an understanding of the existing narratives surrounding NbS or reforestation in Cox's Bazar Rohingya camps.

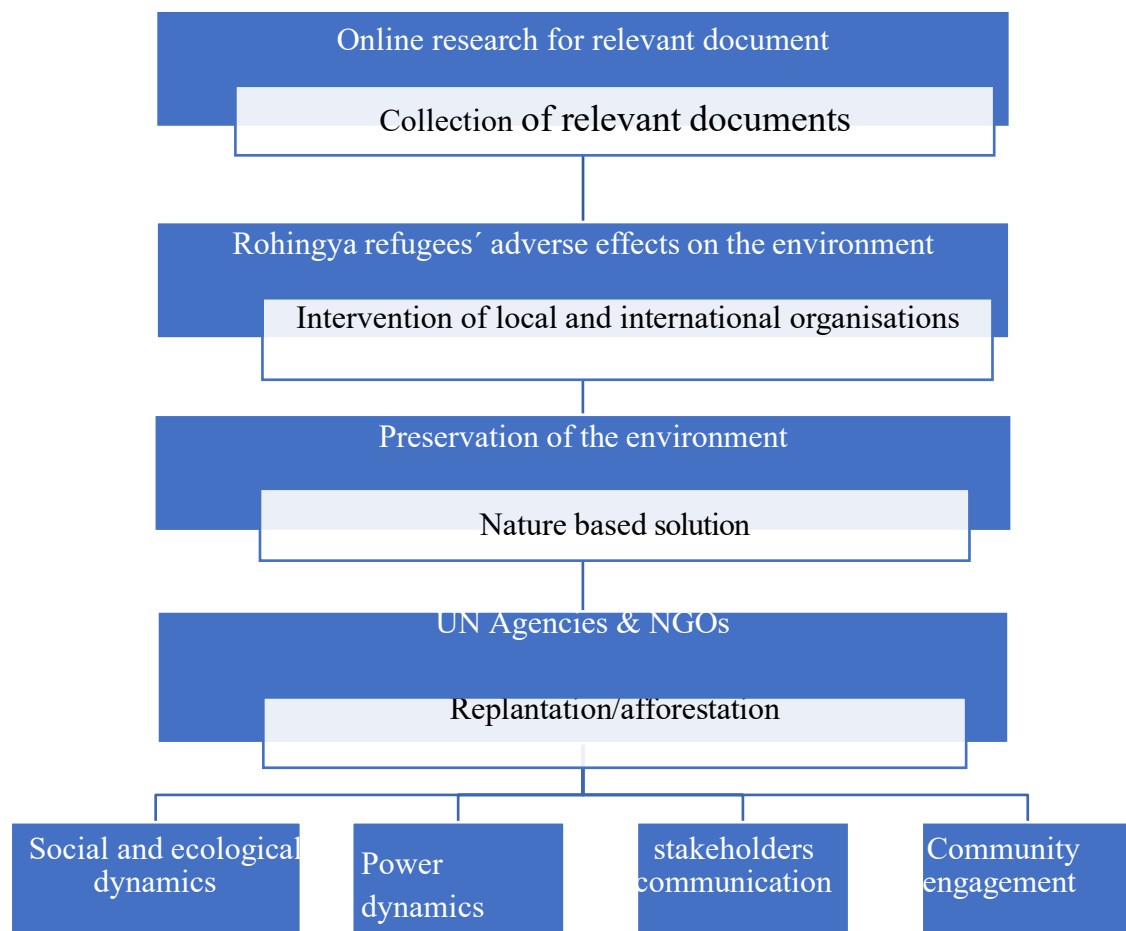


Figure 1 Themes Identified Through Document Analysis

The themes identified through this process directly informed the development of the research questions and the semi-structured interview guide. By mapping how organisations frame challenges, priorities and the operational constraints, the document analysis provided the analytical foundation for formulating the main research questions, sub-questions and the more detailed prompt used during the interviews.

The questions are as followed:

1. What specific obstacles do NGO workers face when initiating and sustaining afforestation projects in Cox's Bazar Rohingya camp?
  - What specific obstacles do different NGOs face to collaborate with each other for the purpose of afforestation projects?
  - What kind of obstacles do NGOs face in relation to fundings and resources for afforestation projects in the Cox's Bazar Rohingya camps?
  - What challenges or obstacles arise in keeping the continuous flow of resources for long-term sustainability?
2. What strategies do NGO workers employ to overcome challenges and foster community engagement in reforestation at the camp in Cox's Bazar Rohingya camp?
  - What strategies do NGOs/organizations follow to communicate and sharing of information among different stakeholders?
  - What strategies do NGOs/organizations use to overcome the environmental factors that influence the success of afforestation initiatives?
  - What strategies do NGOs/organizations follow to promote participatory governance structures in reforestation projects?
3. How does the perception and involvement of local authorities influence the success or hindrance of NGO and UN agency-driven reforestation endeavours in Cox's Bazar Rohingya camps?
  - To what extent do NGOs and UN agencies collaborate with local governmental agencies in planning and executing reforestation projects?
  - How do local authorities perceive and respond to NGO led reforestation projects in terms of lining up with government's policies and environmental goals?

- To what extent is government support available and to what extent it impacts the success of the reforestation initiatives?

#### 4.1.2 Semi-Structured Interviews

Collection of data through communicating with the employees of the NGOs and the UN agencies is the most important task to understand the tensions and challenges faced by the NGOs and UN agencies in implementing reforestation or afforestation projects at Cox's Bazar Rohingya camps. These kinds of communication helped me to gather valuable insights into environmental, social and logistical obstacles. It helped to shed light into community dynamics, resource constraints, and different governmental policies on the local level. The complicated balance between the environmental conservation and humanitarian efforts, helping in the development of sustainable and relevant solutions that were unveiled too. For this purpose, I interviewed the representatives of the NGOs and UN agencies who are associated with the afforestation or reforestation projects from planning to implementation.

All the interviews were conducted online via zoom and teams according to the participants' convenience. For this, I contacted the coordinator of (Energy and Environment Network) EEN of (Inter-Sector Coordinator Group) ISCG in Cox's Bazar Bangladesh through the official email address which is provided on the official website. To ensure my creditability, I communicated through my student email account of Swedish University of Agricultural Sciences. The coordinator asked for an overview of my project, and I provided that. The project overview was presented to the partner organizations in a monthly meeting where all the representatives agreed to participate in the data collection process of the study. After that an online sign-up form was circulated to all the partner organizations including myself. On that form the participants input their name, positions, organizations' names and contact details. After that I contacted all the participants and booked times for the online interviews according to the participants' and my convenience.

*Table 2 List of informants*

UN Agency	Number of participants	NGOs	Number of participants
A	2	E	2
B	1	F	2
C	1	G	3
D	2	H	2

I collected most of data over a period of four week in February and a few in March,2024 after developing an interview guide. As data collection methods, semi- structured interviews were conducted. Before starting the data collection, I obtained informed consent from the participants (Creswell & Creswell, 2018). I also addressed the right to participate and the issue of confidentiality in advance before data collection (Creswell & Creswell, 2018). I conducted semi-structured interviews with the participants who are bestowed with different responsibility for replantation/afforestation projects at Cox’s Bazar Rohingya camps. To help the research focus, I prepared a flexible interview guide to make follow up questions (Robson & McCartan, 2002). I conducted the interviews online or internet based as it is not possible for me to travel such distance for my then health condition. Moreover Internet-based data collection can reach geographically widely dispersed groups, reduce costs and a wide variety of recruitment strategies help to yield larger samples (Robson & McCartan, 2002). Most of the interviews were recorded with the permission of the participants and transcribed for analysis (Creswell & Creswell, 2018). Notes were also taken during the interviews. The reason for recording and transcribing interviews is to ensure a “more thorough examination of what people say” (Bryman, 2016).

## 4.2 Researcher’s Positionality and Limitations of the Research

As a researcher recognizing my position in exploring the tensions and challenges faced by the NGOs and UN agencies in implementing nature-based solution or reforestation projects at Cox’s Bazar Rohingya camps is imperative. Because

researchers must be conscious of their own backgrounds, perspectives and biases which may influence the research process and interpretation (Creswell & Creswell, 2018).

I never worked with any of the participants or organizations that I was studying. Whatever knowledge or information that I had was gained primarily through reading documents. So, it was easy for me to be self-reflective at every point of the research. It helped me to adopt the position of a researcher only and to lay aside any potential biases (Berger, 2015). As the participants were aware of the purpose of my data collection that is my MSc thesis. They were very helpful towards me other than considering me as a media investigator and my position was established as a researcher only.

Moreover, some of the interviews were done in my native language Bengali and some interviews were done in English with the international representatives of the organizations which helped me to create a quick rapport with the participants. The research was not exempted from limitations. As all research has limitations (Creswell & Cresswell, 2018). This is a qualitative study which might restrict the generalization of findings beyond the specific context of Cox's Bazar Rohingya camps. So as a researcher while conducting the data collection process, I had to be always conscious about the specific area of my study and selection of the stakeholders who give information about that particular area as well. While taking interviews, I was conscious about the fact that, the participants did not go beyond the research topic or if I felt to extract more information, follow-up questions were asked when needed to extract information.

As I come from Bangladesh, it helped me to be mindful of the cultural and political positions as well as any power dynamics which is inherent in the research process. Researchers need to critically reflect on their own subjective and how these may impact the data collection and analysis (Robson & McCartan, 2016).

Moreover, access constraints were also a limitation for the research. Because the topic Rohingya Refugee is a sensitive and complex geopolitical context. So, it was needed to be conscious that the research was focused on the reforestation projects at the Rohingya Refugee camps and there was no refugee involvement.

Other than this, as the data was collected online because I was pregnant. It was not convenient for me to travel such a distant and sensitive setting. Thus, involvement of camp residents or refugees was challenging. Moreover, I was careful to avoid ignoring any kind of improper information which might be a representation of any particular organization or group of persons.

### 4.3 Ethical Consideration

Ethics are very important in the process, as human beings are the ultimate concern of social science. Because the research might have some level of disturbance or discomfort on the people being studied. At the very initial stage when I was considering the research, I contacted with two representatives of the prescribed projects about which I am intending to explore. I am keeping their names unmentioned for the privacy purposes. Contacting these two NGO representatives is parallel to that as one needs to engage gatekeepers before venturing into research (Creswell & Creswell, 2018). The two representatives are responsible for the research site where the reforestation projects are being implemented. They guided me to proceed formally to collect data by guiding me to collect the ISCG's (Inter-Sector Coordination Group) contact information from the website. The participants were informed about the purpose of the research (Punch, 1994). I have sent an email describing my research purpose, timeframe of the projects to the responsible authority's official email address. I also used my email address from SLU to keep my ethical purpose reliable and clean. At the beginning of the interviews, I made sure that I get informed consent verbally from the participants. The key informants are the employees of the NGOs and UN agencies who are serving in different roles regarding the replantation program at Cox's Bazar Rohingya camps. I also assured them of the confidentiality of whatever they would tell me. Before recording an interview, I asked for permission to go ahead and mentioned that the recording is for my private use only and not for the public. The recordings are mostly audio and some of them includes video too depending on the participants' comfortability and consent. The participants were informed that the recording is a means to facilitate the transcribing of the interviews to aid my data analysis. With regard of confidentiality, I assured participants of

anonymity in this thesis to avoid them being harassed or accountable in any way. The names of all the participants are not mentioned anywhere in the thesis. The organizations' names are anonymous too as the participants wish. I conducted all of the interviews myself on zoom and teams.

## 4.4 Data Analysis

I started data analysis during the time of data collection. This was ensured during the online interviews when participants were being interviewed, and I thought how data should be extracted out from the participants' responses (Robson & McCartan, 2002). After data collection, the first thing I did was to transcribe audio recordings from the interviews. Transcribing the interviews was a key part of the analysis process. As the interviews were both in Bengali and English, it was not difficult for me to understand them. Moreover, the notes that were taken during the interviews helped me to understand data from the transcribe and its context. That's why I went through the transcripts thoroughly to understand the collected data (Robson & McCartan, 2002). Themes were developed according to the research questions and by reading all the transcripts. I highlighted relevant segments corresponding to my theoretical concept brokerage and the anti-politics machine. Then the interesting and relevant parts were put under the themes developed accordingly and afterwards they formed the writing of empirics in this thesis.

## 4.5 Alignment Between Research Questions and Findings

This section demonstrates how the empirical findings presented in Chapters 5, 6 and 7 directly address the research questions developed earlier in the study. Establishing this alignment strengthens the methodological coherence of the thesis by showing how the data collected through semi-structured interviews systematically responds to each research question. The document analysis informed the development of the research questions and interview guide but was not used as a source of empirical data. The table below maps the three main research questions to the corresponding sections of the Findings, Discussion and

Key Findings chapters, followed by a concise summary of how each question is answered through the empirical material.

*Table 3 Alignment Between Research Questions and Findings*

Serial Nr	Research Questions	Where it is answered	How it is answered
1	What obstacles do NGO and UN agency workers face when initiating and sustaining afforestation projects in Cox’s Bazar Rohingya camps?	5.1, 5.2, 5.3, 5.5, 5.6, 5.7, 6.1, 6.2, 7.1	The findings identify structural, institutional and environmental obstacles rooted in humanitarian governance rather than ecological factors such as coordination gaps, short-term funding, environmental limits and political sensitivities.
2	What strategies do NGO and UN agency workers employ to overcome challenges and foster community engagement in reforestation?	5.3, 5.4, 5.5, 6.1, 6.3, 7.1, 7.3	The findings identify a range of technical, organisational and participatory strategies used to navigate challenges and foster engagement with both refugee and host communities.
3	How does the perception and involvement of local authorities influence the success or hindrance of NGO and UN-led reforestation initiatives?	5.1, 5.6, 5.7, 6.1, 6.2, 7.1, 7.2	The findings show that local authorities shape reforestation outcomes through their control over land access, species approval and regulatory processes, while bureaucratic delays, shift requirements and political sensitivities further affect implementation.

The following chapter presents the findings in detail, organised into the key themes that emerged from the interview data, with the document analysis having informed the initial thematic focus and the development of the research questions and interview guide.

## 5 Findings

This chapter presents the main findings of the study. It organises the empirical material into key themes that emerged from interviews and related documents. The purpose of this chapter is to describe what the data shows, the theoretical interpretation of these findings is developed in the following discussion chapter.

### 5.1 Challenges in Initiating and Coordinating Reforestation Activities

Interviews show that NGOs and UN agencies operate as brokers among donors, government authorities, and refugee communities. In the early years of the response, the absence of a central planning authority created significant coordination problems. Participants described how organisations selected plantation sites based on convenience rather than ecological suitability, leading to overlapping activities, repeated planting, and mixing of species without technical guidance. As one participant recalled, “Sometimes one NGO used to finish its plantation and the next day another one used to come and do the gap fillings” (NGO E, 16.02.2024; NGO G, 19.02.2024).

In addition to these issues, several participants highlighted that there was no roundtable or shared platform where all organisations could present or coordinate their long-term plantation plans. As most projects were tied to short-term, funding -based cycles, NGOs rarely had the opportunity or the institutional incentives to align activities beyond immediate project timelines. This absence of a collective planning mechanism reinforced the fragmented nature of early reforestation efforts and directly connects to the funding constraints discussed in section 5.2.

Although the RRRC and CiC offices now monitor activities, participants noted that smaller organisations and independent groups still plant without following Forest Department’s guidelines, sometimes damaging existing seedlings. These coordination gaps illustrate how NGOs and UN agencies must mediate among donor expectations, government oversight, and practical field realities. The brokerage role becomes visible in the way NGOs negotiate space,

timing, and species selection while attempting to maintain working relationships with multiple actors.

At the same time, the framing of environmental degradation as a technical crisis rather than a political issue linked to land control, refugee governance, and state restrictions, which reflects the dynamics of the anti-politics machine. Participants described the camps as environmentally devastated, yet the political sensitivities around land use remain largely unspoken. This depoliticised framing allows NGOs to continue operating but limits their ability to address structural causes of environmental stress.

These coordination challenges demonstrate that obstacles are not generic forestry issues but arise from the governance structure that regulates land, authority and organisational mandates in the camps.

## 5.2 Funding Constraints and the Limits of Sustainability

Funding emerged as one of the most significant challenges. Field staff explained that project proposals often change as they move up organisational hierarchies, creating gaps between field-level needs and donor interpretations. As one environmental officer noted, “Sometimes there occurs a gap in the interpretation of the project and its requirement- donors grant less amount as estimated” (NGO H, 23.02.2024). This mismatch forces NGOs to adjust project scopes and compromises implementation.

Short-term funding cycles further undermine sustainability. Participants repeatedly emphasised that seedlings require three to four years of care, yet most projects last one year or less. As a result, survival rates remain low, often below 30% because no agency is responsible for maintenance once a project ends (UN Agency B, 17.02.2024 & NGO G, 18.02.2024). Refugee communities also lose interest after project completion, as the camps are temporary settlements.

Some organisations, however, reported better outcomes where long-term donor support and strong community engagement were present, with survival rates reaching around 70% (NGO H, 23.02.2024 & NGO G, 25.02.2024). These

contrasting experiences highlight how NGOs and UN agencies broker between donor priorities, ecological requirements, and community expectations.

The LPG distribution programme under SAFE+ was repeatedly described as essential for reducing pressure on forest resources. Yet, participants noted declining funding, uncertainty beyond a few months, and the need to divert resources from other humanitarian sectors to keep the programme running. As one coordinator explained, “Whatever they have now will not be enough if fundings do not come”, (UN Agency D, 21.03.2024). This again reflects the tension between donor-driven short-term programming and the long-term ecological needs of reforestation.

These funding dynamics illuminate the brokerage role, as NGOs negotiate between donor priorities and ecological requirements. It shows how short-term humanitarian governance structures shape NbS implementation more than technical forestry needs.

### 5.3 Community Engagement and Everyday Negotiations

Community engagement is central to the success of reforestation projects, but interviews show that NGOs must constantly negotiate among the interests of host communities, refugees, and donors. Host communities often resist plantation activities on agricultural land, requiring NGOs to negotiate directly and sometimes alter plantation sites to avoid conflict. Refugee engagement is equally complex. NGOs rely on the refugee block leaders to mobilise groups, but inter-group tensions sometimes lead to sabotage of plantation sites (NGO F, 21.02.2024 & UN Agency C, 06.03.2024).

Cash for work programmes were widely viewed as the most effective strategy for fostering engagement. Participants described how training and remuneration helped refugees develop a sense of ownership, with some camps achieving survival rates of around 75% (NGO H, 23.02.2024). Yet, these successes coexist with ongoing tensions. As one participant noted, “Sometimes what is good for the environment does not align with what refugees need for their daily lives” (NGO H, 23.02.2024).

These examples illustrate the brokerage role NGOs play in balancing donor visibility requirements, host community concerns, and refugees' immediate livelihood needs. They also show how global community-engagement strategies require significant adaptation in the camp context, where social divisions and land politics shape outcomes.

These kinds of negotiations highlight brokerage in practice while reframing of political tensions as 'community engagement challenges' reflects the Anti-politics Machine at work.

## 5.4 Communication and Information Sharing Among Stakeholders

Communication and information sharing in the Rohingya camps operate within a highly structured, top-down humanitarian system. The Government of Bangladesh maintains overarching authority, with the Refugee Relief and Repatriation Commissioner and Camp-in-Charge officials overseeing all activities at camp level. NGOs and UN agencies coordinate their work through the Inter-Sector Coordination Group which manages sectoral planning, harmonises data collection, and prevents duplication across the 12 thematic sectors. Within this system, information is expected to move vertically from national-level planning bodies such as the Strategic Executive Group to district-level coordination between the RRRC and ISCG Senior Coordinator, and finally to camp-level implementation led by CiCs. However, interviewees noted that information often becomes inconsistent as it moves between headquarters and field teams, with one participant explaining that "Information can shift halfway, between fields and headquarters" (UN Agency D, 21.02.2024).

NGOs share information and distribute responsibilities through both formal and informal mechanisms. Formally, sector coordination meetings and Joint Response Plan planning processes provide structured spaces for agencies to review progress, allocate responsibilities, and avoid overlapping activities. At camp level, CCCM agencies coordinate directly with CiCs to ensure that daily operations such as WASH, protection, or shelter activities are aligned with

government directives. Informally, frontline staff rely on WhatsApp groups, ad-hoc field visits, and bilateral communication to resolve operational issues quickly. These practices help maintain day-to-day coordination but also contribute to uneven information flows when decisions made at higher levels are not consistently communicated to field teams. This reinforces the brokerage role of NGOs, who must interpret and translate information across multiple layers of humanitarian governance.

## 5.5 Responding to Environmental Constraints and Promoting Participatory Governance

Environmental conditions in the camps such as loose soil, landslides, flash floods, and water scarcity- pose significant challenges to reforestation. NGOs have adapted by planting vetiver grass to stabilise slopes, raising low-lying areas, constructing bamboo and sandbag barriers, and arranging supplementary water supplies during the dry season (NGO H, 23.02.2024; NGO G, 25.02.2024). These adaptations show how global NbS ideas are reshaped to fit local environmental realities.

Participatory governance is promoted through awareness campaigns and skill-development programmes, though participants noted challenges related to age restrictions, gender inclusion, and bureaucratic processes. Despite these constraints, interviewees emphasised that community engagement has been essential to the partial success of reforestation efforts.

These adaptations illustrate how global NbS ideas are depoliticised and reframed as technical fixes, even though the environmental constraints themselves stem from political decision such as land allocation, settlement planning and mobility restriction within the humanitarian governance system.

## 5.6 Collaboration with Local Government Agencies

The BFD plays a central and authoritative role in reforestation, providing technical guidance, approving species lists, and supporting capacity development. NGOs and UN agencies rely heavily on BFD expertise, but collaboration is often

shaped by bureaucratic procedures, shifting policy requirements, and the need to secure formal approvals at multiple stages of implementation.

In practice, collaboration occurs through joint field visits, species-list negotiations, and approval of plantation plans. For example, several organisations described situations where plantation schedules had to be delayed because BFD approval for seedling species arrived only days before the monsoon planting window. Others noted that BFD occasionally revised species lists mid-season such as restricting fast-growing exotics which forced NGOs to re-procure seedlings and renegotiate donor budgets (UN Agency A, 17.02.2024; NGO G, 25.02.2024). These delays and revisions illustrate how NGOs must continually adjust their operational plans to align with government expectations.

Collaboration also involves navigating overlapping mandates. Donors may prioritise carbon-friendly or fast-growing species, while BFD emphasises native biodiversity and long-term ecological restoration. NGOs therefore act as intermediaries, translating donor requirements into formats acceptable to BFD while ensuring compliance with national forestry regulations. This brokerage role is further visible when NGOs facilitate communication between BFD and CiC, for example when securing access to fenced-off hillsides or negotiating the placement of nurseries in contested spaces.

Taken together, these examples show that NbS implementation is shaped not by generic ecological considerations but by the political authority and regulatory power of the BFD. Collaboration is therefore less a neutral technical process and more a negotiated practice in which NGOs and UN agencies must continually broker between donor expectations, government regulations, and operational realities on the ground.

## 5.7 Government Support and Perceptions of NGO-Led Reforestation

The government acts as both a partner and regulator. While BFD (Bangladesh Forest Department) supports reforestation and collaborates with agencies such as FAO approval processes remain unpredictable. As one participant noted, “Having a momentum does not mean it will always be approved by the government” (UN Agency B, 17.02.2024). NGOs and UN agencies must therefore continually negotiate and adapt to changing requirements, reflecting the political nature of environmental interventions in the camps.

These dynamics reflect the anti-politics machine, where political sensitivities shape what NGOs can implement while being framed as technical approval process.

## 6 Discussion

This chapter interprets the findings through the concepts of Brokerage and the Anti-Politics Machine to explain why environmental interventions in Cox's Bazar face persistent challenges. The discussion argues that these challenges are not generic afforestation problems but are specific to the humanitarian governance structure of the Rohingya camps, where political constraints are reframed as technical issues and NGOs must broker competing demands among donors, government authorities, and refugee communities. These theoretical lenses help illuminate how environmental interventions are shaped by political sensitivities, bureaucratic hierarchies, donor priorities, and the everyday negotiations required to maintain operational legitimacy in a highly regulated and securitised refugee context.

### 6.1 NGOs and UN Agencies as Brokers

Environmental interventions in Cox's Bazar unfold within a humanitarian governance system where agencies must continually negotiate access, legitimacy, and compliance. In this context, brokerage refers to the work of intermediaries who translate, mediate, and reconcile competing interests across different actors and scales. Drawing on anthropological understandings of brokerage as the negotiation of relationships, meanings, and resources between groups with unequal power, this section argues that NGOs and UN agencies act as brokers who navigate the demands of donors, the Government of Bangladesh, the RRRC, host communities, and Rohingya refugees. Brokerage is not a neutral or technical process. It is shaped by the securitised and highly regulated nature of the camps, where political sensitivities routinely override ecological priorities and where maintaining institutional legitimacy becomes as important as achieving environmental outcomes.

Earlier examples in this chapter such as the protracted negotiations required to secure land for reforestation, the need to obtain RRRC approval for even minor environmental activities, and the adjustments agencies made when government

restrictions shifted demonstrate how brokerage operates in practice. These cases show that environmental programming is less about ecological assessments and more about navigating institutional imperatives, bureaucratic expectations, and political constraints. This dynamic echoes Ferguson's (1990) argument that development interventions are shaped by bureaucratic logics that depoliticise structural issues. In Cox's Bazar Rohingya camps, the need to maintain access and comply with government directives means that environmental interventions often reflect what is politically permissible rather than what is ecologically necessary.

A central feature of brokerage in Cox's Bazar is the absence of meaningful refugee participation. Despite global commitments to participatory approaches, refugees rarely participate in environmental planning, decision-making, or governance structures. Instead of participatory processes, agencies rely on top-down coordination mechanisms, security-driven approval systems, and bureaucratic reporting structures that prioritise compliance over consultation. This exclusion reinforces a governance model in which refugees are positioned as beneficiaries rather than decision-makers, limiting opportunities for community-led environmental stewardship. It also reproduces hierarchical humanitarian relations, where expertise is located within institutions rather than communities, and where environmental interventions are designed around institutional mandates rather than refugee priorities or knowledge.

NGOs' activities are further shaped by the securitised governance of the camps. Tree-planting sites, for example, are often selected based on RRRC security restrictions rather than ecological suitability, waste-management projects require clearance from multiple security actors; and agencies avoid working in areas deemed "politically sensitive," even when environmental degradation is most severe there. These practices illustrate how NGOs prioritise maintaining operational access and institutional legitimacy over pursuing ecological objectives. Brokerage, in this sense, involves constant negotiation with security actors, balancing donor expectations for visible outputs with the constraints imposed by camp authorities. Environmental interventions thus become instruments for demonstrating compliance rather than addressing environmental risk.

Coordination adds another layer to this brokerage landscape. While the ISCG and sectoral working groups are designed to harmonise activities, coordination in practice requires agencies to navigate a complex architecture of guidelines, reporting requirements, and inter-agency expectations. Coordination mechanisms such as standardised technical guidelines, duplication-prevention protocols, and joint planning frameworks shape what kinds of environmental activities are possible and how they are implemented. NGOs must align donor expectations for measurable environmental outcomes with RRRC directives, land-use restrictions, and community tensions. Agencies with mandates in both environmental protection and disaster risk reduction often scale back ecological components when security protocols limit movement or when donor reporting cycles demand rapid, visible outputs. Coordination is therefore not simply administrative, it is a political process through which agencies negotiate their survival, legitimacy and continued access within a tightly controlled humanitarian space.

Overall, brokerage in Cox's Bazar Rohingya camps emerges from the interplay of securitised governance, donor priorities, and restricted participation. Environmental interventions are shaped not by ecological needs alone but by the everyday negotiations required to operate within a highly regulated humanitarian system. Understanding NGOs and UN agencies as brokers helps explain why environmental programming often reflects political sensitivities more than environmental needs, and why interventions prioritise visibility, compliance, and institutional legitimacy over long-term ecological resilience.

## **6.2 Depoliticization and the Anti-Politics Machine**

Environmental work in Cox's Bazar Rohingya camps is often described as a technical problem that requires technical solutions. Activities such as planting seedlings, stabilising slopes, or distributing LPG are presented as neutral, routine tasks that simply need to be implemented efficiently. This way of talking fits closely with Ferguson's idea of the Anti-Politics Machine, where political issues are reframed as practical jobs that NGOs can manage without appearing to challenge anyone in power. This technical framing is not neutral; it actively redirects attention away from the political decisions that produce environmental

stress. This shift from technical narratives to the underlying political drivers is crucial, because it shows how depoliticization operates not only through what is emphasised, but also through what is systematically left unsaid.

But this technical framing hides the real political causes of environmental pressure in the camps. Problems such as land clearing for camp construction, restrictions on refugee movement, government forest rules, tensions between refugees and host communities, and the protected status of the forest are treated as logistical matters rather than political outcomes. By translating these issues into operational challenges, NGOs and UN agencies can continue their work without appearing to question government decisions or broader governance structures. This allows them to maintain access, avoid confrontation, and preserve the cooperative relationships they rely on to operate in a politically sensitive environment.

This depoliticised way of working also shapes how projects are designed, funded, and evaluated. It helps explain why short-term projects continue even when long-term ecological needs are widely recognised, and why donors prioritise measurable outputs such as the number of seedlings planted or the number of LPG cylinders distributed. These indicators fit neatly within a technical logic that values quantifiable results over structural change. Similarly, community meetings and participatory activities avoid sensitive topics such as land rights, mobility, or the political implications of forest protection. As a result, environmental projects remain technical fixes that address symptoms rather than the deeper political conditions that produce environmental stress in the first place.

First, short-term project cycles persist because they align with a depoliticised logic that treats environmental degradation as a series of discrete, solvable problems rather than as the outcome of structural constraints. In Cox's Bazar Rogingya camps, this enables repeated funding for activities such as annual seedling distributions or slope-stabilisation works, which generate visible outputs within donor timeframes. Addressing long-term ecological pressures such as chronic land scarcity or forest loss linked to camp construction would require confronting governance decisions that fall outside the humanitarian mandate.

Depoliticization therefore sustains a cycle of short-term interventions by making structural change appear beyond the scope of environmental programming.

Second, the emphasis on quantifiable indicators reflects how depoliticization shapes what counts as ‘success’ in environmental work. Donors favour metrics such as the number of seedlings planted or LPG cylinders distributed because these can be easily reported, audited, and compared across projects. Yet these indicators obscure the political conditions that undermine ecological recovery, including restrictions on refugee mobility and the protected forest status of the area. By privileging measurable outputs, the funding system reinforces a technical logic that sidelines political analysis and makes structural transformation appear impractical or irrelevant.

Third, participatory activities are constrained by depoliticised framings that limit what can be discussed. Community meetings focus on practical issues such as planting schedules, maintenance responsibilities, or distribution procedures while avoiding politically sensitive topics like land rights, mobility restrictions, or tensions between host and refugee communities. This avoidance reflects the need for NGOs to maintain access and avoid appearing confrontational in a politically sensitive environment. As a result, community engagement becomes a space for managing expectations and coordinating tasks rather than addressing the political drivers of environmental vulnerability.

In this sense, NbS interventions become part of a broader humanitarian apparatus that manages, rather than transforms the conditions of crisis. They help stabilise the situation and maintain the appearance of progress, but they do so by working around rather than engaging with the political dynamics that shape environmental vulnerability in Cox’s Bazar Rohingya camps.

### **6.3 Interplay Between Brokerage and Depoliticization**

The interaction between brokerage and depoliticization reveals three dynamics that are distinctive to the humanitarian governance structure in Cox’s Bazar Rohingya camps. Expanding these dynamics shows more clearly how

environmental interventions particularly NbS are shaped, constrained, and negotiated across multiple scales.

### *1. NGOs mediate relationships within depoliticised frameworks*

NGOs act as everyday brokers between Rohingya refugees, host communities, local authorities, and UN coordination structures. However, their brokerage occurs within depoliticised framings that present environmental degradation as a technical or ecological problem rather than a political one. For example, when NGOs negotiate land access for tree planting or slope stabilisation, they must frame requests in technical terms (soil erosion risk, safety concerns) rather than acknowledging the political tensions around land scarcity, host-refugee relations or government fears of permanence. Similarly, when NGOs mediate community tensions such as disputes over firewood collection or access to plantation sites they rely on technical language (resource management, behaviour change) because political grievances cannot be openly addressed within the humanitarian system.

This depoliticised framing limits NGOs' ability to challenge structural drivers such as restricted refugee mobility, unequal land rights, or the political sensitivities that shape where NbS projects can be located.

In practice, NGOs broker relationships, but only within the narrow space allowed by technical narratives, meaning that brokerage itself becomes a mechanism through which depoliticization is reproduced.

### *2. Multiscale brokerage produces tensions*

Brokerage occurs simultaneously at multiple scales frontline staff, programme managers, UN clusters, and government authorities each brokering different interests. This produces governance tensions that shape NbS implementation. Frontline NGO staff often adapt interventions to local realities (e.g., modifying planting layouts to accommodate informal footpaths or community preferences). These adaptations sometimes conflict with UN-led standardisation, such as fixed

species lists, uniform plantation designs, or strict reporting templates required by the Environment or Shelter/NFI sectors.

Government regulations especially around land use, visibility of interventions, and restrictions on “permanent structures” add another layer of brokerage, forcing NGOs to negotiate between compliance and practical feasibility.

A concrete example is the repeated modification of plantation sites when government authorities request relocation due to political sensitivities, even after NGOs have already negotiated access with community leaders. This illustrates how different scales of brokerage can collide, producing delays, duplication, or fragmented implementation.

These tensions are intensified by depoliticization, which prevents actors from openly addressing the political drivers behind relocation requests or standardisation pressures, resulting in bureaucratic adjustments rather than political dialogue.

### *3. Depoliticization obscures marginalised voices*

Depoliticised institutional narratives prioritise donor, government, and UN perspectives, while refugee and host community voices enter the system only indirectly through NGO mediation. Refugee concerns such as fear of losing access to informal livelihood spaces or scepticism about the usefulness of certain NbS activities are often softened or reframed by NGOs to fit acceptable technical language. Host community grievances about land pressure, environmental degradation, or unequal benefits are similarly filtered through NGO reporting structures.

Donor reporting requirements emphasise quantifiable outputs (number of seedlings, hectares covered), which further marginalises local perspectives that do not fit easily into technical indicators. For instance, in one NGO-led reforestation project, refugees expressed concerns that dense plantations reduced visibility and

increased safety risks for women. These concerns were not incorporated into the final design because they were not part of the donor’s technical indicators. This demonstrates how depoliticization shapes which problems become “visible” and which remain unaddressed.

Here, brokerage becomes a filtering process: NGOs translate local concerns into technical categories that fit reporting requirements, which dilutes their political content and reinforces the depoliticization of community perspectives.

Together, these points show that brokerage enables implementation, but depoliticization shapes the boundaries of what can be brokered. NGOs navigate complex relationships, yet their ability to address structural issues is constrained by the humanitarian system’s preference for technical, apolitical solutions. As a result, political tensions are managed through brokerage rather than addressed directly, producing interventions that are operationally feasible but limited in their transformative potential.

## 6.4 Implications for Research and Practice

This chapter’s analysis highlights several implications for how NbS interventions are designed, coordinated, and understood within the humanitarian governance system in Cox’s Bazar Rohingya camps. The findings show that environmental interventions are shaped not only by technical considerations but also by political sensitivities, institutional mandates, and the brokerage roles played by frontline actors. Expanding these implications clarifies how the dynamics identified in the findings translate into broader lessons for both research and practice.

### *Coordination across scales is essential*

Effective NbS interventions require alignment between frontline NGO brokerage and higher-level UN coordination. The findings show that NGOs work at the interface of communities, CiCs, and government authorities, negotiating land access, community expectations, and camp-level constraints. UN agencies,

meanwhile, set technical standards, allocate resources, and coordinate across sectors.

Concrete examples from the findings show how coordination gaps create real operational problems.

For instance, NGOs described how “one NGO used to finish its plantation and the next day another one used to come and do the gap fillings” (NGO E; NGO G), illustrating duplication caused by weak cross-agency communication. Similarly, smaller organisations and independent groups continued planting without following Forest Department guidelines, sometimes damaging existing seedlings. Participants also noted that “information often stops halfway, between fields and headquarters” (UN Agency D), reinforcing how coordination challenges occur both horizontally and vertically.

Because land scarcity and political sensitivities shape every stage of implementation, gaps in coordination lead to fragmented or duplicated activities. This demonstrates that NbS outcomes depend not only on technical design but on how well actors at different levels communicate, negotiate constraints, and align priorities.

#### *Depoliticization limits long-term sustainability*

The analysis shows that NbS is frequently framed as a technical, apolitical intervention. This framing obscures the political constraints that shape environmental degradation in the camps, including restrictions on land use, mobility, and long-term planning. Examples from the findings illustrate how depoliticization operates in practice.

Participants described the camps as environmentally devastated, yet political issues around land allocation and state control remained largely unspoken. Short-term funding cycles further reinforce this depoliticization: seedlings require three to four years of care, but most projects last one year or less, resulting in survival rates often below 30%. The SAFE+ LPG programme also reflects this

tension despite being essential for reducing pressure on forests, it faces declining funding and uncertainty, with one participant noting that “whatever they have now will not be enough if fundings do not come” (UN Agency D).

### *Institutional perspectives are partial*

Refugee and host community voices remain marginal in decision-making. Their concerns are filtered through NGO mediation, shaped by reporting requirements, and constrained by political sensitivities. While community consultations occur, they rarely influence core design decisions.

The findings provide clear examples of how institutional filtering works. Host communities often resisted plantation activities on agricultural land, forcing NGOs to negotiate and sometimes relocate plantation sites. Refugee engagement was mediated through Majhis or refugee block leaders and inter-group tensions occasionally led to sabotage of plantation sites (NGO F; UN Agency C). Participation challenges such as age restrictions, gender inclusion barriers, and bureaucratic processes further limited meaningful involvement.

Expanding this point highlights that institutional perspectives dominate because they are embedded in hierarchical humanitarian structures, not because communities lack knowledge or interest. This has implications for how participation is conceptualised and operationalised in NbS programming.

### *Power dynamics shape outcomes*

Donor priorities, government restrictions, and bureaucratic hierarchies influence how NbS interventions are framed, funded, and implemented. The findings show that what counts as a “successful” intervention is often defined by donor reporting metrics rather than local environmental needs.

Taken together, these implications show that NbS implementation in the Rohingya camps is shaped less by technical design than by the governance structures, political sensitivities, and institutional hierarchies that humanitarian actors must navigate. The examples demonstrate how coordination challenges,

depoliticization, partial participation, and power dynamics collectively influence what is possible in practice. Recognising these dynamics is essential for designing NbS interventions that are both ecologically meaningful and institutionally feasible within humanitarian settings.

## 6.5 Summary

NbS implementation in the Rohingya camps is shaped by the interacting processes of brokerage and depoliticization. NGOs act as frontline mediators, negotiating local constraints while implementing technical solutions. UN agencies coordinate and standardise interventions at a higher scale. These roles produce both innovations and challenges, including unintended consequences, trade-offs, and the depoliticization of structural issues. Understanding these dynamics is essential for improving the design and sustainability of environmental interventions in humanitarian settings, where political sensitivities and governance structures fundamentally shape what is possible.

Taken together, the findings demonstrate how brokerage and the Anti-Politics Machine operate simultaneously in the implementation of NbS in the Rohingya camps. Brokerage explains how NGOs mediate between communities, government authorities, and UN agencies, negotiating constraints and translating institutional expectations into practice. At the same time, the Anti-Politics Machine helps illuminate how these interventions become depoliticised, framed as technical solutions rather than responses to structural drivers of environmental degradation. Expanding this point shows that the interaction of brokerage and depoliticization is central to understanding why NbS interventions are both innovative and limited: they succeed in navigating complex governance arrangements but remain constrained by the political conditions that humanitarian actors cannot openly address.

## 7 Conclusion

This study examined the challenges faced by NGOs and UN agencies in implementing (Nature-based solutions) NbS, particularly afforestation or reforestation, in the Rohingya refugee camps of Cox's Bazar. By analysing organisational experiences through the concepts of brokerage and the Anti-Politics Machine, the research demonstrates that the obstacles encountered are not generic forestry challenges, but are deeply shaped by the humanitarian governance structure, political sensitivities, and the securitised environment of the camps. Environmental interventions unfold within a system where political constraints are reframed as technical issues, and where NGOs must continuously negotiate competing demands among donors, government authorities, and refugee communities.

### 7.1 Key Findings

The findings reveal three central dynamics that shape NbS (Nature-based Solution) implementation in Cox's Bazar:

#### *Structural and institutional obstacles*

NGOs and UN agencies face persistent challenges across all stages of reforestation from planning to long-term maintenance. Limited land availability, overlapping mandates, and unregulated planting by smaller organisations complicate coordination. Short-term funding cycles undermine the survival of seedlings and threaten complementary programmes such as LPG distribution, which are essential for reducing pressure on forest resources. These challenges arise from the political and institutional configuration of the camps, rather than from ecological factors alone.

#### *Strategies for navigating constraints*

To address these obstacles, organisations rely on coordination platforms (e.g., EEN, ISCG & RRRC), community engagement, and cash-for-work schemes that foster ownership and improve maintenance. However, these strategies operate within a context marked by host-refugee tensions, bureaucratic approval

processes, and donor-driven priorities. As a result, interventions often reflect negotiated compromises rather than ecological or community-defined needs.

#### *Influence of government authorities*

The Bangladesh Forest Department (BFD) plays a decisive role in shaping reforestation outcomes by approving species lists, providing technical guidance, and ensuring regulatory compliance. While government involvement enhances legitimacy, slow approval processes and strict regulatory frameworks can delay implementation. This highlights the centrality of state authority in determining what forms of environmental action are possible within the camps.

## 7.2 Analytical Implications

Applying brokerage and the Anti-Politics Machine reveals how environmental interventions are shaped by political and institutional forces:

- Brokerage explains how NGOs mediate between donors, government authorities, and refugee communities, negotiating access to land, resources, and legitimacy. Their role is intensified by the securitised governance of the camps, where every activity requires approval and where political sensitivities shape operational decisions.
- The Anti-Politics Machine illuminates how political issues such as land scarcity, mobility restrictions, host-refugee tensions are reframed as technical challenges. This depoliticization enables interventions to proceed but limits their transformative potential, reinforcing short-term, output-driven programming.

Together, these concepts show that NbS (Nature-based solutions) in Cox's Bazar Rohingya camps are constrained not by ecological limitations alone, but by political structures that define what can be said, done, and funded in a humanitarian setting.

This study extends the existing debates by demonstrating that brokerage and depoliticization operate simultaneously and mutually. They reinforce one another in humanitarian environmental governance. While previous literatures often treat this process separately, the Cox's Bazar Rohingya camps case shows that NGOs broker relationships within already depoliticised frameworks. These are producing

interventions that are technically efficient but structurally limited. This shows how NbS in crisis setting become tools for managing rather than transforming environmental vulnerability.

### 7.3 Implications for Development Practice

The findings suggest several practical implications for improving NbS implementation in humanitarian contexts:

- Long-term funding is essential. Reforestation requires multi-year maintenance, yet most projects operate on annual cycles. Donors must recognise the long-term nature of ecological restoration.
- Coordination must be strengthened. Clearer oversight is needed to prevent unregulated planting and ensure adherence to agreed guidelines.
- LPG distribution must be sustained. Discontinuation of SAFE+ programmes would reverse environmental gains and increase pressure on forested areas.
- Livelihood opportunities should be expanded. Without viable income sources, refugees remain dependent on firewood and humanitarian aid. Skill development must be paired with policies that allow refugees to use their skills productively.
- Community engagement must be meaningful. Participation should move beyond awareness campaigns to include shared decision-making and long-term stewardship.

More broadly, humanitarian actors must acknowledge that environmental interventions cannot succeed without addressing the political structures that shape land access, mobility and resource use.

### 7.4 Contribution to Rural Development and Natural Resource Management

This research contributes to rural development and natural resource management by demonstrating how environmental interventions unfold in crisis-affected rural settings where governance, displacement, and ecological pressures intersect. It highlights how:

- humanitarian governance structures shape access to natural resources
- power dynamics influence environmental decision-making
- depoliticization limits the scope of NbS interventions
- NGOs act as intermediaries navigating competing institutional agendas

These insights extend debates on participatory governance, environmental restoration, and humanitarian practice by showing how NbS (Nature-based Solution) are translated, negotiated, and constrained in politically sensitive environments.

## 7.5 Final Reflection

Overall, the study shows that effective NbS (Nature-based Solution) implementation in Cox's Bazar Rohingya camps requires more than technical expertise. It demands recognition of the political, institutional, and social dynamics that shape environmental interventions in humanitarian settings. By foregrounding brokerage and depoliticization, this research provides a framework for understanding why environmental projects succeed or alter in refugee camps. The study therefore contributes to wider debates on humanitarian governance and environmental restoration by demonstrating how political structures shape the possibilities and limits of NbS (Nature-based Solution) in displacement settings. It offers lessons for designing more sustainable, inclusive, and context-sensitive interventions in other crisis-affected regions.

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# Popular Science Summary

Trees are essential for life. They clean the air, cool the environment, protect soil, and support biodiversity. They also provide food, medicine, and materials that people depend on every day. Because of this, reforestation is especially important in places where the environment has been heavily damaged.

The Rohingya refugee camps in Cox's Bazar, Bangladesh, are one such place. After the refugee influx, large areas of forest were cleared, putting pressure on the local ecosystem. NGOs and UN agencies have been working to restore the environment through tree-planting and other nature-based solutions.

My research explored the challenges they face while doing this work. I found that organisations struggle with coordination, especially in the early years when there was no central planning. Short-term and inconsistent funding make it difficult to care for seedlings long enough for them to survive. Programmes like LPG distribution which reduce the need for firewood-also depend on funding that is not always guaranteed.

Despite these challenges, progress has been made. Better coordination, community engagement, and training programmes have helped improve survival rates in some areas. However, long-term success depends on sustained funding, strong collaboration, and continued support for both refugees and the environment.

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# Appendix

A list of interview participants

Participants No	Institutional Sector	Specific Job Role	Amount of time taken (min)	Online	Gender
1	UN Agency	Inter-agency project coordinator	40	Zoom	Male
2	UN Agency	Inter-agency project coordinator	55	Teams	Male
3	UN agency	Environmental manager	60	Teams	Male
4	UN Agency	Environmental manager	43	Zoom	Male
5	UN Agency	Environmental officer	48	Zoom	Male
6	UN Agency	Environmental officer	45	Zoom	Male
7	NGO	Senior Field officer	45	Zoom	Male
8	NGO	Field Officer	60	Zoom	Male
9	NGO	Field Officer	55	Zoom	Male
10	NGO	Senior Field Officer	40	Zoom	Male
11	NGO	Field officer	60	Zoom	Male
12	NGO	Field officer	45	Zoom	Male
13	NGO	Field officer	45	Zoom	Male
14	NGO	Field officer	60	Zoom	Male
15	NGO	Field officer	50	Zoom	Male

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