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## **The Impact of Climate Threats on International Migration within the Framework of Non-Traditional Security: Selected Cases**

**أثر التهديدات المناخية في الهجرة الدولية ضمن إطار الأمن غير التقليدي: نماذج مختارة**

**Asst. Professor Dr. Basil Muhsin Muhanna**

أ.م.د. باسل محسن مهنا

**Kufa University/ College of Political Science**

جامعة الكوفة / كلية العلوم السياسية

basilm.alumeiri@uokufa.edu.iq

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## الملخص

برزت التغيرات المناخية بوصفها أحد أبرز التحديات في إطار الأمن غير التقليدي لما لها من تأثيرات عميقة في الاستقرار الاجتماعي والاقتصادي والأمن الإنساني وأنماط الهجرة الدولية. إذ تسهم الضغوط البيئية -مثل الجفاف والتصحر وارتفاع مستوى سطح البحر وتزايد الظواهر الجوية المتطرفة- في تعميق الضغط على الموارد الطبيعية وسبل العيش لا سيما في المناطق الهشة مما يدفع نحو أنماط معقدة من التنقل والحركة السكانية العابرة للحدود ذات أبعاد استراتيجية متزايدة.

تهدف هذه الدراسة إلى تحليل التفاعل بين التهديدات المناخية والهجرة الدولية من خلال مقارنة مقارنة لحالتين إقليميتين مختارتين: منطقة الساحل الإفريقي إذ يؤدي التصحر وندرة الموارد إلى توليد ضغوط هجرية متصاعدة وكذلك جنوب آسيا الساحلي (بنغلادش) إذ يسهم ارتفاع مستوى سطح البحر وتكرار الفيضانات في إحداث موجات نزوح واسعة النطاق، لذا اعتمدت الدراسة منهجاً استنباطياً مدعوماً بمقاربات وصفية وتحليلية ومقارنة فضلاً عن منهج دراسة الحالة والاستشراف، إذ تنتقل من الأطر النظرية العامة للأمن غير التقليدي إلى التحليل التطبيقي للحالات المدروسة.

وتظهر نتائج الدراسة أن التهديدات المناخية تؤدي دور مضاعف للمخاطر أكثر من كونها عاملاً مباشراً للهجرة إذ تعمل على تعظيم الهشاشة الاجتماعية والاقتصادية والقصور المؤسسي القائم بما يعيد تشكيل ديناميات الحركة السكانية كما تؤكد الدراسة الحاجة إلى تبني استجابات سياساتية متكاملة تجمع بين التكيف المناخي وحوكمة الهجرة وتعزيز التعاون الدولي بما يسهم في الحد من المخاطر المتصاعدة وتعزيز منظومة الأمن غير التقليدي على الصعيد العالمي.

**الكلمات المفتاحية:** "التغير المناخي"، "الهجرة الدولية-إدارة المخاطر"، "الأمن غير التقليدي"، "الساحل الإفريقي"، "جنوب آسيا-بنغلادش"

## Abstract

Climate change has emerged as a critical non-traditional security challenge, it affects profoundly on socioeconomic stability, human security, and the patterns of international migration. Environmental stressors -such as drought, desertification, rise of sea-level and extreme weather events- exacerbate pressures on natural resources and livelihoods, particularly in fragile regions, So, that will drive complex forms of cross-border mobility with significant strategic implications .

This study investigates the interaction between climate threats and international migration through a comparative analysis for two selected regions:

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African Sahel where desertification and resource scarcity generate for migration pressures and coastal South Asia (Bangladesh), were seas rising and recurrent flooding lead to large-scale displacement. Employing a deductive method including descriptive, analytical, comparative, case study, and foresight approaches, the research moves from general theoretical frameworks on non-traditional security to specific empirical observations, So, the findings of this research demonstrate that the Function of climate threats primarily as risk multipliers, amplifying pre-existing socioeconomic and vulnerabilities in institutions rather than it acts as direct drivers of migration .

The study underscores the necessity for integrated in policy responses that combine climate adaptation, migration governance, and international cooperation to mitigate the rising risks and global non-traditional security enhancement.

Keywords: "Climate Change", "World Migration-risk management", "Non-Traditional Security", "African Sahel", "South Asia-Bangladesh".

### Introduction

Climate change has become a critical challenge that is shaping the contemporary international system even beyond environmental impacts extending to influence economic stability or social resilience and patterns of human mobility, so phenomena such as temperatures rising or drought even desertification, sea-level rise and extreme weather events that intensify pressure on resources and livelihoods particularly with regions reliant developing on climate sensitive sectors, As a result, environmental stressors intersect increasingly with migration dynamics and new forms of mobility beyond traditional drivers generation.

The nexus between environmental changes and migration has been gaining a prominence in academic and policy debates for instance degradation undermines local economies and community resilience and that makes migration an adaptive response for risk while most movements remain internal but their interaction with structural vulnerabilities such as poverty and weak governance which can drive cross border migration.

This transformation has also reshaped the concept of security which it shifts from a narrow military focus toward a broader framework of non-traditional security which it incorporates environmental and human dimensions, so migration induced by climate emerges as a key phenomenon that can link environmental stress to governance even stability and international security.

Thus, Climate change operates as a risk multiplier even exacerbates the existing vulnerabilities and intensifies a competition over scarce resources which may lead to displacement despite the increasing of recognition to these dynamics and current governance frameworks remain insufficient for manage the complexity of climate-related mobility effectively.

### **Research Importance**

This study is significant cause its analysis for climate threats and international migration relationship within non-traditional security framework, so security studies are expanding because the contribution of this study beyond traditional paradigms through environmental and migration-related risks incorporating, thus, its integration among climate change even migration security perspectives for a comprehensive understanding provision of climate induced mobility and its implications on international stability and governance.

### **Research Objectives**

The relationship between climate threats and international migration are aimed by this study to examine it through the following objectives:

1. The conceptual link between climate change and migration within non-traditional security are aimed to Clarify it.
2. The interaction between environmental pressures and socioeconomic vulnerabilities are aimed to Analyze it through migration dynamics shaping.
3. Selected cases are Examined to identify regional patterns and their institutional responses.
4. The strategic implications of climate-induced migration are Assessed for governance and international security.

### **Research Problem**

Through examining how climate threats drive international migration and their implications for non-traditional security, so why a relationship that remains insufficiently explored in terms of mechanisms and impacts, all that motivated this study to address the central question: **How do climate threats influence international migration and what are their strategic implications with non-traditional security?** thus, as a result this question leads to three sub-questions on: the evolution of security to include environmental threats; the regional patterns of climate-induced migration particularly in the Sahel and South Asia; and its effects on sovereignty even governance and stability as well as the effective management scenarios.

### **Research Hypothesis**

It assumes that climate threats lead to multipliers in structural risk that would intensify vulnerabilities which existing, thereby drive for migration and for non-traditional security challenges generation that vary across regions and the necessity for integrated policy responses requirements.

### **Research Methodology**

A deductive approach is adopted by this study to move from general theoretical frameworks to specific empirical cases which combines descriptive even analytical comparative or case study and foresight approaches to analyze comparatively to identify patterns and variations in climate-induced migration in the Sahel region and coastal South Asia (Bangladesh), so this integrated

methodology enables a comprehensive understanding for the climate threats and migration relationship within non-traditional security, as well as governance challenges future.

## **I- Conceptual and Theoretical Framework of Climate Threats and International Migration**

### **I-I Climate Threats and the Evolution of the Security Concept in International Relations**

#### **I-I-1 The Concept of Climate Threats and Their Main Patterns**

Climate threats represent one of the most significant non-traditional risks that facing states and their societies in the twenty-first century, as they affect natural resources directly, economic systems, and socio-political stability, so, increasingly current research recognizes that environmental degradation and variability in climate can act as catalysts for instability, especially in fragile regions where capacity in institutions is limited. Climate-related hazards often interact with existing socioeconomic vulnerabilities, thereby intensifying pressures on communities and contributing to displacement and migration patterns.<sup>1</sup>

Among the most prominent manifestations of climate threats are Drought and Desertification which effect on food security and rural livelihoods, then if we look to the regions such as The African Sahel, prolonged drought cycles have led productivity to declining agricultural and the degradation of grazing lands, undermining traditional economic activities and forcing populations to migrate in search of livelihoods alternative. The reports of United Nations indicate that agricultural output declined by 15-20% in certain areas of the Sahel between 2010 and 2020 due to droughts prolonged, which contributed to displacement even in internal or cross-border.<sup>2</sup>

Climate threats have another critical manifestations which are the growing frequency, intensity of floods and extreme weather events, especially in vulnerable coastal and deltaic regions. South Asia represents a notable example, where flooding recurrent -especially in Bangladesh and eastern India- has displaced large numbers of people and damaged for critical infrastructure. These shocks in environment destroy housing, agricultural land and undermine economic resilience, thereby contributing to long-term migration pressures.<sup>3</sup>

In addition, sea-level rise poses a significant long-term risk to coastal areas in densely populated, as well as low-lying countries and delta regions - such as the Ganges Delta - face land loss prospect, saltwater intrusion into freshwater systems, and the gradual displacement of coastal communities, so, according to the Intergovernmental Panel on Climate Change (IPCC), sea levels rising – It estimates that about 0.6-meter rise in sea level through 2100- could expose and place tens of millions -over 50 million- at risk of displacement from South Asia people.<sup>4</sup>

climate change Furthermore contributes to ecosystems disruption and resources of water, precipitation patterns altering and increasing in the variability of water availability, so, these changes intensify competition over scarce resources, particularly in regions where scarcity of water already constitutes a structural challenge, so, environmental stress can interact with political and economic fragility, and that effects on increasing in the risk of social tensions and in the cross-border instability, as what happened in the Nile Basin and the Somali coast.<sup>o</sup>

### **I-I-2 The Evolution of the Security Concept in International Relations**

Security concept in international relations has undergone a profound transformation through the past decades, and that shifting made this concept evolves from military threats as a narrow focus to a broader political, economic, societal, and environmental understanding:

The dominant approach to security was traditionally rooted in classical and structural realism which primarily conceptualized security in terms of state survival within an anarchic international system, so, according to this perspective, and as a result states sought to maximize their power and protect their sovereignty against abroad military threats, while environmental and societal factors were largely considered secondary in strategic competition.<sup>v</sup>

beyond the end of Cold War era, the security agenda that was prompted by a gradual expansion and that lead to concept of human security emergence, so, this approach shifted the analytical focus from state security to individuals and communities' security, through emphasizing on protection from a wide range of threats, even including poverty, disease, environmental degradation or natural disasters.<sup>y</sup>

increasingly, scholars and policymakers recognized the significance of environmental and climate security, even that environmental degradation, resource scarcity or climate variability that began to be understood as ecological issues and factors that could influence on political stability, economic development and the dynamics of conflict, thus, climate change has been widely described as a multiplier risk that exacerbates vulnerabilities existing and indirectly to instability, conflict, and migration contribution.<sup>^</sup>

### **I-I-3 Integrating Climate Change into the International Security Agenda**

climate change in recent years has gradually become integrated into security agenda globally, reflecting recognition rise of its implications on international stability potentially.

The United Nations at the international level and the Security Council increasingly have addressed the security implications of climate change, especially in fragile and conflict-affected regions, so, the Council discussions has highlighted how environmental stress can exacerbate political tensions existing and undermine the efforts of peacebuilding, thereby reinforcing of the

necessity to integration of climate considerations into conflict prevention strategies.<sup>9</sup>

Scientific assessments conducted by the Intergovernmental Panel on Climate Change (IPCC) which have also played a crucial role in international policy debates informing, so comprehensive reports from the IPCC provide empirical evidence on climate change and its long-term impacts which including its potential effects on migration patterns even resource availability and human security.<sup>10</sup>

Thus, several states -at the national level- have begun climate-related risks incorporation into their national security strategies cause they recognize that environmental change may affect infrastructure resilience even energy security or water resources and migration management, for instance the United Kingdom and Germany governments have explicitly acknowledged that climate change as a strategic challenge which requires coordinated responses across environmental even security and economic policy domains.<sup>11</sup>

## **I-2 International Migration as a Result of Climate Pressures**

A significant driver of human mobility has increasingly been recognizing through climate change particularly in regions that characterized with environmental vulnerability even socioeconomic fragility and limited institutional capacity, then the complex relationship between environmental change and migration have examined by scholars and policymakers whom emphasizing that climate related factors would rarely operate in isolation but rather interact with economic even political and demographic dynamics, as a result the climate induced migration has become an issue key within the broader framework of non-traditional security which it effects on state stability even border governance and international cooperation.<sup>12</sup>

Livelihoods even degrade agricultural productivity and weaken local economies could be undermined by environmental pressures -such as drought, desertification even sea levels rising and extreme weather events-so, these processes eventually may push affected populations to seek alternative sources of income and security beyond their place of origin, however, migration decisions are highlighted by contemporary research which are often complex adaptive strategies outcome rather than a direct or deterministic response to environmental stress.<sup>13</sup> Climate change - in this sense - acts as a multiplier risk which intensifies on vulnerabilities existing and contributes to migration pressures in regions already which are facing the socioeconomic challenges.<sup>14</sup>

### **I-2-1 The Concept of Environmental and Climate Migration and the Problem of Definition**

One of the central challenges in climate induced migration studying lies in a universally accepted definition absence for environmental or climate migrants. however, in the 1980s and 1990s the early attempts are emerged to conceptualize the phenomenon when scholars and international organizations

began to draw attention to the effects of potential displacement of environmental degradation, then these early formulations often used the term (environmental refugees) which referred to enforce individuals to leave their homes due to environmental disruptions which threatened their survival or livelihoods.<sup>١٥</sup>

However, environmental refugee term soon became controversial because it lacked legal precision and risked conflating environmental mobility with category of refugees established which defined under international law, many scholars consequently prefer environmental migrants term or climate migrants term because they see it more accurately reflects the diverse forms of mobility that associated with environmental change which is including a temporary displacement even seasonal migration and permanent relocation.<sup>١٦</sup>

The climate-related migration which is emphasized by recent studies that is rarely monocausal, so instead, environmental stress interacts with economic inequality even governance deficits or demographic pressures and social networks which is shaping migration outcomes in a complex way, thus increasingly climate migration is conceptualized as a multidimensional process embedded within broader socio-economic systems rather than a simple environmental reaction.<sup>١٧</sup>

### **I-2-2 Climate as a Driving Factor in Theories of International Migration**

Environmental change and migration relationship could be better understood through classical and contemporary migration theories lens which are highlighted different mechanisms through which environmental pressures influence mobility.

**The push-pull theory** is one of the earliest analytical frameworks which it explains migration as factors' result that push individuals away from their place of origin and factors that attract them to destination areas, then, environmental degradation -such as agricultural productivity declination even water scarcity and natural disasters- could function as a strong push factors by local livelihoods undermining and increasing economic insecurity, thus destination regions - at the same time - may offer pull factors such as employment opportunities even better infrastructure and greater environmental stability.<sup>١٨</sup>

**World-systems theory** is another important perspective which it situates migration within the broader dynamics of global economic integration, then environmental degradation -according to this theory- often intersects with structural inequalities within the global economy which peripheral regions that depend heavily on agriculture and natural resources are particularly vulnerable to climate change that could intensify economic marginalization patterns and stimulate migration toward more industrialized regions..<sup>١٩</sup>

**Multicausal approach to migration** is adopted recently by some scholars which emphasizing on the fact that environmental factors operate in conjunction with economic even political and demographic drivers, so from this

perspective, migration is not automatically produced by climate change but instead existing migration systems modification by livelihood strategies influencing even resource availability and local conflict dynamics, thus significant prominence from this analytical framework has been gained in contemporary migration studies and is used widely in climate-security research.<sup>١٠</sup>

### **I-2-3 The Legal Gap in the International Protection System**

The international legal framework -Despite growing recognition of climate-induced migration- that is governing displacement remains largely inadequate for addressing environmental mobility challenges, so the 1951 Convention Relating to the Status of Refugees could be considered as the cornerstone of the global refugee protection regime which defines a refugee as a person who has crossed an international border due to a wellfounded fear of persecution based on race even religion or nationality or political opinion or membership in a particular social group.<sup>١١</sup> However, under this Convention, environmental factors are not included among the legal grounds for refugee status, as a result individuals displaced by climate related events -such as sea levels rising even drought or natural disasters- do not qualify for international protection under refugee regime existing, thus, this legal gap has been generated significant debate among scholars and policymakers regarding the necessity for new legal instruments development or mechanisms capable of addressing the growing phenomenon of climate induced displacement.<sup>١٢</sup>

Thus, to address this gap, efforts have emerged through initiatives such as the Global Compact for Safe Orderly and Regular Migration and the Nansen Initiative on Disaster Induced Cross Border Displacement which seek for international cooperation enhancement in environmental migration management, nevertheless these frameworks remain largely nonbinding and rely on voluntary cooperation among states with limiting their effectiveness in durable protection mechanisms providing.<sup>١٣</sup>

### **I-2-4 The Relationship between Forced Migration and Political and Security Stability**

Climate induced migration and political stability intersection has become a central concern in contemporary security studies, so, Large-scale population movements triggered by environmental pressures can generate significant challenges for both origin and destination countries which including competition over resources even pressure on infrastructure or public services and emergence of social tensions potential.

Environmental stress -especially in fragile states - may exacerbate existing governance weaknesses and contribute to internal displacement and conflict, for instance agricultural productivity declining and water scarcity can intensify competition between communities, so triggering localized violence potentially and further displacement,<sup>١٤</sup> thus, in such contexts migration may

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serve both as an adaptation strategy and as an indicator of deeper structural vulnerabilities within affected societies..

Climate related migration - at the international level - may also influence geopolitical dynamics through pressures increasing on border management systems and shaping migration policies in receiving countries, so, in regions - such as Europe even rising migration flows have already contributed to political debates over border security or asylum policies and migration role in national identity politics, then, climate migration consequently is increasingly viewed not only as a humanitarian issue but also as a strategic challenge for international security governance.<sup>١٥</sup>

Table 1: Types of Climate Threats and Their Impact on Migration Patterns

Type of Climate Threat	Environmental Impact	Typical Migration Pattern	Potential Security Implications
Drought and Desertification	Decline in agricultural productivity and loss of grazing land	Rural-to-urban migration and cross-border labor migration	Food insecurity, competition over resources, and local conflicts
Sea-Level Rise	Coastal erosion, land loss, and saltwater intrusion into freshwater systems	Permanent displacement and relocation of coastal populations	Border pressure, humanitarian crises, and regional instability
Flooding and Extreme Weather Events	Destruction of housing, infrastructure, and farmland	Temporary displacement and seasonal migration	Strain on urban infrastructure and disaster management systems
Water Scarcity	Reduced water availability for agriculture and domestic use	Migration toward regions with greater resource availability	Increased risk of resource conflicts and social tensions
Ecosystem Degradation	Loss of biodiversity and deterioration of natural livelihoods	Gradual migration and livelihood diversification	Economic instability and increased vulnerability of rural communities

Table prepared by the author based on the following sources:

Richard Black, Stephen Bennett, Sandy Thomas, and John Beddington, "Migration as Adaptation," *Nature* 478 (2011): 448-449; McLeman, *Climate and Human Migration*, 73-78; Adger et al., "Cultural Dimensions of Climate Change Impacts and Adaptation," 758-760; IPCC, *Sixth Assessment Report*, 118-121.

## **II-1 Climate-Induced Migration in the Sahel: Desertification and Resource Degradation**

The Sahel region which stretches across the southern edge of the Sahara Desert from Senegal to Sudan that represents one of the most vulnerable regions in the world to climate change impacts, so, it's characterized by fragile ecosystems even rapid population growth and limited institutional capacity, thus the region has experienced significant environmental transformations over the past decades, then these changes have directly affected on agricultural productivity even water availability and pastoral livelihoods, thereby increasing patterns of human mobility contribution and cross-border migration.<sup>٢٦</sup>

Climate change -in this context- functions not merely as an environmental phenomenon but as a structural driver of socioeconomic instability and pressures intensifying on rural communities and migration dynamics across West and North Africa, so the Sahel has therefore become a key case study in contemporary research on climate security and environmental migration which it illustrates how ecological stress can interact with governance challenges and demographic pressures for complex migration patterns production.<sup>٢٧</sup>

### **II-1-1 Climate Change and Its Impact on Agricultural and Pastoral Resources**

The primary sources of livelihood for the majority of the Sahelian population are constituted by agriculture and pastoralism, however, temperatures rising even irregular rainfall patterns and desertification increasing have significantly undermined the productivity of these sectors, thus, studies indicate the Sahel has been experienced that a decline in agricultural yields average due to prolonged droughts and soil degradation which have the availability of arable land and grazing areas reduction.<sup>٢٨</sup>

The shrinking of traditional grazing corridors and the depletion of water sources are particularly affected severely on pastoral communities, so, as pastoral mobility becomes increasingly constrained and that herders are often forced to migrate longer distances in search of pasture, then frequently crossing national borders, thus this mobility has intensified interactions and sometimes tensions between pastoralists and sedentary farming communities competing for the same natural resources.<sup>٢٩</sup>

### **II-1-2 Food Insecurity and Increasing Competition over Resources**

The deterioration of agricultural systems in the Sahel has had significant implications for food security -according to the Food and Agriculture Organization (FAO)- there are millions of people in Shel region face chronic

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food insecurity as a result of crop yields that declining water scarcity and recurrent droughts.<sup>۳۰</sup>

Food insecurity threatens human welfare and especially contributes competition heightened over land and water resources, so in many Sahelian countries there is expansion of agricultural land into traditional grazing areas has generated conflicts between farmers and pastoralists, thus these tensions are often exacerbated by weak governance structures and limited mechanisms for resource management with increasing local instability risk and displacement.<sup>۳۱</sup>

Table 2: Selected Indicators of Climate Vulnerability in the Sahel Region

Indicator	Estimated Trends	Implications for Migration
Temperature Increase	+1.5°C since the 1970s	Declining agricultural productivity
Rainfall Variability	Increasing drought frequency	Seasonal and permanent migration
Population Growth	Among the highest globally	Increased pressure on natural resources
Agricultural Dependence	Over 60% of the population reliant on farming	Vulnerability to climate shocks
Food Insecurity	Millions facing chronic food shortages	Rural-urban and cross-border migration

Table prepared by the author based on the following sources:

IPCC, Climate Change 2022, Impacts, Adaptation and Vulnerability, 1403-1405; FAO, State of Food Security and Nutrition in the World 2022, 18-21; Rigaud et al., Groundswell, 57-60.

### II-1-3 Patterns of Displacement and Cross-Border Migration toward North Africa and Europe

Environmental degradation in the Sahel has contributed to diverse migration patterns which including internal displacement even rural-urban migration and cross border migration, so many migrants initially move from rural areas to urban centers within their own countries whom seeking employment opportunities and improved living conditions, however persistent economic hardship often encourages further migration toward North African transit countries such as Libya and Algeria.<sup>۳۲</sup> These migration trajectories -in some cases- extend beyond the African continent toward Europe particularly through irregular migration routes across the Mediterranean, although climate factors alone rarely explain migration decisions and environmental stress often interacts with economic and political drivers with reinforcing the incentive to migrate internationally.<sup>۳۳</sup>

### II-1-4 The Interaction between Climate Change and Local Conflicts

The Sahel region has also witnessed an increasing overlap between environmental pressures and security challenges, so climate-induced resource scarcity can exacerbate tensions between communities particularly in areas where governance structures are weak or where armed groups are active, thus research suggests that declining access to land and water has intensified disputes between farmers and pastoralists, particularly in countries such as Mali even Niger and Burkina Faso, then while climate change does not directly cause conflict but it can act as a risk multiplier or amplifying existing grievances and increasing the likelihood of violence.<sup>٢٤</sup>

### **II-1-5 The Role of International and Regional Organizations in Crisis Management**

Given the transnational nature of climate-induced migration in the Sahel even in international and regional organizations that play a crucial role in addressing the crisis, so institutions such as the United Nations or the African Union and the Economic Community of West African States (ECOWAS) have launched initiatives aimed at strengthening climate adaptation even improving food security and regional cooperation enhancement in migration management, then the World Bank and other development institutions have also supported programs designed to improve climate resilience in vulnerable communities for example the Sahel Adaptive Social Protection Program seeks to strengthen social safety nets and promote sustainable livelihood strategies in climate-affected regions.<sup>٣٥</sup>

### **II-2 South Asia as a Model of Climate-Induced Migration Associated with Sea-Level Rise**

South Asia represents one of the most climate-vulnerable regions in the world due to its dense population even extensive coastal zones and high dependence on climate-sensitive sectors such as agriculture and fisheries within this regional context, Bangladesh has emerged as one of the most frequently cited examples in the literature on climate-induced migration, so the country's geographical location in the low-lying Ganges -Brahmaputra- Meghna delta exposes it to a wide range of climate hazards which including sea level rising even coastal flooding or storm surges and salinity intrusion, thus, these environmental pressures have increasingly influenced patterns of human mobility and making Bangladesh a critical case for understanding the relationship between climate threats and migration within the framework of nontraditional security.<sup>٣٦</sup>

The interaction between climate change and migration dynamics in South Asia is particularly complex because environmental pressures intersect with rapid demographic growth uneven economic development and fragile infrastructure, as a result climate induced migration in the region often manifests through multiple forms of mobility with including internal displacement even

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rural-urban migration and crossborder movements toward neighboring countries.<sup>٣٧</sup>

### **II-2-1 Coastal Flood Risks and Hydrological Changes**

The increasing frequency of coastal flooding -one of the most significant climate threats facing South Asia - and hydrological disruptions even rising sea levels or combined with more intense tropical cyclones and storm surges have intensified coastal communities' vulnerability in Bangladesh and neighboring regions and these environmental processes have contributed to land erosion even saline intrusion into freshwater systems and the gradual loss of habitable land.<sup>٣٨</sup>

The significance changes in the delta region are hydrological changes which also influenced by shifts in both monsoon rainfall patterns and glacial melting in the Himalayas which affect river flows throughout the Ganges Brahmaputra basin and eventually these dynamics increase the likelihood of both seasonal flooding and longterm environmental degradation even agricultural productivity undermining and increasing the risk of displacement among rural populations..<sup>٣٩</sup>

Table 3: Climate Risks and Migration Pressures in Coastal Bangladesh

Climate Risk	Environmental Impact	Migration Outcome	Security Implications
sea-Level Rise	loss of coastal land and saline intrusion	permanent displacement from coastal villages	pressure on urban infrastructure
cyclones and Storm Surges	destruction of housing and infrastructure	temporary and seasonal displacement	humanitarian crises and disaster management challenges
river Flooding	agricultural land damage	rural-urban migration	economic instability
salinity Intrusion	decline in agricultural productivity	migration to inland regions	livelihood insecurity

Table prepared by the author based on the following sources:

IPCC, Climate Change 2022: Impacts, Adaptation and Vulnerability, 1518-1523; Nicholls and Cazenave, "Sea-Level Rise and Its Impact on Coastal Zones," 1519-1520; Rigaud et al., Groundswell, 83-85

### **II-2-2 Population Pressures and Migration from Bangladesh**

Bangladesh is among the most densely populated countries in the world with more than 165 million inhabitants concentrated within a relatively small geographic area, so this demographic significantly pressure increases the

vulnerability of communities to environmental shocks especially when climate hazards destroy agricultural land or reduce access to freshwater resources and affected actually on populations often have limited alternatives other than migration.<sup>٤١</sup>

Internal migration toward major urban centers such as Dhaka and Chittagong have significantly increased in recent decades partly driven by environmental factors, so rural households affected by flooding even cyclones and salinity intrusion frequently relocate to urban areas in search of employment and better living conditions, however the rapid growth of urban populations has placed considerable pressure on housing even public services and labor markets and creating new socioeconomic challenges in destination areas..<sup>٤١</sup>

### **II-2-3 Climate Threats and Regional Stability**

The potential security implications of climate induced migration in South Asia extend beyond national borders, so large scale displacement could affect regional stability by increasing migration pressures on neighboring countries and intensifying political debates over border control and migration governance, then some analysts have suggested that rising environmental pressures in Bangladesh could contribute to increased cross border migration toward India particularly in border regions such as West Bengal and Assam, thus although migration between the two countries historically has been influenced by economic and political factors then climate change may amplify existing mobility patterns by intensifying environmental vulnerabilities in coastal areas.<sup>٤٢</sup>

### **II-2-4 Policies of Neighboring States in Managing Migration**

Neighboring states have adopted different approaches to manage migration flows associated with environmental pressures, like India has implemented stricter border controls along parts of the Bangladesh-India border which reflecting domestic political concerns about irregular migration and demographic change, at the same time regional cooperation mechanisms in South Asia remain relatively limited compared with other regions while organizations such as the South Asian Association for Regional Cooperation (SAARC) have addressed environmental issues and disaster management, thus there is still no comprehensive regional framework specifically designed for climate-induced migration management.<sup>٤٣</sup>

### **II-2-5 Adaptation Strategies and Climate Risk Management**

Bangladesh has implemented a range of adaptation strategies -in response to growing climate risks- that aimed at strengthening resilience and vulnerability reduction, so these initiatives include the construction of coastal embankments even cyclone shelters and early warning systems designed to mitigate the impacts of extreme weather events, then the government has developed national strategies such as the Bangladesh Climate Change Strategy and Action Plan which seeks to integrate climate adaptation into broader development policies, so international organizations which including the World Bank and the United

Nations have also supported projects aimed at improving water management even protecting coastal ecosystems and promoting climateresilient agriculture.<sup>٤٤</sup>

### **III- Strategic Implications of Climate-Induced Migration on International Security**

#### **III-1 Climate Migration as a Transboundary Threat within the Framework of Non-Traditional Security**

Climate induced migration -in recent years- has increasingly been conceptualized within the broader framework of non-traditional security which reflecting a growing recognition that environmental change can influence political stability even economic resilience and international cooperation but unlike traditional security threats which are primarily associated with military confrontation among states as a result climate migration represents a complex phenomenon that emerges from the interaction between environmental pressures with socioeconomic vulnerabilities and governance challenges, thus climate change intensifies the frequency and severity of environmental shocks but migration has become one of the most visible manifestations of climate-related instability particularly in regions characterized by fragile institutions and limited adaptive capacity.<sup>٤٥</sup>

Climate migration -from a strategic perspective- is increasingly viewed not merely as a humanitarian issue but as a transboundary security challenge that affects both origin and destination countries with large scale population movements can place pressure on infrastructure even public services and labor markets while also influencing political debates on migration governance and border control, so climate migration has consequently emerged as an important topic within contemporary discussions of global security and international governance.<sup>٤٦</sup>

##### **III-1-1 Climate Migration as a Risk Multiplier for Security Threats**

The notion of climate change as a risk multiplier is considered as a key concept in the study of climate security and this concept suggests that environmental stress does not necessarily create new conflicts or security crises on its own rather it exacerbates existing vulnerabilities within societies and political systems, so in regions already facing poverty or weak governance and demographic pressures which climate induced migration can intensify social tensions and competition over scarce resources.<sup>٤٧</sup>

largescale migration -for instance- triggered by environmental degradation may increase pressure on urban centers that already struggle with limited infrastructure and employment opportunities, so with such contexts the influx of displaced populations can contribute to economic marginalization and social fragmentation even potentially generating instability in both origin and destination regions, thus as a result many scholars argue that climate migration should be understood as part of a broader nexus linking environmental change with development challenges and security risks.<sup>٤٨</sup>

### III-1-2 Migration Flows and Their Impact on Border Policies and National Sovereignty

Individuals displaced by environmental factors -in many cases- do not fall within the legal definition of refugees under international law and that will leave destination countries uncertain about their obligations toward such migrants but consequently states often respond by strengthening border controls and implementing stricter migration policies aimed at limiting irregular migration.<sup>٤٩</sup>

### III-1-3 Climate Migration and Societal Security in Europe

Europe has become one of the primary destinations for migrants originating from regions affected by environmental degradation particularly in Africa and the Middle East but economic and political factors remain central drivers of migration toward Europe and environmental pressures have increasingly contributed to these mobility patterns, thus the arrival of large numbers of migrants has generated significant debates within European societies regarding integration even social cohesion and the sustainability of welfare systems but some policymakers and analysts argue that largescale migration may create pressures on housing even employment and public services which potentially affecting on perceptions of societal stability.<sup>٥٠</sup>

### III-1-4 Climate Migration and the Rise of Populist and Nationalist Movements

Migration pressures have also influenced the political landscape in many destination countries particularly in Europe and North America -In recent years- migration has become a central issue in electoral politics often framed within broader debates about globalization even national identity and economic inequality, so several studies suggest that the perception of uncontrolled migration can contribute to the rise of populist and nationalist political movements which frequently advocate stricter border controls and more restrictive immigration policies, thus these political dynamics illustrate how migration flows -regardless of their underlying causes- can have farreaching consequences for domestic political stability and international cooperation.<sup>٥١</sup>

Table 4: Security Implications of Climate-Induced Migration

Dimension of Security	Potential Impact of Climate Migration	Strategic Implications
Economic Security	Pressure on labor markets and public services	Increased demand for social and economic policies
Societal Security	Debates over identity, integration, and social cohesion	Rise of anti-immigration narratives
Political Stability	Polarization in domestic politics	Strengthening of populist movements
Border Security	Increased irregular	Expansion of border

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	migration flows	control measures
Human Security	Vulnerability of displaced populations	Need for international protection mechanisms

Table prepared by the author based on the following sources:

Barnett and Adger, "Climate Change, Human Security and Violent Conflict," 640-642; Biermann and Boas, "Preparing for a Warmer World," 68-70; Betts, Survival Migration, 94-97; Black et al., "Migration as Adaptation," 447-449.

### III-1-5 Interaction between Climate Migration and Other Non-Traditional Security Threats

Climate induced migration also intersects with other forms of non-traditional security threats which including terrorism or organized crime and human trafficking, so displacement and irregular migration routes may create opportunities for criminal networks to exploit vulnerable populations particularly in regions where state authority is weak.

Human trafficking networks -for example- often target migrants who lack legal protection or safe migration pathways, so similarly unstable regions experiencing largescale displacement may become more susceptible to the activities of armed groups seeking to recruit marginalized individuals or exploit governance gaps.<sup>٥٢</sup>

### III-2 Future Scenarios for Managing Climate-Induced Migration in the International System

Environmental pressures across vulnerable regions are intensified by consistently threats of climate change and that offer question of how the international community will manage climateinduced migration has become a critical issue within global governance and security debates, so future migration patterns will largely depend on climate adaptation strategies effectiveness even the resilience of socioeconomic systems and the capacity of international institutions to develop coordinated responses to environmental displacement.

Scholars and policymakers -from a strategic perspective- have proposed several potential scenarios for the future management of climate migration and these scenarios range from pessimistic projections characterized by largescale humanitarian crises and weak institutional responses to more cooperative frameworks in which states and international organizations adopt coordinated policies to manage migration and enhance climate resilience.<sup>٥٣</sup>

#### III-2-1 Scenario of Escalating Humanitarian Crises and Large-Scale Displacement

The escalation of humanitarian crises -which considered as one of the most concerning future scenarios - caused by climaterelated disasters that is leading to widespread displacement and largescale migration flows -according to projections by the World Bank- so climate change could force more than 200

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million people to migrate internally by 2050 if current environmental and socioeconomic trends continue.<sup>٥٤</sup>

### III-2-2 Scenario of Institutionalized International Cooperation

States and international organizations develop more effective institutional frameworks – as an alternative scenario envisions a future- to manage climate-induced migration, so climate migration -under this model- would be integrated into global governance mechanisms which addressing climate adaptation even development policy and migration management thus international initiatives such as the Global Compact for Safe or Orderly and Regular Migration and the Platform on Disaster Displacement already represent initial steps toward developing cooperative approaches to environmental mobility, so these frameworks emphasize the importance of strengthening resilience in vulnerable communities with legal migration pathways expanding and international coordination improvement in disaster response.<sup>٥٥</sup>

Table 5: Future Scenarios of Climate Migration Governance

Scenario	Key Characteristics	Implications for International Security
Humanitarian Crisis Scenario	large-scale displacement and weak institutional responses	increased instability in fragile regions
Adaptation and Resilience Scenario	improved climate adaptation in vulnerable regions	reduced migration pressures
Institutional Cooperation Scenario	strengthened international migration governance	greater regional stability
Security-Oriented Scenario	strict border control policies and securitization of migration	rising geopolitical tensions

Table prepared by the author based on the following sources:

Rigaud et al., Groundswell, 97-102; IPCC, Climate Change 2022: Impacts, Adaptation and Vulnerability, 1525-1527; Betts, Survival Migration, 100-103.

### III-2-3 Integrating Climate Change into National Security Strategies

Several states have begun incorporating climate-related risks into their national security strategies -in response to the growing strategic implications of climate change- then Governments increasingly recognize that environmental degradation may influence economic stability even migration patterns and geopolitical competition, for instance the United States even the United Kingdom and several European countries have identified climate change as a significant national security challenge in recent policy documents, thus these

strategies emphasize the need to strengthen climate resilience even support vulnerable regions through development assistance and enhance early warning systems for environmental crises.<sup>٥٦</sup>

### **III-2-4 Developing International Legal Frameworks for Climate Migrants**

The international legal system -despite increasing recognition of climate induced migration- still lacks a comprehensive framework for protecting individuals displaced by environmental factors, As noted earlier the 1951 Refugee Convention does not include climate change or environmental disasters among the legal grounds for refugee status, so In response scholars and policymakers have proposed various approaches for strengthening international protection mechanisms, thus some proposals call for the adoption of a new international treaty on climate displacement while others advocate expanding existing refugee and human rights frameworks to include environmental migration.<sup>٥٧</sup>

### **Conclusion**

This study examined the relationship between climate threats and international migration within the framework of non-traditional security which emphasizing the strategic significance of climate-induced mobility in the contemporary international system, so through conceptual analysis and comparative case studies -specifically the Sahel region and coastal South Asia- the research shows that climate change shapes migration dynamics by interacting with socioeconomic vulnerabilities even governance challenges and demographic pressures.

Findings indicate that climate change acts primarily as a risk multiplier rather than as a direct driver of migration as a result environmental stressors such as drought even desertification or sealevel rising and hydrological disruptions undermine traditional livelihood systems particularly in regions dependent on agriculture and natural resources, thus in these contexts migration emerges as a rational adaptive strategy and enabling households to cope with environmental and economic pressures.

Comparative analysis reveals significant regional variation in the Sahel which environmental degradation intensifies competition over scarce resources even driving rural displacement and crossborder mobility often interacting with fragile governance and local security challenges, in contrast Bangladesh experiences largescale internal migration caused by sealevel rising even coastal flooding and salinity intrusion with generating urban pressures and long-term regional migration concerns.

Climate-induced migration -beyond local dynamics- has broader implications for international security for instance population movements affect border governance even migration policies and political stability in receiving regions, so increasing securitization of migration highlights intersections with national sovereignty even social cohesion and international cooperation, thus the

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study -at the institutional level- underscores gaps in global governance: the 1951 Refugee Convention does not cover climate-induced displacement which leaving millions without protection.

### Key Findings

1. Climate change is a major driver of nontraditional security challenges even affecting livelihoods or economic stability and resource availability in vulnerable regions.
2. Migration is shaped by complex interactions between environmental stressors and socioeconomic even governance and demographic vulnerabilities.
3. Migration often functions as an adaptive strategy which allowing households to diversify income even access alternative labor markets and reduce exposure to environmental risks.
4. Regional dynamics differ in the Sahel faces rural and crossborder displacement from resource competition while Bangladesh experiences urbanbound internal migration from sealevel rising and floods.
5. Environmental displacement pressures urban infrastructure even labor markets and social services which affecting regional stability.
6. Migration flows influence border governance and national sovereignty with challenging the adequacy of existing refugee frameworks.
7. Climate migration intersects with societal security issues which including social cohesion and political stability in destination countries.
8. Migration pressures can influence domestic politics with contributing to populist and nationalist movements rising.
9. Legal frameworks are insufficient in climate migrants remain largely unprotected under international law.
10. Integrated policies combining climate adaptation with sustainable development and migration governance that what the Effective management required
11. To address the transboundary nature of climate migration should strengthen the international cooperation and regional governance as essential element.

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<sup>1</sup> Vally Koubi, Climate Change and Migration, Global Environmental Change 54 (2019): 78.

<sup>2</sup> United Nations Development Programme, Human Development Report 2022: Climate and Displacement (New York: UNDP, 2022), 34.

<sup>3</sup> World Bank, South Asia Flood Resilience Report (Washington, DC: World Bank, 2021), 56.

<sup>4</sup> Intergovernmental Panel on Climate Change (IPCC), Sixth Assessment Report (Geneva: IPCC, 2021), 112.

<sup>5</sup> Koubi, Climate Change and Migration, 78.

<sup>6</sup> Kenneth Waltz, Theory of International Politics (Reading, MA: Addison-Wesley, 1979), 127.

<sup>7</sup> United Nations Development Programme, Human Development Report 1994 (New York: UNDP, 1994), 22.

<sup>8</sup> Richard Matthew, Jon Barnett, Bryan McDonald, and Karen O'Brien, Climate Change and Security: Risks and Responses (London: Routledge, 2010), 45.

<sup>9</sup> United Nations Security Council, Climate Change and International Peace and Security Report (New York: UN, 2018), 5.

<sup>10</sup> IPCC, Sixth Assessment Report (Geneva: IPCC, 2021), 56-58.

<sup>11</sup> UK Ministry of Defence, Climate Change and Defence Report (London: UK MoD, 2020), 13; Federal Ministry of the Interior Germany, National Security Strategy and Climate Risks (Berlin: Federal Ministry of the Interior, 2021), 27.

<sup>12</sup> Richard Black, Stephen Bennett, Sandy Thomas, and John Beddington, "Migration as Adaptation," Nature 478 (2011): 431.

<sup>13</sup> Robert McLeman, Climate and Human Migration: Past Experiences, Future Challenges (Cambridge: Cambridge University Press, 2014), 73.

<sup>14</sup> W. Neil Adger, Jon Barnett, Katrina Brown, Nadine Marshall, and Karen O'Brien, "Cultural Dimensions of Climate Change Impacts and Adaptation," Nature Climate Change 3 (2014): 758.

<sup>15</sup> Essam El-Hinnawi, Environmental Refugees (Nairobi: United Nations Environment Programme, 1985), 4.

<sup>16</sup> McLeman, Climate and Human Migration, 28.

<sup>17</sup> Black et al., Migration as Adaptation, 436

<sup>18</sup> Everett S. Lee, A Theory of Migration, Demography 3, no. 1 (1966): 50.

<sup>19</sup> Douglas S. Massey et al., "Theories of International Migration: A Review and Appraisal," Population and Development Review 19, no. 3 (1993): 444.

<sup>20</sup> Adger et al., "Cultural Dimensions of Climate Change Impacts and Adaptation," 759.

<sup>21</sup> Alexander Betts, Survival Migration: Failed Governance and the Crisis of Displacement (Ithaca: Cornell University Press, 2013), 17.

<sup>22</sup> Jane McAdam, Climate Change, Forced Migration, and International Law (Oxford: Oxford University Press, 2012), 35.

<sup>23</sup> Betts, Survival Migration, 89.

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- <sup>٢٤</sup> Adger et al., "Cultural Dimensions of Climate Change Impacts and Adaptation," 760.
- <sup>٢٥</sup> Black et al., Migration as Adaptation, 440.
- <sup>٢٦</sup> Intergovernmental Panel on Climate Change (IPCC), Climate Change 2022: Impacts, Adaptation and Vulnerability (Cambridge: Cambridge University Press, 2022), 1403.
- <sup>٢٧</sup> Kanta Kumari Rigaud et al., Groundswell: Preparing for Internal Climate Migration (Washington, DC: World Bank, 2018), 57.
- <sup>٢٨</sup> Benjamin Sultan and Mathieu Gaetani, "Agricultural Impacts of Climate Change in the Sahel," Global Environmental Change 36 (2016): 12.
- <sup>٢٩</sup> Tor A. Benjaminsen and Boubacar Ba, "Why Do Pastoralists in Mali Join Jihadist Groups? A Political Ecological Explanation," Journal of Peasant Studies 46, no. 1 (2019): 4.
- <sup>٣٠</sup> Food and Agriculture Organization (FAO), The State of Food Security and Nutrition in the World 2022 (Rome: FAO, 2022), 18.
- <sup>٣١</sup> Benjaminsen and Ba, "Why Do Pastoralists in Mali Join Jihadist Groups?" 6.
- <sup>٣٢</sup> Rigaud et al., Groundswell, 63.
- <sup>٣٣</sup> Black et al., Migration as Adaptation, 449.
- <sup>٣٤</sup> IPCC, Climate Change 2022: Impacts, Adaptation and Vulnerability, 1405.
- <sup>٣٥</sup> World Bank, Sahel Adaptive Social Protection Program Report (Washington, DC: World Bank, 2021), 42.
- <sup>٣٦</sup> IPCC, Climate Change 2022: Impacts, Adaptation and Vulnerability, 1518.
- <sup>٣٧</sup> Rigaud et al., *Groundswell*, 83.
- <sup>٣٨</sup> Robert J. Nicholls and Anny Cazenave, "Sea-Level Rise and Its Impact on Coastal Zones," Science 328, no. 5985 (2010): 1519.
- <sup>٣٩</sup> IPCC, Climate Change 2022: Impacts, Adaptation and Vulnerability, 1521.
- <sup>٤٠</sup> Rigaud et al., Groundswell, 84.
- <sup>٤١</sup> Md. Nazrul Islam and Shakhawat Hossain Hasan, "Climate-Induced Human Displacement," Migration and Development 5, no. 3 (2016): 6.
- <sup>٤٢</sup> Adger et al., "Cultural Dimensions of Climate Change Impacts and Adaptation," 760.
- <sup>٤٣</sup> Betts, Survival Migration, 92.
- <sup>٤٤</sup> World Bank, Climate Risk Country Profile: Bangladesh (Washington, DC: World Bank, 2021), 66.
- <sup>٤٥</sup> Jon Barnett and W. Neil Adger, "Climate Change, Human Security and Violent Conflict," Political Geography 26, no. 6 (2007): 640.
- <sup>٤٦</sup> Frank Biermann and Ingrid Boas, "Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees," Global Environmental Politics 10, no. 1 (2010): 68.
- <sup>٤٧</sup> Adger et al., "Cultural Dimensions of Climate Change Impacts and Adaptation," 759.
- <sup>٤٨</sup> Barnett and Adger, "Climate Change, Human Security and Violent Conflict," 641.
- <sup>٤٩</sup> Betts, Survival Migration, 94.
- <sup>٥٠</sup> Black et al., Migration as Adaptation, 448.
- <sup>٥١</sup> Betts, Survival Migration, 97

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<sup>٥٢</sup> Adger et al., "Cultural Dimensions of Climate Change Impacts and Adaptation," 760.

<sup>٥٣</sup> Rigaud et al., Groundswell, 97.

<sup>٥٤</sup> IPCC, Climate Change 2022, 1525.

<sup>٥٥</sup> Betts, Survival Migration, 101.

<sup>٥٦</sup> United States Department of Defense, Climate Risk Analysis (Washington, DC: U.S. Department of Defense, 2021), 9.

<sup>٥٧</sup> Biermann and Boas, "Preparing for a Warmer World," 72.