

SECURITIZATION OF CLIMATE CHANGE INDUCED MIGRATION:
ANALYSIS OF THE EUROPEAN UNION DISCOURSES AND POLICIES

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PLAGIARISM

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.



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ÖZET

Göçler insanlar için her zaman daha iyi bir yaşama ulaşmanın bir yolu ve değişen koşullara uyum sağlama stratejisi olmuştur. 1000'li yılların başından itibaren, iklime bağlı çevresel değişiklikler, yaşam biçimleri doğaya ve yerel kaynaklara bağlı olan toplulukları doğrudan etkilemeye başlamıştır. Temelde insan faaliyetlerinin neden olduğu iklim değişikliği ve onun yarattığı yıkıcı çevresel değişikliklere bağlı olarak, insanlar gönüllü ya da zorunlu olarak yer değiştirmeye, yurtlarını terk etmeye başlamış ve ülke içi veya sınır ötesi gerçekleşen bu göçler artık görünür hale gelmiştir. Uluslararası Göç Örgütü (IOM) 2008 yılında, 2050 yılında 200 milyon insanın iklim değişikliği nedeniyle göç edeceği yönünde çarpıcı bir öngöründe bulunmuştur (IOM, 2008). Afetler nedeniyle yerinden edilme konusunda en çok atıfta bulunulan ve en çok kabul gören veri kaynaklarından biri olan Internal Relocation Monitoring Centre (IDMC) 2021 yılında yayınladığı raporda 2020 yılında doğal afetler nedeniyle 145 ülke ve bölgede 30,7 milyon insanın yer değiştirmek zorunda kaldığını belirtmiştir. Küresel olarak ısınan dünya, artık insani güvenlik için bir "tehdit çarpanı" haline gelen kitlesel ölçekteki yer değiştirmelerle karşı karşıyadır. İklim değişikliğinin bir sonucu olan göç hakkında pek çok analiz yapılıyor olsa da uluslararası ilişkilerin akademik ve siyasi söyleminde iklim değişikliği ve güvenlikleştirme arasındaki bağlantıyı açıklayan ampirik temelli çalışmaların eksikliği hissedilmektedir. Bu tez, iklim değişikliği kaynaklı göç ve güvenlik arasındaki ilişkiyi, insani güvenlik teorisi çerçevesinde ve Kopenhag Okulu'nun güvenlikleştirme teorisi bağlamında analiz etmeyi; Avrupa Birliği'nin iklim değişikliği kaynaklı göç konusunda güvenlikleştirme politikalarını nasıl yapılandırıldığını; Paris Anlaşması'ndan bu yana saygın bir aktör ve küresel lider olarak kendini tanımlayan AB'nin güvenlikleştirme politikalarının Birliğin yasal inisiyatifleri altında nasıl işlediğini incelemeyi amaçlamaktadır.

Anahtar Kelimeler: iklim değişikliği, iklim değişikliği kaynaklı göç, insani güvenlik, güvenlikleştirme

ABSTRACT

Migration has always been a way for people to reach a better life and a strategy to adapt to changing conditions. Since the early 1000s, climate-related environmental changes have begun to directly impact communities whose way of life is dependent on nature and local resources. Owing to climate change, which is mostly a result of human activity, and the devastating environmental changes it has created, people have begun to relocate voluntarily or forcefully, to abandon their homelands, and these migrations within the country or across borders are now evident. The International Organization for Migration (IOM) made a sobering prediction in 2008 that 200 million people will migrate in 2050 due to climate change (IOM, 2008). Internal Relocation Monitoring Centre (IDMC), one of the most cited and widely recognized data sources on disaster displacement, reported in 2021 that: "In 2020, 30.7 million new displacements were triggered by disasters in 145 countries and territories.". The globally warmed world is now facing with mass-scale human displacements which became a “threat multiplier” for human security. Although knowledge about migration as an impact of climate change has been analyzed for a while, there is a gap of empirically based study on the linkage between climate change and securitization to be researched furtherly in academic and political discourse of international relations. This thesis aims to analyze climate change induced migration and security nexus through theoretical framework of human security and in the context of the securitization theory developed by the Copenhagen School; and how the European Union structured securitization policies on climate change related migration; and as an estimable actor and global leader since the ratification and adaptation of Paris Agreement, how EU’s securitization policies have been processed under the Union’s legal initiatives.

Keywords: climate change, climate change induced migration, human security, securitization



I dedicate this thesis to my dearest mother and father.

Dilek Saygı

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ABBREVIATIONS

CEECCA	Central and Eastern Europe, Caucasus, and Central Asia
CSDP	Common Security and Defence Policy
COP	Conference of The Parties
EC	European Commission
EEAS	European External Action Service
EP	European Parliament
EU	European Union
EUFSP	European Union's Foreign and Security Policy
EP	European Parliament
ETR	Ecological Threat Register
FAO	Food and Agriculture Organization of the United Nations
FCO	UK's Foreign and Commonwealth Office
GAMM	Global Approach to Migration and Mobility
GDP	Gross Domestic Product
GHG	Greenhouse Gas
HSN	Human Security Network
HSU	Human Security Unit
ICSU	The International Council for Science
IDMC	Internal Displacement Monitoring Centre
IPCC	Intergovernmental Panel on Climate Change
IPBES	Intergovernmental Science-Policy Platform on Biodiversity & Ecosystem Services
ICMPD	International Centre for Migration Policy Development
IDMC	Internal Displacement Monitoring Center
IOM	International Organization for Migration
NASA	National Aeronautics and Space Administration
NDCs	Nationally Determined Contributions
NGO	Non-Governmental Organizations
NRC	Norwegian Refugee Council
OECD	The Organisation for Economic Co-operation and Development
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PACE	Parliamentary Assembly of the Council of Europe
PDD	Platform on Disaster Displacement

SIDs Small Island Developing States

TFD Task Force on Displacement

UN United Nations

UK United Kingdom

US United States

UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

UNDP United Nations Development Programme

UNICEF United Nations Children's Fund

UNFCCC United Nations Framework Convention on Climate Change

UNCHR United Nations High Commissioner for Refugees / Refugee Agency

UNTFHS United Nations Trust Fund for Human Security

UDHR Universal Declaration of Human Rights

UNEP United Nations Environment Programme

WEF World Economic Forum

WHO World Health Organization

WMO World Meteorological Organization

WWF World Wide Fund

INTRODUCTION

The most significant environmental issue of the 21st Century, climate change, presents a serious threat to our planet's future. Climate change is commonly defined to be the transformation of weather patterns, such as temperature and precipitation, and unexpected values seen in those patterns. The findings of recent scientific studies demonstrate that the pressure placed on the environment by human activities, which increased after the advent of industrialization, has had a deleterious effect on human life as well as the ecosystems on which it depends by rapidly elevating the temperature of the earth (Chigbo, et al. 2016). Globalization, increase in population, urbanization, human mobility and air transportation, the production of agricultural goods and emissions of greenhouse gases have been rising as current problems of the World which contribute to the growing severity of the environmental problems. As an impact of climate change and natural disasters such heat waves, droughts, floods, and landslides, as well as the melting of glaciers and other ocean and marine environmental abnormalities, human lives are under risk because of these damaging catastrophes.

Climate related conflicts have become more common, bringing with them political, social, and economic challenges. Although climate change has an impact on all geographies, it is particularly damaging the ecosystems in specific places of vulnerable regions. One of the most important problems caused by climate change is the rise in average sea levels. The data collected by the Intergovernmental Panel on Climate Change (IPCC), an organization that investigates climate change thoroughly, indicates that sea level rise will cause coastal flooding in low-lying places and coastal erosion during the 21st century (IPCC, 2021). The same IPCC report defined the climate change as 'widespread, rapid, and intensifying' and indicated that; by the end of the century, extreme sea level events that happened once every 100 years might happen every year. Scientists predict that many coastal towns and island nations across America, Asia, Europe, and Africa will be flooded because of this fast rise in sea levels. Organization for Economic

Cooperation and Development (OECD) researchers made an alarming prediction in 2007 indicating that climate change might raise the number of people at risk from all sources by more than three times, to roughly 150 million, by the 2070s because of sea-level rise and increased storminess (OECD, 2007).

There has been considerable evidence suggesting that human migration patterns are being influenced by climate change. The United Nations High Commissioner for Refugees (UNHCR) acknowledges that climate, environmental degradation, and natural catastrophes are ‘drivers of refugee migrations’ in the framework of Global Compact for Refugees (UNHCR, 2018). Since 2008, natural disasters including floods, storms, wildfires, and severe temperatures have displaced an annual average of 21.5 million people, according to UNHCR. An international think tank, the Institute for Economics and Peace (IEP) predicts that; by 2050, climate change and natural catastrophes will have displaced as many as 1.2 billion people worldwide (McAllister, 2023). The number of people forced to relocate due to climate change might reach 216.1 million by 2050 under the worst reference assumption, which accounts for high emissions and uneven growth trajectories (Celement, V., et al, 2021).

The potential for violence in regions to which people are migrating is one indicator of the connection between climate change and violent conflict. In general, the fact that the preferred nations for immigration have limited capacity and resource limitations might worsen the issues. Mass migrations not only put the safety of migrants at risk, but they could also upset the social and economic order in the countries where they end up. A considerable number of regions experience internal displacement and/or cross-border migration, which are predominantly illegal and irregular. There have occurred socioeconomic imbalances, tensions, vulnerabilities, and other conflicts in those regions. This makes climate change induced migration a worldwide issue and Europe is one of these regions.

It's worth noting that climate change related induced migration and securitization issues are now a requirement for researchers to analyze. The phenomenon of climate change, which has entered and maintained its importance on the global agenda today, has already taken its place among the issues examined by both political science within the scope of the strategies of states to mitigate the problem, and the discipline of International Relations due to its impacts on the system.

Future projections suggest that migration flows from Africa to Europe will increase in the coming decades, but this increase will be driven by demographic and political factors rather than climate change. Nevertheless, given climate change's worsening living conditions and its direct and indirect impacts on population and political dynamics, it can readily be argued that the climate crisis is one of the determinants of migration flows worldwide. Migration from Africa to coastal EU countries could have important consequences for the future of the EU by; creating diplomatic problems between the countries; increased competition for jobs, housing, and other necessities; tensions and conflicts between migrants and host communities through resources; loss of cultural and social connections for migrants, as well as the potential loss of traditional knowledge and practices; and economic and political instability in countries. Briefly summarizing; climate change induced migration can create human and state-wide security problems since the concept has been constituting a threat for social and political prosperity and sustainability. It is essential to recognize that climate change induced migration is a complex issue whose consequences will vary based on several factors, including the context of the displacement, the capacity and willingness of host communities and countries to accommodate newcomers, and the government's ability to respond to the crisis and adaptation policies. In this context, enhancing the support and cooperation that the international community provides to vulnerable regions to reduce the possible consequences of climate change and obtain solutions

to multiple security concerns is one of the crucial measures that must be made to preserve global peace, order, and stability.

The main objective of this research is to explain the direct and indirect ecological, physical, social, and economic impacts of the climate crisis and to analyze one of the major challenges caused by these impacts: climate change induced human displacement. The research question of this thesis is:

- How does the European Union structure securitization policies on climate change induced migration; and how are these policies processed under the Union's legal initiatives?

The first hypothesis of this thesis is that; climate change is acting as a “threat multiplier” for human and state security since it exacerbates existing security problems and creates new ones; and it has the potential to disrupt the socio-economic balance in both for the displacers and their migration destinations. Second hypothesis is that; the traditional security approaches will not provide an inclusive and sufficient solutions to today's modern challenging security problems such as climate induced migration. Since the climate change induced migration is a complex and multifaceted issue traditional security approaches, such as military and border security operations are not able to address the underlying consequences of climate induced migration, such as poverty, food insecurity, or political instability. The issue requires a more comprehensive security approach that incorporates elements of development aid, disaster risk reduction, and environmental protection, in addition to traditional security measures. This approach should also require collaboration between a wide range of actors (state or non-state); including governments, international organizations, NGOs, civil society, and the private sector.

Addressing the issue of climate change induced migration requires not only traditional security measures such as border security and disaster management, but also a deep understanding of environmental science, political science, and social science, as well as other

disciplines such as economics, anthropology, and sociology. This needs a holistic, inclusive, and participatory transdisciplinary approach that seeks to address complexity of security issues.

Considering theorizations, this thesis analyses securitization of climate change induced migration through the new security understandings of human security and Copenhagen School instead of traditional theories in investigating the nexus between climate change, migration, and security. The human security approach, which broadens the traditional notion of security to include human rights, economic, and environmental concerns and how these are interconnected and mutually reinforcing. The Copenhagen School's securitization argues that security is not a given but is constructed through political discourse and action; the school broadens the security agenda considering security to be a 'speech act': an expression that names and labels 'security' concepts. Both theories propose that the climate change induced migration can lead to security threats such as political instability, conflict, and terrorism. Both argue that this is not only a problem for the countries affected, but also for neighboring countries and the international community. Therefore, they propose that climate induced migration need to be constructively securitized by placing it on the international security agenda and treating them as a security issue with the fulfillment of a collective action.

Within the conceptual framework of the thesis, basic concepts such as climate change, impacts of climate change, climate change induced migration, security, human security, and securitization are tried to be explained. The appropriate chapters of this thesis provide a comprehensive explanation and deep analysis of those concepts with the literature review of related studies that are associated with the research topic.

There are very limited research studies and a gap in literature in which climate change, migration and security are studied on the same axis and a lack of empirical research that evaluates the European Union's (EU) securitization policies on climate change related migration.

The issue is still overshadowed by the traditional understanding of security and is not taken as seriously as realistic security problems. Since climate change is a phenomenon that shows its impacts in the long term, the threats it poses are not understood until it turns into a serious security problem. However, in the light of scientific data, the predictions and warnings made by international authorities should be considered, cooperation should be established to develop short and long-term solutions, and countries should include climate change on their agenda with a transdisciplinary approach by adopting new generation approaches while formulating their security policies. In this context, the aim of this thesis is to contribute to the existing literature, to raise awareness about the impacts of climate change and to be one of the studies that will fill the gap in the axis of climate change, migration, and security.

Forced human displacement and involuntary migrations as consequences of climate change, as well as the ideas of international security, human security, national security, environmental security, and securitization, have an old but distinct history in the literature of international relations discipline. The possibility of a connection or cause and effect relationship between climate change, migration, and security has been relatively new as a subject of debate in scholarly publications for decades.

Political leaders, environmentalists, NGOs, academicians, and many media outlets have come around to the idea that climate change is a threat to human security and national security because of massive population shifts caused by environmental degradation, sea level rise, an increase in the frequency and severity of natural disasters, and a decline in the profitability of agricultural land. Migration is not accepted as a security threat by some scholars, and, in fact it is considered as a crucial means of adapting to the impacts of climate change (Brown & Crawford, 2009). However, large scale population displacements which are linked to disruptive environmental disasters and violent conflict, have been firstly recognized as a threat

to world peace and stability by the United States Security Council and later by other global political authorities.

Despite the increased worry and attention being paid to climate change induced migration and security, there is still a lack of clarity about the routes connecting climate change to migration and ultimately to security (Burrows & Kinney, 2016). In this thesis, a literature review has tried to be mainly conducted on climate change, migration, and security nexus focusing on the emphasis with the most important studies and analyses. While explaining the theoretical and conceptual frameworks, main studies of environmentalist, intellectual, innovative, and inquisitive researchers and authors were taken as reference; the contents and clauses of legally binding international agreements on climate change, as well as observational studies, the reports, and data of several organizations and think tanks such as the International Organization for Migration (IOM), the United Nations High Commissioner for Refugees (UNHCR), and Intergovernmental Panel on Climate Change (IPCC), are used as an essential components of this research. Another source of literature includes the publications of the European community, mainly the European Union which served as the foundation and the formation of the case study and empirical analysis of this thesis. The main source of framing the empirical analysis is the papers and reports of EU institutions, mainly the European Commission (EC), the Union's primary legislative body, to determine whether securitization of climate change induced migration has commenced inside the EU. Because EC is the only organization in the Union that has the authority to propose new measures of legislation, making it the initial body to act decisively in the legislative process in the Union. The 2000s marked the beginning of climate change and security challenges within the EU. The significant milestones that caused the issue to gain momentum were the Paris Agreement and the mass migration flows that Europe experienced in 2015. Therefore, the examination of this thesis focused primarily on the preceding ten years.

Literature Review

Lester Brown, founder of the World Watch Institute, and Erik Eckholm, an environmentalist, firstly used the phrase ‘ecological refugees’ in studies written in the 1970s (Eckholm & Brown, 1977). In the same decade, authors taking a neo-malthusianist stance used the term to characterize the migrations that followed the 1973 OPEC oil crises, and it was later used in 1984 in a briefing paper published by the International Institute for Environment and Development in London (Morrissey, 2009). About midway through the 1980s, a new worldwide humanitarian and security concern arose: environmental refugees (Ramlogan, 1996). Two prominent environmentalists, Essam El-Hinnawi in 1985 and Sir Crispin Tickell in 1988, initially brought up the concept of ‘environmental refugees’ in their publications (El-Hinnawi, 1985; Tickell, 1986). An environmental refugee is a "particular group of individuals who had to leave their habitat, temporarily or permanently, because of a possible environmental threat or disruption in their life-supporting ecosystems," as El-Hinnawi put it in a brochure he wrote for UNEP (El-Hinnawi, 1985). Additional categories were devised by World Watch Institute researcher Jodi Jacobson in 1988; she stated that "those escaping from environmental deterioration now make up the biggest group of refugees in the world" (Jacobson, 1988). Already by the late 1980s, discussions of climate change were couched in the alarmist language of security, which ultimately led to the creation of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. For academics, Norman Myers was a major contributor to the ‘environmental refugee’ issue. Myers used the term ‘environmental refugees’ to refer to those who have been compelled to leave their homes due to the loss of their means of subsistence because of environmental deterioration, with the idea that excessive human population growth is a primary cause of this degradation (Myers, 1995). Since 1990s, climate change related environmental crises have started to be seen as a security issue and politicized, and nation states, as the main players in the international system, have recognized the need for regional and global

cooperation in combating this problem, which affects the entire globe, to sustain their own existence (Detraz & Betsill, 2009). Academics and policymakers worked together to expand and reframe the field of security studies, which paved the way for this. Concerning effects of climate change on human migratory patterns have recently been under investigation as a new threat of the warming planet, and this trend began in the 1990s, in tandem with the excellent scientific studies of other influential authors (McGregor, 1996; Myers, 1995; Suhrke, 1993; Richmond, 1993; O'Lear, 1997; Westing, 1992). People who must migrate due to environmental changes were referred as 'environmentally displaced' around the end of the 1990s. Environmental refugees are defined as "people who are displaced within their own country of habitual residence or have crossed an international border and for whom environmental degradation, deterioration, or destruction is a major cause of their displacement, although not necessarily the sole cause of their displacement," in a 1996 International Organization for Migration (IOM) Symposium titled "Environmentally-Induced Population Displacements and Environmental Impacts Resulting from Mass Migration" (IOM, 1996).

However, climate change's effects on human and national security were not exactly included from consideration until the beginning of 2000s. To better understand how to incorporate security concerns into studies of climate change related migration, it is necessary to first consider the far-reaching effects of the conventional security paradigm. United Nations (UN) reports and declarations in the mid-1970s framed security in terms of underdevelopment, placing a premium on fundamental human needs and highlighting issues like poverty, hunger, inequality, and environmental dangers despite the Cold War's consolidation of a state-centric approaches. In 1970s and 1980s, environmental and social scientists began to emphasize the idea of vulnerability as it related to the state of the environment and its natural impact on human well-being (Timmerman, 1981). In 1990s, UN efforts widened security concept and included sustainable development, human rights, and human being notions into the definition. The 1992

Earth Summit in Rio de Janeiro (also known as UNCED) was a turning point in worldwide environmental debates. After that day, the UN Framework Convention on Climate Change (UNFCCC), Convention on Biological Diversity, and Convention to Combat Desertification (UNCCD) were announced to combat with the new phenomenon of climate change (Warner et al., 2008).

Beginning in the early 2000s, a scarcity of natural resources and unstable socioeconomic situations prompted human replacements or migrations in response to catastrophic climatic events and calamities like droughts and storms. Following these uprisings, the notion of "freedom from hazard impact" was added to the human security paradigm to safeguard the most vulnerable people and to strengthen the coping mechanisms of communities already struggling to adapt to the effects of climate change (Jayaram, 2018). According to UN General Secretary Kofi Annan's speech in 2000 Millennium Summit, human security -freedom from fear, want, and future generations- is the new millennium's major goal (CHS, 2003). Sadako Ogata, from UNHCR, wrote "Human Security Now" in 2003, emphasizing the freedom and fulfillment of human being. The UNTFHS Human Security Unit was created in 2004 to promote human security in the worldwide society and political arena. In 2005, UN World Summit reiterated the significance of freedom, equality, and poverty-free living. In 2006, 34 UN member nations founded The Friends of Human Security to institutionalize human security. This unofficial endeavor opened the door to rethinking traditional security concepts and human security came to international arena.

As political scientist Prof. Oels stated; both the scientific community and political leaders, particularly between the years 2007 and 2009, have alluded to climate change as a threat to human security and national security and there has been considerable indication to suggest that an interpretation of climate change along the principles of human security has arisen (Oels, 2012). Humanity's access to natural resources is fundamentally hampered by the environmental

concerns associated with climate change, and this has led to competition of resources and violent conflicts. Changes in living circumstances may pose a threat to human security since climate change causes significant and frequent naturally and environmentally devastating disasters. Conflicts are mostly caused by fragile livelihoods, poverty, infrastructure-weak nations, and migration (Barnett & Adger, 2007). In 2007, Jeffrey D. Sachs, director of the Earth Institute at Columbia University, published a paper titled “Climate Change Refugees: As global warming tightens the availability of water, prepare for a torrent of forced migrations” and stressed that there will be a sizable number of people who will suffer irreparably as a result of climate change since hundreds of millions of people may be forced to relocate during the next few decades, if not sooner, due to environmental concerns (Sachs, 2007). Paul Smith, an associate professor of national security affairs at the US Naval War College, brought to attention that the rising number of people migrating for environmental reasons is coming into a conflict with the prevalent anti-immigrant attitude that exists in both industrialized and developing nations all over the globe. In his work on “Climate change, mass migration and the military response”, he emphasized that some nations are seeing migration, and especially unlawful international migration, as a ‘security threat’ and are resorting to military forces to discourage or regulate the people flows; this is a trend that is expected to become more widespread in the coming years (Smith, 2007). He made the argument that environmental migration brought on by climate change might cause states that are already undergoing social and economic instability to reach a ‘tipping point’ which can then lead to instability or the collapse of the state. Moreover, he warned that the global community may face new security threats if climate change causes or exacerbates the collapse of states, a more probable scenario for economically and socially disadvantaged developing nations. One of the most significant and most cited publications on climate change, "The Economics of Climate Change: The Stern Review" explains the ramifications and social and economic impacts, warning that the warming trend will have increasingly dire repercussions. The Review claims that if

temperatures continue to rise, it will increase the likelihood that sudden and widespread changes will occur, resulting in regional upheaval, migration, and violence (Stern, 2006). Another seminal approach that characterizes climate change related migrations as one of the key factors of risk for security identifies the social, economic, and political repercussions of climate change as ‘consequences of consequences’ (Vivekananda & Smith, 2007).

Scientists, at the turn of the 20th century, have started researching the global securitization of climate change and climate migration. Literature on the topic indicates that climate change has been recognized as a ‘threat multiplier’, deteriorating economic conditions, and escalating political tensions, as well as leading to displacement, and exacerbating other threats to both national security and human security (Howeth, 2020). IPCC Working Group II devoted an entire chapter of the 5th IPCC Assessment Report, which was published in 2014, to the human security implications of climate change; additionally, both the European Union and the United Nations have characterized climate change as a ‘threat multiplier’ that has the possibility to increase and worsen preexisting vulnerabilities and frictions (Oels, 2012).

As a threat multiplier that has the potential to spiral out of control, climate change and its societal and humanitarian repercussions are presented as a worldwide environmental "mega crisis" (Endter-Wada & Ingram, 2012). Modern European security studies heavily include securitization theory, which itself draws on contributions from crisis studies. Many authors have noted that times of crisis present an opportunity for policy change (Buzan et al., 1998; Pralle, 2009). Researchers have proposed an agenda-setting viewpoint that can shed light on the current state of climate policy politics by illuminating the factors that have brought the climate change debate to the forefront of public and governmental attention. Because climate change is a long-term problem and governments are uncertain to deal with the climate crisis with a single policy implemented at one point, placing climate change at the center of government decision agendas will be crucial in the upcoming future (Pralle, 2009). It is claimed that these kind of crisis, shocks,

or events, like natural disasters, are usually unplanned and hard to predict, and they lead to an assessment of policy learning (Lowry, 2006). Scholars also assert that the number and severity of climate disasters will only increase as resources become scarcer and as the effects of climate change become more apparent (Klein, 2007) and a ‘securitizing move’ is needed to elevate a topic beyond the realm of national politics into a realm of absolute urgency (Warner & Boas, 2019). In 2009, Michael Brzoska from University of Hamburg published a paper with his colleagues from several research institutions, on “The securitization of climate change and the power of conceptions of security” and argued that various concepts of security lead to a variety of diverse suggestions for government policy (Brzoska, 2009). Traditional ideas of security are not entirely extinct, but they no longer have the dominant position in the international politics they once had in either the theoretical or practical realm. They have been augmented and, at least in rhetoric and non-governmental circles, superseded by broader ideas of security in recent years (Brzoska, 2009). Climate change has been cited as a reason for the shift of perspective required to re-conceive national security in terms of human safety rather than as a matter of state sovereignty (Joshi, 2009). Some scholars argue that climate change is linked to human concerns such as food insecurity, rapidly increasing poverty, and regression in development. Therefore, the idea that a state-centric view of security is inadequate in the face of climate change sparked the need for a wider meaning of the term. According to the academic study paper of Denise Garcia from Northeastern University, water, more than any other nonrenewable resource, may become a flashpoint in conflicts and entanglements because of climate change; rising sea levels and migration, internal population relocation, loss of territory, crop failure, and many other unplanned yet extreme climatic occurrences may drastically weaken human security in many places of the globe in the 20th Century (Garcia, 2010). Security researchers have explored the social and political roots of the fear of mass migration and its political ramifications, expanding

theoretical perspectives from fundamental security studies and started to analyze security and climate change induced migration in the same lump (Rothe, 2015; Boas, 2016).

Environmental conflicts can cause forced migration and forced migration can also cause environmental conflicts. In that regard, many researchers claimed that climate migrants could get the international protection they need by getting humanitarian asylum or another form of protection (Kolmannskog, 2008). The Norwegian Refugee Council has compiled a paper that offers a comprehensive analysis of the phenomenon of climate change induced migration. This research investigates the complex web of causes that contribute to conflict and forced migration, as well as susceptible 'hotspots', international law and protections for climate refugees, and protective actions. At the end of the study, there is a bulleted list that provides broad suggestions for the international community on protecting and prevention of forced migrants. But recognition of climate migrants is another research topic which should be analyzed in terms of international law and human rights.

In his book titled "Climate Change and Migration: Security and Borders in a Warming World," which was published in 2011, Professor Gregory White discussed two different types of international migration that have occurred in the modern era (White, 2011). The first type is migration that is prompted by political factors, such as the need to escape war, genocide, or instability. The second type is migration that is motivated by economic factors. Global warming, on the other hand, has in recent times caused a new wave of people to be forced to flee their homes. The effects of climate change can be seen throughout the world's tropical regions, from sub-Saharan Africa to Central America to South and Southeast Asia, where landscapes and economies have been fundamentally reshaped. In the book, Prof. White provides a comprehensive overview of the issue. He demonstrates how global warming has significantly impacted international relations by focusing on climate change induced migration from Africa to Europe. This trend has improved security regimes in not only the advanced economies of the

North Atlantic, but also in states that serve as transit points between the most advanced and most desperate nations. In addition, he shows that climate change has affected how the involved nations understand their own sovereignty, with the result that the state's reach over society has grown in both Europe and North Africa because of increased border enforcement and border definition. In his conclusion, White makes the case that the only viable long-term answer is a program that is both serious and thorough in its approach to lowering greenhouse gas emissions, which are the root cause of climate change. The book *Climate Change and Migration* offers a startling and much-needed link between two of the most serious concerns in current world politics by providing an in-depth study of both environmental and border policy from a global viewpoint. White demonstrates how the trans-Atlantic security community of the USA and Europe, which is well legitimized through NATO and other associations, has led the way in visualizing climate change induced migration as a security threat. He compares the 'securitization' of environmental issues and immigration policies during the 1980s with the 'security threat' framing of climate related migration in the 2000s. In 2013, a book review was published in *Review of Policy Research* and explained White's approach underlining those White shows how the United States, the North Atlantic Treaty Organization (NATO), and the European Union have come to see climate driven migration as mainly a threat to their security from the outside (Sowers, 2013). According to Sowers, White claims that this 'securitization' of climate related migration leads to wrong ideas about the size and scope of the problem and makes short-sighted, counterproductive state responses more politically appealing.

In the early 2000s, climate change induced migration began to be addressed as a new security problem. The intersection of environment and security is becoming increasingly meaningful, both in terms of theory and practice, because environmental issues, such as climate migration, pose a threat to intricate security concerns (Huntjens & Nachbar, 2015). As climate change contributes to events that cause displacement and exacerbates current displacement

scenarios worldwide, some argued that the connections between climate change, disasters, and other causes of migration are now indisputable (Goodwin-Gill & McAdam, 2016). Large actors in international politics, such as the United Kingdom and the United States, mass media initiatives, non-governmental organizations, the International Organization for Migration, and United Nations initiatives such as UNEP, UNFCCC, and IPCC, have released reports and documentaries on the grave effects of climate change and noted the relationship between climate change and conflicts. Dr. Maria Julia Trombetta from the University of Nottingham Ningbo China (UNNC) who focused on securitization theory and environmental problems in her works, has published several papers in that field. Her most influential study precisely focusing on this issue was “Linking climate-induced migration and security within the EU: insights from the securitization debate” published in 2014. In her research, she examined how climate related migration has been seen to advance environmental measures, new forms of government inspired by solidarity, and a restructuring of security practices. She maintained that the fact that it is being securitized within the context of migration securitization makes it no less problematic (Trombetta, 2014). Her essay engages with two theoretical approaches to securitization to investigate the consequences of doing so with respect to climate induced migration within the EU. The article delves into the connection between the Copenhagen and Paris Schools. The former analyzes public statements that label a problem as dangerous and lead to new approaches, while the latter describes how everyday monitoring and policing activities may make people feel unsafe. In contrast to the more overt process outlined by the Paris School, environmental and climate change induced migration appears to be securitized primarily through speech actions. Together, they illustrate the challenges of altering long-established patterns of governance and strengthening current methods of security.

Since traditional approaches to security in the literature of international relations, such as idealism, realism, and its variants, were inadequately addressed and mitigated, new concepts

about security emerged during the late 20th Century. The reconsideration of what constitutes security has been tremendously facilitated by critical and postmodern approaches. Human security and ecological security discussions have started to be involved within the scope of new security methods. In other words, to ensure absolute national and international security, the individuals and the environment are included in the analyses as actors playing in the system. Therefore, climate change has begun to be evaluated as a security threat because of the impact it has on both individuals and the environment. In this context, the studies of the Copenhagen School pioneered by Barry Buzan, which analyze this question by splitting the security into sectors - military, political, economic, social and environmental- , constitute a crucial reference. The securitization concept, first introduced by Ole Waever and later developed by three Copenhagen Peace Research Institute (COPRI) researchers Barry Buzan, Ole Waever, and Jaap de Wilde, and broadened including threats and conflicts which were regarded as low politics by traditional approaches (Buzan, et al. 1998). These authors are considered as the main representatives of the Copenhagen School of Security Studies, which has 'good practices' on security and securitization as speech acts and interdependent methods to identify the new contemporary frameworks of constructing threat (Filimon, 2016). Environmental security authors argued that framing environmental problems as threats to national security is a persuasive way to get governments to pay attention to issues that might otherwise be ignored and the theory of securitization is widely regarded as one of the most influential developments in recent academic history. (Peoples & Vaughan-Williams, 2015)

Securitization moves and acts of climate change induced migration in European Union is the case study of this thesis. European Union is the most influential actor worried about future climate migrations because of its geographical closeness of Africa. According to the World Migration Report 2020, natural catastrophes rather than other conflicts were the primary drivers of new internal displacements in Europe in the year 2020. The conference paper that was done

by American academics Cottier and Salehyan is one of the first to conduct a comprehensive analysis of the influence that weather shocks have had on irregular migration across a wide range of nations and in Europe (Cottier & Salehyan, 2021). The paper was written for the United Nations Climate Change Conference, which was held in 2011, Durhan. The region has witnessed both internal displacements and hosted migrants coming from outside the border due to climate change. Inadequate and imprecise data and statistics regarding cross-border movements result in a lack of information. This makes the issue more complex and challenging to investigate; the weakest point of this thesis and similar studies is this lack of data.

The EU has recognized climate change as a threat to international security and is working to establish itself as a frontrunner in the effort to shape the world response to the consequences of climate change for international security. But migration is the ‘consequence of consequence’ of climate change. Therefore, describing the EU's climate change policies does not mean that we are narrowing the scope of the discussion in terms of migration. However, examination of these policies is required to establish where the problem of migration is handled.

In last 20 years, the EU has frequently addressed climate change as an international security issue in its foreign policy discourse. The Union has securitized the issue by emphasizing that it will increase tensions and violence in various African countries, including the Sahel, due to the vulnerability of the regions.

The European Commission report titled "Climate Change and International Security" in March 2008 and following European Council paper in May 2008 were covering comprehensive analysis on climate change and evaluating it as a threat multiplier for state stability (EU & EC, 2008). Climate change induced migration is counted as one of the factors creating tensions and conflicts, particularly through competition for resources on a global scale in those papers (Liberatore, 2013). Environmental migration was also listed as a kind of migration which can occur both within and between countries and it is not just a problem for the people who are

leaving their homes; it also puts pressure on the states and regions that are getting new residents (Scott, 2012). Rodrigues De Brito wrote an insightful chapter in a recent OECD study titled "Global Security Risks and West Africa: Development Challenges" that delves into the ramifications of the 'securitization' of climate change in the European Union (De Brito, 2012). De Brito, after reviewing the relevant research, concludes that EU policy on reducing emissions and adjusting to climate change has benefited from framing the problem as a security threat.

In 2011, the EU adopted the Sahel Strategy to address climate change in the region's extreme chronic poverty, food insecurity, rapid population growth, corruption, and development problems, identified terrorism and transnational crime as the principal threats, and support for the development of the region to ensure its security as part of its early foreign security policy. However, English academics argued that the connections between environmental change, human migration, and adaptation in the relatively mature in the governance system of the EU and it is shown that these linkages are limited and need a security focused approach (Geddes & Jordan, 2012). According to the Youngs' policy paper published in 2014, climate considerations are virtually missing from European migration policy, even from recent tendencies toward more stringent immigration rules (Youngs, 2014). European Union initiatives have continued to publish study papers, commission reports and committee results regarding climate change and security nexus and offered suggestions for how regionally specialized strategy can be emphasized. However, according to many researchers, climate-induced geopolitical instability requires a more comprehensive EU response and preparation strategy, since politicians are unsure how to shape rapid policy responses, and climate-related threat mitigation initiatives have failed (Young, 2014).

EU established the Regional Action Plan for its Strategy in 2015 to avoid radicalization, generate favorable conditions for youth, migration and mobility, border control, and combat transnational organized crime in the Sahel. EU now continues to support regional cooperation

and funding projects such as G5S, Sahel Alliance to protect Europe from future security issues. Researchers highlighted the fact that the EU is now working with the UNEP on pilot projects to investigate the feasibility of incorporating considerations of climate change into initiatives aimed at fostering peace (van Schaik & Bakker, 2017).

The framework for the presence of state-level duties and worldwide community-level objectives has been bolstered by several environmental summits, notably the Kyoto Protocol and the most recent and ambitious of these, the Paris Agreement (Hariharan, 2020). With the approval of the UNFCCC Paris Agreement in 2015, the world and EU acknowledged migration and climate change in unprecedented ways (McAuliffe & Triandafyllidou, 2021). The European Union stated that it will lead the Paris Agreement, the first legally binding international agreement to address climate change and its repercussions, shortly after its signature. The Paris Agreement provided a completely inclusive plan for nations to reduce gas emissions, promote environmentally sustainable economic growth, and encourage adaptation and mitigation programs to address climate change (UN, 2015). Due to various Middle Eastern conflicts, millions of people were forced to flee their homes during the 2015 refugee crisis in Europe, generating a humanitarian disaster across its borders and seas (Moran, 2022). The 2015 Paris Agreement and EU Refugee Crisis inspired and probably led EU migration policy developed on climate, migration, and security axis. Because the need for nations to defend the rights of migrants in the context of the consequences of climate change was specifically mentioned in the introduction to the Paris Agreement that was included at the COP2 conference (Biermann, 2018).

The European Commission's 2016 communication papers highlighted 'violence' as a key factor driving people to move and warned that natural disasters and climate change are threatening residents' economic and psychological safety; climate change may increase the dangers of instability, conflict, and state fragility (EC, 2016). Another European Economic and Social Committee document accompanied that Commission working papers. This text does not

explicitly mention climate change-induced migration, but it is certain that climate change drove a large share of forced migration from susceptible countries to Europe in those years (EC, 2016). In 2016 again, the Parliamentary Assembly of the Council of Europe (PACE) issued a report urging member states to prioritize the establishment of protection legislation and standards for victims of natural disasters and climate change. The Assembly's main recommendation at the time was prioritizing the development of protective laws and standards for those affected by natural, chemical, or nuclear catastrophes, as well as climate change, and revising the 1951 Geneva Convention on the Status of Refugees, using measures like an extra protocol. The conceptualization of climate change and migration as a nexus in terms of mass displacement, 'climate refugees' and security has shown to be remarkably robust, connecting with the repeated cycles of concern and alarmism on migration and asylum of which these years events in Europe were given as an example in those years (Bettini, et al. 2017). A clear link between climate change and persons who have been forcefully displaced due to environmental issues was recognized in 2018 with New York Declaration for Refugees and Migrants. Scholars highlighted that the growing number of vulnerable refugees, migrants, and displaced people is a direct result of global conflict, climate change, and economic inequality and when people flee their countries, they may lose many possessions, but they should never lose their basic human rights and dignity (Afaq & Sirohi, 2018).

The debates on climate change that took place in the United Nations (UN) Security Council in 2007 and 2011 were the ones in which the securitization of climate migration was discussed most prominently. Particularly, the discussion that took place in 2007 has even been singled out as the pivotal moment that marked the beginning of the broad securitization of climate change, including concerns connected to it such as climate migration (Brauch 2009). Key securitisers in both the climate change and climate migration issues in the UN Security Council are European and small island states (Boas, 2015).

EU security policy shows that climate change must be addressed, since the environmental destabilization from climate change threatens state and individual security. Policies of adaptation were widely recognized as crucial. Researchers from the universities of McGill and Leeds compiled a global distribution of adaptation reports in 2011 revealed that Europe had the greatest number of adaptation reports (Ford, et al. 2010).

The EU's Global Strategy reports have kept their security policy more unified, with human security as the primary focus while also getting close to a state security viewpoint. This strategy prioritizes security within and beyond with a more effective migration policy in collaboration with NATO, UN agencies, G20, ASEAN, and international treaties. In 2016, *Shared Vision, Common Action: A Stronger Europe* stated that EU will develop common and tailored migration strategies incorporating development, diplomacy, mobility, legal migration, border management, readmission, and return with countries of origin and transit and they will collaborate with international partners to ensure global solidarity and shared responsibilities. (EUFSP, 2016).

EC adopted European Green Deal in 2020 as a set of policy actions to reach EU climate neutrality and zero greenhouse gas emissions by 2050, with reference to more economic strategy of Strategic Long-Term Vision 2018 named *A Clean Planet for all*. EU stated that global climate change and environmental challenges are threat multipliers and sources of instability, and this ecological transition will cause geopolitical, economic, and security-related stability issues in states (Wachsmuth, 2022). According to European scholars from the Council on Foreign Relations, EU has a strategic interest in contributing to the stability of its neighborhood for a variety of reasons including migration, so the European Green Deal is seen as a crucial item on the foreign policy agenda (Leonard, et al. 2021). According to IOM experts, migration in its many expressions does not play a key part in the European Green Deal documents and should be incorporated into Green Deal policies (Berends, 2020). Although Green Deal has several

important components such as; the European Green Deal Investment Plan; the Just Transition Mechanism; the European Climate Law; the European Climate Pact; the European Industrial Strategy; the Circular Economy Action Plan; the Farm to Fork Strategy; the EU Biodiversity Strategy for 2030, and the EU strategies for energy system integration and hydrogen, it has been criticized. Senior Program Manager of United Nations Network on Migration, Barwise criticizes that there is only one direct reference of the link between climate change and migration/displacement is made in the European Green Deal Communication, and current plans tend to focus largely on EU citizens as constituencies, targets, or beneficiaries of the Deal (Barwise, 2020). The preparation of the European Climate Pact Roadmap and the establishment of the Lives in Dignity (LiD) Grant Facility, the publication of the Climate Change and Defence Roadmap in 2020, the communication paper of the EC on a New Pact on Migration and Asylum, and ICMPD's Policy Unit's report titled "Climate Change and Migration, Legal and policy challenges and responses to environmentally induced migration" are milestone moments in the process of securitizing change challenges with an emphasis of operational involvement of climate change induced migration policies in agenda. Alex Flavell, an independent consultant, and researchers from the IOM authored the report titled "Migration, environment, and climate change: A literature review" (Flavell, et al. 2020) and analyzed the association between extreme weather events and refugee applications in the EU and concluded that asylum applications will grow in the future because of global warming. EU published its Council conclusions on climate and energy diplomacy on January 2021, reiterating that it is vital to strengthen the connection between climate and security and that cooperation with the United Nations, NATO, the OSCE, and the African Union is essential (EC, 2021). The EC's Adaptation Strategy document and other communication papers published during 2021 was concentrated on the adaptation to the inevitable impacts of climate change disasters including forced displacement. EU has also proposed using its 2022 Platform on Disaster Displacement (PDD) chairmanship to promote

global efforts to protect climate change related displacers. The Commission Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO) published the Disaster Preparedness Guidance Note in May 2021 to help increase displacement resilience, particularly in disaster areas which have climate change related refugees and internally displaced persons. (EC, DG ECHO, 2021).

Along the axis of climate change, migration and security, the EU took several important diplomatic steps forward such as publishing the Concept for an Integrated Approach on Climate Change and Security in October 2021, Council conclusions on EU Climate Diplomacy; accelerating the implementation of Glasgow outcomes in February 2022, the Strategic Compass for Security and Defense approved in March 2022, establishment Group of Friends (GoF) in October 2022. The European Union (EU) policy on adaptation to climate change in 2021 and European Green Deal (2019) address climate concerns and outline how the EU can adapt to climate change's inevitable effects and become carbon neutral by 2050 (Knez, et al. 2022). After COP27 held in December 2022, European Parliament published a resolution paper titled “UN Climate Change Conference 2022 in Sharm-el-Sheikh, Egypt (COP27)” and presented an ambitious climate policy, emphasizing that EU recalls for climate crisis and expresses deep concerns about climate change related migration.

Overall, the literature on the securitization of climate change induced migration in the EU discourse is still evolving. Undoubtedly, further study data is required to comprehend the complex dynamics of climate change induced migration and to establish an efficient and compassionate securitization procedure.

Chapter 1 – Climate Change and Migration

1.1 What is Climate Change?

The world has been facing with many climate and environmental problems and has been experiencing different climate periods since its existence. The periodic loop of world climate has mainly consisted of ice ages and warm periods. These natural climate changes should be distinguished from anthropogenic (human related) climate changes. From the ancient times to today, the world has had a natural and mutual interaction with humanity. This mutual interaction between the nature and humanity have always been considerable and undoubtedly this interaction has been evolved over decades. Environmental history has been studying this interaction between human beings and nature since Ancient Greece (Hughes, 2006). Many scholars of 17th and 18th century's philosophy pointed out the relation and interaction between human behavior and climate (McNeill, 2018). Global influences of this interaction have started to be examined in the Age of Enlightenment. By the 20th and early 21st centuries, with the globalization, world trade activities, and settlement of people, environmental and ecological problems gained importance. The organic relation between the world and human beings has transformed into mechanical. Anthropogenic environmental changes emerged in different geographic regions and started to show its affects in different places and in different cultures globally. The most impressive and at the same time theoretical studies started to be analyzed, especially in United States (US) (Warde & Sorlin, 2007). The new world order was now putting “human” and its needs at the center. This social reality proved that, with technological developments, humans' interventions to nature gradually increased. One of the most critical environmental problems that started to emerge in those days, continues today and will continue in the future is climate change (Hughes, 2006).

Climate change is accepted as one of the biggest, alarming problems that threatens the interdependent world facing today. The Earth has a dynamic structure and the atmospheric system have undoubtedly changed several times in its natural cycle. During the geological periods and in between glacial and glacial periods temperature differences and other climate events have been experienced. The main reasons of these changes were mainly natural ecologic events like insolation and solar radiation, ocean current systems, and volcanic movements. After these ancient periods, the origins and concepts of these problems have started to be changed.

To understand climate change phenomenon and its affects, climate and climate systems should be considered initially. Climate is shortly and narrowly defined as “average weather”, or properly described as changeability of amounts throughout a time span spanning from a few months to many thousand or even millions of years (IPCC, 2013). Sometimes it seems difficult to distinguish the differences between weather and climate. Weather gives the conditions and mix of events of the atmosphere over a short period of time, on the other hand climate shows how the atmosphere reacts over long periods of time and the average of long-term daily weather measurements (NASA, 2015). The anonymous quotation summarizes the difference between weather and climate as; The climate is what you expect; the weather is what you get. Climate is mainly explained with the related measurements of temperature, precipitation, humidity, atmospheric pressure, and wind including statistical analysis of the climate system which involves the atmosphere, the hydrosphere, the cryosphere, land surface and the biosphere. Due to the interaction of these components and because of other natural facts like volcanic eruptions, solar variations and human-related activities, climate system is continuously changing.

The World Meteorological Organization (WMO) defines climate change as “...a statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period (typically decades or longer). Climate change may be due to natural internal processes or external factors such as persistent changes to the atmosphere or

changes in land use” (WMO, 2017). However, after the 19. Century, with the industrial revolution, it has begun to be discussed that, in addition to natural and cyclical changes, "human activities” started to play a decisive role on climate change on a regional and global scale and those activities began to affect the atmosphere and ecosystem. Contrary to WMO’s definition, in 1992, United Nations Framework Convention on Climate Change (UNFCCC), expressed that; “Climate change’ means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.”. Other important and comprehensive studies on climate change are carried out by the Intergovernmental Panel on Climate Change (IPCC) and according to IPCC, “Climate change in IPCC usage refers to a change in the state of the climate that can be identified (e.g., using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. It refers to any change in climate over time, whether due to natural variability or as a result of human activity”.

Climate change is defined as a weather phenomenon which mainly comes up with a global increase in average temperatures. The temperature of the world was started to be recorded in early 1850s (Brohan, Kennedy, Harris, Tett & Jones, 2006) and compared to that era our world is now one degree Celsius hotter than those years (National Meteorological Service, 2017). This problem formerly called global warming which refers to the long-term heating of the climate system, has now been defined as climate change because of the larger changes and broader climate effects to the planet. Global warming term is now insufficient to define these complex and current problems of the planet; it is not only the warming; it is the changes in average weather conditions covering both increasing and decreasing of temperatures as well as changes in other features of climate system.

National Aeronautics and Space Administration (NASA) verifies the climate change with the following evidences; global temperature rise mostly in the last 40 years, warming ocean, shrinking ice sheets in the Greenland and Antarctic, glacial retreat in everywhere covering Alps, Himalayas, Andes, Rockies, Alaska, and Africa, decreased snow cover in Northern Hemisphere, global sea level rise, declining Arctic sea ice, high and low temperature extreme events and ocean acidification as a result of human emitting more carbon dioxide into the atmosphere. After the industrial revolution, with the human populations reached to billions and with increase in industrial activities, energy consumption of the world also increased. The use of fossil fuels causes an increase in carbon dioxide (CO₂) emissions into the atmosphere and high CO₂ emissions create greenhouse effect. Greenhouse effect is the most important natural process that leads to the warming of Earth's surface. Basically, the energy coming from the sun reaches to the atmosphere in different forms such as ultraviolet, visible, and near-infrared radiation. Some of this energy is reflected to space and some of it is absorbed by the atmosphere. Earth's surface is colder than the Sun, so it radiates more than it absorbed. This absorption warms the atmosphere and leads to higher temperatures. Since the Industrial Revolution, greenhouse gases in the atmosphere have remarkably increased. The increase of greenhouse gases in the atmosphere, especially carbon dioxide and methane, causes the increase in land and sea temperatures and related climate changes. The use of fossil fuels as an energy resource in industry, transportation, industrial agriculture, husbandry etc. is the first reason of increase in greenhouse gases. Secondly, it depends on the reduction of size of sinks (forests) and their carbon dioxide absorption capacity (oceans and soil). So, climate change is entirely occurring because of human activities (Şahin, 2014).

Enhanced greenhouse effect is also described through human activities; carbon dioxide levels increased from human activities, and it strengthens this effect. IPCC 2014 Assessment Report emphasizes that; "Anthropogenic greenhouse gas emissions have increased since the pre-

industrial era, driven largely by economic and population growth and are now higher than ever. This has led to atmospheric concentrations of carbon dioxide, methane and nitrous oxide that are unprecedented in at least the last 800,000 years. Their effects, together with those of other anthropogenic drivers, have been detected throughout the climate system and are extremely likely to have been the dominant cause of the observed warming since the mid-20th century.” (IPCC, 2014).

In the light of above discussions, the answer of what causes climate change is obvious, humans. Intergovernmental Panel on Climate Change Report states that; “Human influence on the climate system is clear.” (IPCC, 2013). As a result of Fifth Assessment Report of IPCC; there is a greater than 95 percent chance that human actions are the cause of global warming, which was a consensus reached by 1,300 scientists working independently from nations all over the world. (IPCC, 2014a). Since mid-20th century, human activities like burning fossil fuels, clearing of land for agriculture, industry and other activities change the natural greenhouse of Earth and as a consequence of these activities extreme climate events emerge; earth is becoming warmer; warmer conditions is leading to more evaporation, oceans are getting warmer, ice sheets are partially melting, sea levels are rising; the whole system is affected (NASA, 2020). Due to these reasons, climate change is also regarded as anthropogenic (human-caused) problem (Cook et al., 2016). Even though people are the ones who cause climate change, they are also the ones who suffer the most from its effects. This interactive relationship between people and climate change is worth discussing. All ecosystems, economies, and communities in all parts of the world are feeling the effects and effects of climate change.

1.2 Impacts of Climate Change

The main concern of today's scientists and researchers who mainly focused on studies related to nature and people, is that the world has been dramatically experiencing the impacts of climate change with its all dimensions. The dimensions of ecological and physical and socio-economic impacts, even if they vary from region to region, make the climate change one of the most urgent and alarming problems facing humanity today. Climate change will lead to extraordinary human displacements in coming years and give rise to humanitarian crises in many countries in terms of politics, economics and social issues and countries above sea level, as migration receiving countries, will need to find sustainable places for climate refugees to settle (Sparks, 2021).

The results of climate change have already begun to reveal and impact the physical and biological systems of the world which cause mainly sea-level rise on ecosystems, water resources, agriculture and food security, human health, coastal and low-lying regions and industry and settlements (IPCC, 2007). The physical changes directly or indirectly lead to socio-economic results on primarily affected regions and indigenous people living in those regions. After the Industrial Revolution, in parallel with the developing science and technology in the world, climate change has turned into a problem that also concerns healthiness and security of people and is now unavoidably on the agenda of countries' governments and international policies. The physical impacts of climate change to the ecological system and the social and economic impacts should be estimated and analyzed as intertwined with each other and should be observed by considering the cause-and-effect relationship of all dimensions.

It is an obvious fact that climate change is a global issue, but the impacts of climate change have had disruptive influences particularly on developing and poor countries of low-income communities rather than developed ones. Vulnerable countries, which are the 70 percent of world, have had serious struggles with influences on health issues, insufficient natural resources,

and economical problems (Rüttinger, 2020). Vulnerability here, is defined as a concept of propensity or predisposition, sensitivity or susceptibility, lack of capacity to struggle with threats and to adapt with changes in the environment experienced (Rigaud, K., et al, 2018). It is also described as a concept of building a structure based on resistance, ability to overcome and rescue from a disaster (Agder, 2000). The socio-economic and political vulnerabilities of communities provide basis to high risk of climate-related changes and its impacts on individuals and their livelihood. The poor societies are the most affected ones from all catastrophes. The politicized world that we live in shows the unequal distribution of costs and benefits related with environmental change (Bryant and Bailey 2003).

According to United Nations Development Programme (UNDP), many regions of Africa, Small Island States (SIDs) and coastal zones are facing with droughts, extreme weather events and sea level rises mostly. Regarding the Gross Domestic Product (GDP) of poor countries, the consequences of these effects could be accepted as apocalyptic (UNDP, 2007). Simulation research about global economy proposes that if policy makers do not act against climate change, by the year 2060, the effects of climate change on yearly GDP will have increased by around 2%. (OECD, 2015).

The effects of climate change have already had and will continue to have extensive repercussions, which will not only have an impact on significant economic sectors but will also have an impact on both the supply and demand for products and services in all sectors. These impacts have eventually had a negative impact on human security, health, and well-being of people, as well as cultural structure and social equality, and they make it difficult for governments to respond to and regulate the extent of the threat for their society. Poverty and hunger are the fundamental problems that humanity can ever face. So, the impacts and of climate change which create risks for livelihoods of people, economic and social welfare, and equality, it is inevitable to be recognized as a threat for the world. As the climate change has been

occurring and will increasingly continue, the impacts should be recognized as not only environmental but also humanitarian. Because of the risks to human safety, both the wellbeing of the people and the stability of the nation are under trouble.

At that point, the link between being forced to move or migrate and climate change becomes clear. Socio-economic dimensions of climate change, especially on vulnerable communities, have an impact of forced or voluntary migration of people. These movements or relocations can be analyzed as a humanitarian reaction of both indigen people and governments who should adapt some strategy to get over this threatening occasion they're facing with and to find alternative livelihoods. We might conclude that climate change's effects are interconnected and complementary to one another.

Climate change and the related rise in the frequency of severe weather events such as floods, droughts, and that sea levels are increasingly being recognized as posing political and security risks that endanger national and regional stability and people's well-being (Kloos, Gebert, Rosenfeld & Renaud, 2013). As a result, there has been an increase of government concern in the impact of climate change on water supply and human wellbeing. Especially, whether climatic and hydrological changes and growing variability cause and multiply conflict at various scales or induce cooperation between and within countries, and how this affects human security, remains debatable. Within the context of climate change and conflict literature, an increasing approach argue that climate change should be regarded as a threat multiplier for today's conflicts. In comparison, operational systems and well-adapted organizations of countries can create collaboration and dispute resolution, therefore they can be regarded as threat minimizers which mitigate the maintenance of human security.

Whether anthropogenic climate change has had a direct or indirect impact on human security, societies and governments should develop sustainable adaptation policies and well-functioning strategies, but their capabilities and vulnerabilities to act varies according to various

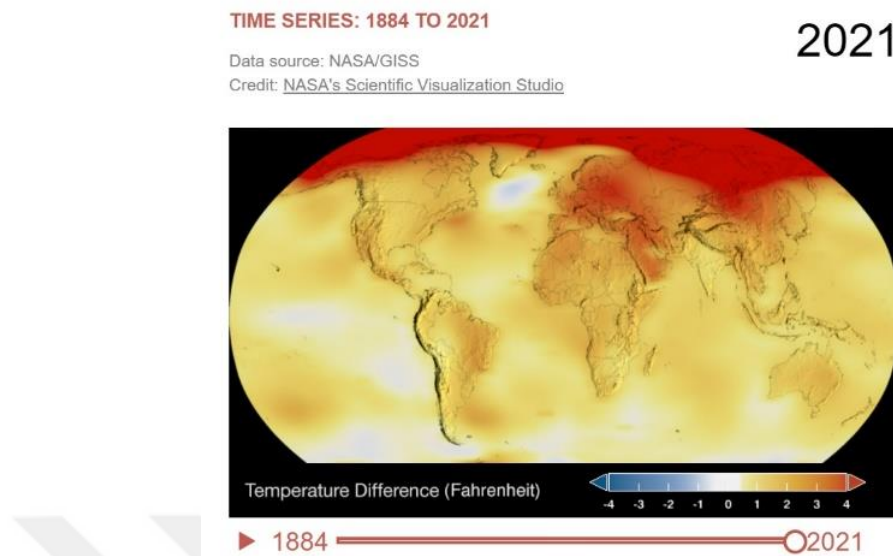
factors like substructure, organizations, fund of knowledge, social security systems, relations with powerful governments, etc. The complexity of connection between environmental system and socio-economic and political conditions of regions, made difficult for researchers to determine the direct effect of climate change on human security.

1.2.1. Ecological ve Physical Impacts of Climate Change

The climate is changing, and it will keep on changing for the foreseeable future. Due to the various physical and ecological impacts on the complex global climate system, major damages of this transformation are considerable. Natural components of Earth, from a little organism to human beings, are under threat of this transformation and devastating change. It is a globally scaled problem of the world but the extent of damages from ecological and physical impacts varies from region to region. Mostly affected regions are specified as Arctic, Africa, and small islands and Asian megadeltas (IPCC, 2007) and a group of American researchers reported that ten places that are mostly influenced by the climate change are Darfur, the Gulf Coast, Italy, Northern Europe, the Great Barrier Reef, island nations, Washington, D.C., the Northwest Passage, the Alps, and Uganda (Scientific American, 2008). According to the researchers, Central and Eastern Europe, Caucasus, and Central Asia (CEECCA) region also experiences several negative influences of global warming, which is faster and stronger than the world average (Safonov, 2019).

WMO reported seven indicators to describe global climate change and its impacts as: greenhouse gases, ocean acidification, temperature, extreme events, ocean heat, sea level, glacial mass, and sea ice. The greenhouse gases (GHGs) are defined as "... gaseous constituents of the atmosphere that absorb and emit radiation at specific wavelengths within the spectrum of terrestrial radiation emitted by the Earth's surface, the atmosphere itself, and by clouds." (IPCC, 2007). Three big GHGs which are Carbon dioxide (CO₂), Methane (CH₄) and Nitrous oxide

(N₂O), are increasing in the atmosphere because of human-related activities. Anthropogenic activities like combustion of fossil fuels after the Industrial Revolution created 45% increase in CO₂, from 280 ppm in 1750 to 415 ppm in 2019 (Shieber, 2019). The increase in GHGs emissions and concentrations leads to a serious global warming effect. Although the land regions have warmed faster than the oceans, damages in water structure threatens the life of living in the sea and in their diversity with the ocean acidification and decrease in pH amount which endanger the ecosystem of sea water, the aquaculture and sea-related fishery activities. The main and stubborn effect is that the first ecological and physical consequence of climate change is globally rising temperatures of the Earth. The world has warmed over the last 150 years and that warming caused many other climate changes of Earth (Wuebbles et al., 2017). Climate change researchers estimate a temperature increase of around 5 °C above pre-industrial levels by 2100 (Tollefson, 2020). According to World Meteorological Organization (WMO)'s report published in December 2020, 2020 has been recorded as one of the three warmest years of the last decade (WMO, 2020). Last year, WMO stated in Provisional State of the Global Climate in 2022 that: "In 2022, scientists predict that the average global temperature will be 1.15°C higher than it was in the pre-industrial period of 1850 to 1900. Due to a rare triple-dip cooling La Nia, 2022 is expected to be "just" the fifth or sixth hottest year on record. While this is certainly welcome news, it does little to halt the overall trend, and another hottest year on record is simply a matter of time. In fact, global warming keeps accelerating. The predicted 10-year average for 2013-2022 is 1.14°C over the 1850-1900 pre-industrial baseline. According to the IPCC's Sixth Assessment report, global average surface temperatures were projected to rise 1.09°C between 2011 and 2020. The pace of warming of the ocean has been exceptionally rapid over the last 20 years, reaching a new peak in 2021." (WMO, 2022).

Figure 1:

Note: NASA's Scientific Visualization Studio Graph

Comparative graph showing the global surface temperature from 1884 to 2021

Due to rising global temperatures, extreme weather events like fires, flooding, droughts, heat and cold waves, severe storms are occurring all around the world. Ocean heat content is also increasing in parallel. This means the volume of oceans increase and serious rise in sea level occurs. High sea levels have a significant effect on marine life and communities living around water. In the high mountains of Asia, and North and South America, there are glaciers which are the freshwater suppliers and one of the big driving forces of ecosystem. As a result of global warming, glacial loss as ice breaks going to the ocean and again contributes to global sea level rise. In 2002, the Larsen B ice shelf of Antarctic Peninsula broke up and went to the ocean and this break up aroused the attention of world about the impacts of global warming. Pine Island and Thwaites icy masses as of now contribute 5% of sea-level rise of the world (Mooney, 2020). Islands of Maldives, Marshall Islands and other island nations are mostly affected regions from high temperatures and seal-level rises. People, settled in low-lying island nations, wrestle with protecting the island's natural resources, the habitat, and their healthiness. Considering the disappearing of the Carteret Islands in Papua New-Guinea, many other low-lying islands are under considerable threat of submerging. The inhabitants of these islands are forced to leave and

migrate, like in Maldives. Maldives, a group of more than 1000 islands in the Indian Ocean, is one the examples of the linkage between climate change and migration.

The Arctic region is warming faster than the global average of the world; like more than twice; it is becoming warmer and wetter too (SWIPA, 2017). Melting is happening to Arctic glaciers, ice caps, and the Greenland Ice Sheet. The average of annual air temperatures in 2014, 2015, 2016, 2017, and 2018 of the Arctic surfaces is measured greater than any year observed in 1900s and the calculations shows that; 2015-2016 has been the first and October 2017-September 2018 has been the second warmest periods seen since 1900. The annual surface air temperature of this region rose nearly 3-degree Celsius compared to 1971 (AMAP, 2019). These temperature changes lead to other critically important changes in Arctic's physical and biological structure. The main results of increase in precipitation and humidity are extreme events of melt of arctic glaciers and global sea level rise, jet streams and wind fires in Northern Hemisphere. This physical changes in the North have an impact on weather conditions to the south. This melting ices going to the Arctic Ocean damages the natural circulation and biological productivity of water, and the soil moisture is also damaged so the vegetation. When the vegetation is damaged, the productivity and diversity of plants decreases, and the nutrition of animals got deficient. Correspondingly, another reality is the loss of biodiversity in sea habitat including fish species. This means that it is not only the ecosystem has been affected by the warmer temperatures, but vital activities of people are also interrupted. Economic and commercial activities related to sea such as marine transportation and shipping are blocked by the melted ice. Many people in Northern countries who earn their living by fishing are mostly affected by these changes. Eskimos, indigenous people of Arctic region, needed to use mobility to survive. This means people living in that region started to migrate as a way of fighting with consequences of climate change. When the adaptation is more difficult than moving, people needed to change their living environment instead. Sometimes this is not a voluntary choice of people, it is a sedenterization

of adaptation policies of both Northern and far East governments (Liao & Fei, 2017). Displacement of young people and forced out-migration of students of that region are also the results of climate change and adaptation policies. This shows us how the physical impacts of climate change are intertwined with socio-economic impacts. Arctic Monitoring and Assessment Programme (AMAP) stated that carbon emissions to the atmosphere are a direct effect of Arctic wildfires. New shipping routes, access to oil, gas, and mineral resources, and shifts in Arctic fisheries all have repercussions for economies both within and outside of the Arctic. Migratory animals that go from the Arctic to the Antarctic are similarly vulnerable to the effects of climate change (AMAP, 2021).

In the last century, the functioning of the ecosystem and biological diversity have been seriously damaged with global warming. According to Global Assessment Report on Biodiversity and Ecosystem Services of The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) the land and sea usage of people is the main driver that threatens the habitat of animal and plant species' distributions and population sizes (IPBES, 2019). Changes in biodiversity in Canada's terrestrial, freshwater, and marine systems have been observed as a result of climate change and high temperatures during the last 50 years (Canada's 5th National Report to the Convention on Biological Diversity, 2014). In the updated report dated 2019, Canada pointed out that more than 500 species are listed as "at risk", mostly because of habitat damages resulting from climate change and pollution (Canada's 6th National Report to the Convention on Biological Diversity, 2019).

The most affected species are the animals which are living in cold climate zone. The melting of glaciers creates a big damage in habitats of the living creatures like penguins and polar bears and they are having problems in hunting and in need of migrating to find colder regions to survive. Estimations of scientists based on carbon dioxide emission calculations show that sea ice in the Arctic region will completely melt in summer by 2050 (Sumner, 2016).

Animals' vital activities become unbalanced because of seasonal changes and weather conditions. Many other polar animals like whales, seals, hippopotamuses, some of bird species like kittiwakes, pigeon guillemots and many fish species are lack of food. Cold water planktons, tiniest and primitive creatures of sea food chain are threatened with extinction. All these problems are also making fishermen's lives difficult (Spence, 2005).

The impacts of climate change are also being felt in other regions, including Europe. Due to global warming of 1990s, the voltinism (Voltinism is a word that comes from the field of biology and refers to the number of offspring or generations that an organism produces in a given year) has been increased in central European butterflies and they have started to migrate to North (Altermatt, 2010). In Europe again, climate change has a potential impact on plant species' population, colonization, and their distribution in the region. It is observed that alpine plant species have migrated upward and northward to find out more suitable climates (Theurillat & Guisan, 2001). In central Europe's spruce forests of Czech Republic, northern Austria, Bavaria and Slovakia, hot and dry conditions of summer have caused to outbreak of bark beetles that are destroying vast swathes (Lopatka, 2019). World Wide Fund for Nature (WWF) reported nine iconic species in United Kingdom (UK), affected by climate change; white-beaked dolphin, Atlantic salmon, Capercaillie bird, sea-birds of Kittiwake and Guillemots, 250 species of bumble and solitary bees, Antarctic puffin, Leatherback turtles of the biggest and most advanced diver of the seven types of sea turtles, and cods living in cold and deep seas (WWF, 2019). Many living creatures of Mediterranean wetlands, the Nile, the Camargue, the Ebro deltas are also under danger.

Both the quantity and quality of water are significantly affected by climate change. In addition to global warming, drought, desertification, and destruction of water resources, climate change also causes extreme and irregular rainfalls, floods, and violent storms. This implies that the timing, location, and amount of precipitation that falls on Earth is directly impacted by

climate change. This extreme water related nature events are affecting the daily lives of people and limiting their access to water resources (National Geographic, 2019). IPCC pointed out that environmental damages refer that in the case of emergent and dangerous event occurred, the indigenous communities lose access to available water resources and face with critical decrease in productivity of the soil and the hazard of crop failure (IPCC, 2012). Salinization of wells, so the limited access of communities to freshwater resources after Indian Ocean Tsunami 2004, is a good example for that kind of crisis. Cape Town, South Africa's second-largest metropolis, is another example of peaked water crisis that the city is running out of water, the government is implementing water restrictions and the city is waiting for the "Day Zero", the day when the whole city become fully dry (Welz, 2018). Researchers point out that because of climate change, becoming a "Day Zero" city by the end of 21st century is not abnormal (Stanford University, 2020). Regarding the water supply, the Baltic States and Central Asian countries are also facing with spread of plant diseases, pests, infectious animal diseases, viruses, and water shortages (Safonov, 2019). In 2019, United Nations Children's Fund (UNICEF) and World Health Organization (WHO) reported under the Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene that 1 in 3 people globally do not have access to safe drinking water (WHO, 2019). Rural regions, Middle Eastern and African countries, are dramatically affected places with very limited access to water resources. The estimations state that in the following years, rural habitants will get their drinking water from wells, not from natural springs (WHO, 2009).

Because of the impacts of climate change on the quantity and quality of water, the problem is certainly associated about human health issues, especially children's lives. WHO expects approximately 250.000 deaths per year in between 2030 and 2050 caused by malnutrition, malaria, diarrhea, and heat stress (WHO, 2020). UNICEF reported that around 500 million children living in under highly risk of flooding and rising sea level events of cyclones, hurricanes,

and storms; in 2040, it is predicted that nearly one-quarter of all children will reside in regions of seriously high-water stress, where they will be at risk for water- and sanitation-related diseases like cholera and typhoid and where each day, more than 700 children under age 5 die from diarrhea linked to inadequate water, sanitation, and hygiene. (UNICEF, 2020).

Apart from being basic need of living beings, water is critically important for agriculture, industry, and energy. Agricultural activities and productivity are limited as a consequence of climate change's severe effects on subterranean and overland water supplies, changes to waterfalls, drought, erosion, and desertification. With the decrease in snow covered soil, isolation effect of soil also decreases, and the protection of the plants and farm products are getting hard. Countries whose economies are dependent on agriculture are the most affected ones from these changes.

These and other ecological and physical impacts of climate change have repercussions for the entire global climate system and pose fundamental risks to many ecosystem services, which in turn affects the livelihoods of indigenous peoples and other inhabitants who live on this planet. These and other impacts can occur separately or in conjunction with one another. In addition, these effects are intricately connected to the socioeconomic impacts and consequences.

1.2.2. Economic and Social Impacts of Climate Change

At the beginning of 20th Century, with the growth of countries and increasing population, the fundamental need for energy resources and raw materials became unavoidable. Unconsciously, the need for energy is started to be supplied from burning fossil fuels and raw materials from destroying the nature rashly. According to these insensitive human activities of a globalized world, technological developments, and rapid population growth, various environmental problems such as water and air pollution arose. In these years, such environmental problems were experienced at regional level, not on a global scale. So, they were not taken into

consideration much and not predicted what other problems they would cause for the world soon. However, after the 1970s, when it is determined that ozone layer was thinned or even pierced, environmental problems started to be taken seriously. These environmental problems were still not seen as globally scaled issues; since the global warming and climate change complex problems have emerged and its influences have begun to be observed in social and economic areas of the whole world.

Socio-economic impacts of climate change which have been basically driven from physical environmental changes, are the challenges that people are facing and struggling around the world today. Climate-related sectors like agriculture, husbandry, tourism, and energy are the most affected areas in terms of economic performance and dependently human welfare. The labor productivity and economic growth are accordingly decreasing because of changing conditions in energy shortages, damaged infrastructures, warming related natural events, loss of clean water resources, illnesses etc. As it mentioned in the previous part, most vulnerable regions are urban areas and their residents suffering from climate change and its damaging consequences. Developing and poor countries' economies are largely depended to weather conditions because of the importance of deep-scaled sectors and labor force in agriculture, farming, pastoralism, fishery, and forestry in their livelihoods. These countries mostly located in hotter regions of the world. This means their ecosystems have the capacity of feeling the impacts of global warming deeper than the rest of the world. Unfortunately, they have a limited adaptation capability, resource mobilization and technology to deal with the socio-economic consequences of climate change (Tol, 2018).

Most of these demographically vulnerable regions are situated near hazardous locations where water resources are and people earn their livelihood from agriculture, marine-related activities like fishery and husbandry. As a consequences of sea level rise, these urban centers are under threat of limited economic and commercial activity, and therefore they are facing with

socio-economic problems of poverty, unhealthiness, hunger, and displacement (Gasper, Blohm & Ruth, 2011). According to the estimations of the World Employment and Social Outlook 2018 report, climate change is threatening 1.2 billion jobs in the world (ILO, 2018). South and Southeastern Asian countries are the mostly affected parts of the world by sea level rise. For example, in India, expressions about the percentage of total regional agricultural land area and capital losses show that it is -0,63% in 2060 compared to 2000 respectively (OECD, 2015). In comparison with India, other countries in this region are affected in a smaller extent. Northern America, especially Canada, Mexico and major parts of United States are also affected. Middle East, Europe, with non-OECD countries, Israel, Norway, and Turkey are also the regions that being affected by sea-level rise and its consequences on socio-economic level. With the negative effects of climate change on agricultural activities, mostly affected countries are again underdeveloped and developing countries compared to European Union (EU) countries and USA. With the high temperatures, agricultural activities in middle latitudes are become difficult and hard to get efficiency. For example, it is projected that countries like Russia and Canada will have to expand their agricultural areas. But this will not be a sufficient solution for long-term plan because it is not only the weather conditions changed, but the physiological structures of soil and plants and seed qualities are also changed in these regions. This will inevitably affect the agricultural activities, productivity, and variety as well as various agricultural areas covering crop production, animal farming, pastures and rangelands and aquaculture.

Climate change has a negative impact on coastal zones and coastal human-related systems of economy through damaging warmer sea temperatures and acidification, erosion, and sea level rise. IPCC mentions that negative effects and positive effects of changes in temperatures vary from region to region. However, at the global level, studies show that the negative impacts on agricultural productivity will be higher and higher CO₂ concentrations in the atmosphere, changes in rainfalls, extreme weather events, disease frequencies and pests, will have a

devastating effect on crop yields and weeds heterogeneously, and damages on especially in higher levels of ozone (IPCC, 2014b). The way of agricultural regulations and controls on food security, water systems and protection of biodiversity will also need to be changed because of soil and water pollution. With the globally high temperatures, extreme weather events of tropical cyclone and hurricanes have started to become more damaging. Tropical cyclones, hurricanes and typhoons are regional titles of a very similar natural event. Tropical cyclones are called for tropical events occur in the southwest Indian Ocean, the Bay of Bengal, and the Arabian Sea and in some parts of the South Pacific and Australian coastwise. In the northwest pacific, they are called typhoons; hurricane in the Caribbean, the southeast of USA and Central America (El-Hinnawi, 1985).

Figure 2:

Projected number of people at risk of a 100-year coastal flood.



Note: Number of people at risk of a 100-year coastal flood

As seen in the Figure 2, people population living in coastal areas are projected as under risk compared to other regions because of serious sea level rises (IPCC, 2022)

By the end of this century, researchers observe that these extreme weather events in the middle latitude landmasses and wet tropical areas will increase frequently and excessively (IPCC, 2013). Decreased rainfalls and increased evaporation caused to droughts in husbandries. This kind of extreme events and their damaging consequences are proposed to result much higher economic costs compared to any economic problem of a world without climate change (OECD, 2015).

Economic impacts of climate change primarily come through industry. The required infrastructure for industrial operations directly related to some services like electricity, water, and waste management which are experiencing the damages, especially in terms of the effects on physical capital. The quality of surface water used for industrial processes has been damaged because of sea level rise and its effects to water volume, salinity, Ph balance and cleanliness. For instance, the local sea level rise in Philadelphia, in Delaware Estuary leads to flooding and erosion and problems in tidal coastal wetlands. As a solution, to save tidal coastal wetland, migration from waterfronts to landward is allowed (Delaware Valley Regional Planning Commission, 2004). This presents how difficult for governments to manage with climate change problems and policy making for adaptation. Apart from industrial use of water, freshwater resources are also important for both industry and human well-ness. The expectations indicate that humid regions of middle latitude and high latitude will highly face with limited water availability and cleanliness. Ground water is the main source and reserving area of freshwater and structurally it is isolated. However, groundwater reloading system is proposed to decrease in many countries and in parallel saltiness of reserved water will also increase. Reduced water availability and wide range of dry periods will affect middle latitudes and dry subtropical latitudes more. The negative effects of climate change on water availability, as well as degradation in the toxin-free structure of water quality, result in limited access to fresh water

sources. This has an impact on the availability of drinking water for individuals as well as industry due to the implications on water supply system and power production (OECD, 2005).

Drinking water shortage is one of the biggest problems threatening the human health. According to World Economic Forum (WEF), the estimations of water experts show that; from Yemen to India and regions of Central America to the African Shell, nearly quarter of the world's population are facing with extreme water shortages, and this leads to conflict, social unrest, and migration (WEF, 2020). Another fact is that cleaning the water is over costing, especially for Middle Eastern countries. These regions have already had conflicts about energy resource and with the limited water resources, national and international competitions, more serious conflicts will be occurred in these regions.

Provision of electricity is another affected area of industrial activities. Many regions have difficulties about energy shortages. Brazil using hydroelectricity and Ningbo port of China are some examples of energy-dependent and electricity-based industries which are struggling with water scarcity and energy shortages. Energy loses in water and electricity damages and ceases the national and international industrial processes and limits the economic growth. Researchers points out that changes in climate negatively impacts the urban economies and social lives of residents. Water floods of 1998 and 2004 in Dhaka, Bangladesh were recorded big losses in their factories and industry.

Tourism-based economies are another part of the system impacted by climate change. The length and structure of tourism seasons are changed, so the destination choices of tourists also changed. Regions economically dependent on beach tourism are dealing with operational costs of climate-based breakdowns. Local climate conditions specify the attractiveness of tourist locations. For example, because of less snow, the Alps and skiing do not attract as many tourists as before. In addition, providing artificial snow is very costly.

Commercial transportation activities are under risk due to unexpected climate events and changes. In the not-too-distant future, it is estimated that eastern coastal area of the United States could be under water as a result of sea level rise or flooding due to storm surge disasters; Ports of Maryland, Virginia, and North Carolina are the riskiest ones. One of the highly influenced areas from flooding is Boston Logan International Airport. Seven of the ten ports located in the Gulf of Mexico are also declared as risky (Gasperi 2011).

Social impacts of climate change have primarily concentrated and should be analyzed around health issues. The negative impacts on health have physical and psychological dimensions. Extreme climate changes and weather events increase the spread of epidemic and infectious diseases, due to heat stress, lack of food and clean water. The linkage between climate change and food security shows that by the year 2050, the likelihood of suffering from hunger and malnutrition might rise by up to 20 percent. (UN WFP, 2020). Changes in mortality and morbidity shows the influence of climate change related diseases of malaria, schistosomiasis, dengue, diarrhea, cardiovascular problems, and respiratory illnesses and premature deaths (OECD, 2015). Economic approaches based on production indicates that health impacts of climate change affect the labor productivity and requirements in health services in terms of economy. Dealing with these types of health problems and diseases is extremely difficult for both humans and governments. At human level, illnesses affect daily lives of people when they are fighting against diseases and trying to protect their families and relatives, and in the medium-term they are facing with stress, anxiety, and depression. Impacts of climate change on health can be classified as direct and indirect effects, covering; weather temperature related deathrate and morbidity, water, food, and vector-borne infection; deaths and welfare and changes in atmospheric pollution and allergic matters (OECD, 2015). All these impacts are posing a risk for health infrastructure and occupational health and safety issues.

1.2.2.1 Mobility and Migration as an Impact of Climate Change

Human mobility and migration have been mainly based on economic, social, and political conflicts of countries, but global warming and climate change have brought a new dimension to these movements. Although, it seems like a new phenomenon, people have been moving and relocating because of changes in the environment for centuries. The founders of migration studies, like Friedrich Ratzel, and later researchers of neo-environmental determinism mentioned the environment issues and defined climate change as an important determinant of human mobility (Piguet, 2013).

The increasing effect of climate change on involuntary and forced migration, within their country or across international borders, has become an important field for researchers and relevant authorities. In general manner, migration has been accepted as a survival method of people facing with natural or human-related disasters. The absence of natural resources such as clean water and extreme weather conditions such as hot and dry or cold and wet have been endangering the way of life of indigenous people and causing socio-economic disputes, both of which serve as a threat multiplier for the notion of human security. According to data-driven research analysis of the Ecological Threat Register (ETR) produced by global think tank Institute for Economics & Peace, 157 independent states and regions are under threat of ecological problems measuring population growth, water stress, food insecurity, droughts, floods, cyclones and rising temperature and sea levels (IEP, 2020). Every year, 24 million people have been displacing because of ecological disasters and this amount is predicted to be increased and these mass movements are expected to be more than 2015 European migration crisis (IEP, 2020).

In 1990, the IPCC noticed that the massive impact of climate change could be on human migration. As a result of extreme and abnormal events of high temperatures and sea-level rise, the average of more than 20 million people has been obliged to leave their homeland and move to other places every year (UNCHR, 2020). Future predictions note that 141 countries are under

threat of ecological disasters and more than one billion people do not have the capacity to struggle with environmental changes and estimation for the year 2050 points out that there would have been 1.2 billion individuals forced to relocate. (IEP, 2020). According to the statistics of Internal Displacement Monitoring Center (IDMC), every year nearly 3 million people have been displacing as a result of extreme weather events and the International Federation of Red Cross and Red Crescent Societies expressed that during the six-month period from September 2020 to February 2021, approximately 10 million people were migrated because of climate change related weather events of flooding and droughts, mainly in Asia (Reuters, 2021).

The linkage and interaction between migration and environment issues have also started to be considered as an important field after the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992 (Hugo, 1996). According to the published Agenda 21 of the Earth Summit, the Rio Conference, the results of human activities should be considered in terms of increasing climate events and environmental changes which have the capability of destroying people's local livelihoods and lead to major migration flows (UNSD, Agenda 21, 1992).

The direct impact of environmental issues on migration have been still argued by different disciplines and perspectives. It is obvious that healthy analysis of the interaction and cause and effect relation between climate change and migration needs an interdisciplinary approach. The main arguments about the role of climate change on migration indicate two points; the vulnerability of people and regions and political situation of these regions in terms of combatting against climate change and their adaptation and reduction strategies. International organizations, institutions, conferences and conventions like UNFCCC, IPCC, COP, IOM are the main courses that have discussed the issue and emphasized the necessity of adaptation policies for climate change and international mechanisms to control its effects including migration.

Nomadic people, migratory agriculturists and pastoralists are the first examples of environmental-related migrants. However, those were mostly the voluntarily movements, but in the last 30 years a considerable connection between climate change and forced human mobility has started to be deeply recognized and analyzed. Contemporary and future challenges arising from anthropogenic climate change have started to be discussed since these challenges have led to national and international mass migrations. Different research perspectives and approaches have discussed this complex and urgent problem of climate change related migration in different levels. The most extensive perspectives are maximalist/alarmist and the minimalist/sceptical perspectives which have discussed the connection between climate change and migration (Göransson, 2013). These approaches have focused on the discussion that whether the migration is a result of unsuccessful mitigation and adaptation actions, or it should be subjected as an adaptation plan. The maximalist/alarmist approach explains the link between climate change and migration as linear that environmental changes cause largescale migration. Preferably, the minimalist/sceptical approach see non-linear relationship between climate change and migration and defines it as a more complex phenomenon. In essence, minimalists argue that the environment is nothing more than a contextual aspect in determining migration, whereas maximalists insist that the environment is the primary reason or cause that compels individuals to move (Suhrke, 1993). Despite the oppositeness, both approaches argue that the risks posed by climate change induced migration will be mitigated with adaptation policies and measures (Göransson, 2013).

According to many environmental authors, climate change affect the human mobility a minimum of four distinct ways; 1) greatness and seriousness of natural disasters; 2) increased weather temperatures and droughts which affect the production in agriculture and access to clean water resources; 3) sea level rises which make coastal regions unlivable and increase in the

number of sinking island states; 4) fights for natural resources which lead to conflicts and displacement, as a result (Laczko & Aghazarm, 2009).

Migration is accepted as one of the complex social impacts or results of climate change. The “environmental refugee”, “environmental migrant”, “climate refugee” concepts have been used within new migration forms of the world since climate change has started threatening the environmental security of communities. According to environmental security concept, climate change is an exterior push factor of mass migrations which is accepted as a social consequence and involuntary response of people (Mearns & Norton, 2010).

The causative relationship or connection between migration and climate change is one of the complex problems that the world is facing today. To understand the cause-and-effect relation between migration and climate change, how and in which level environmental events influence the mobility of people should be analyzed. Extreme climate events or sudden-onset and slow-onset disasters have had short-term and long-term effects on vulnerable locations and their residents. These effects can be caused from different type of environmental disasters, sudden or chronic, such as droughts, desertification, floods, tsunamis, hurricanes etc., mainly driven from increasing temperatures and sea level rise problem. Many people living in problematic regions have had the experience of sudden and extreme weather events and they have the capability of overcoming with the results of those events and hazards. In these kind of regions, short distance human movements are seen frequent and natural. The complexity and seriousness of climate change induced migration can be clearly observed in Small Island Developing States (SIDs). People living in SIDs have been facing with and suffering increasingly strong natural disasters and other climate issues, which threaten their well-being and as their territories are going under water, the movement of them is urgent and mandatory. EU has also been facing with environmental migration intensively, specifically with boat refugees in the Mediterranean Sea.

Thus, the scale or potential of relocation depends on the scale or type of weather event and environmental risks that individuals and communities are experiencing in their livelihoods.

Another variety fact of climate migration is the governmental policies of adaptation and socio-economic resistance of governance against these environmental threats. In the aftermath of an extreme natural disaster, people need humanitarian needs of food, water, shelter and medicine. If the government and local administrations have not developed sufficient infrastructure and system of disaster management, relief period and reconstruction of disaster area spin out of control. In those kind of events, international foreign emergency organizations come and help. The dimension of international help is related with foreign relations and politics of both aid recipient and aid giving nations. In most cases, the "relocation" system is used as a method of dealing with the consequences of the disaster or helping the victims.

The global issue of climate change has been triggering the activity of migration because it affects the environmental conditions and livelihoods of people and threatens their lives with serious and vital conflicts of waterlessness, hunger, homelessness, and unemployment. Refugees and stateless masses have been the reflection of worldwide climate change problem indicating how the problem requires urgent action. Many people living in fragile and conflict-affected areas have lack of resources to adapt or recover the damaging effects of environmental disasters.

Politically and economically wealthier governments of developing countries have constructed a steady infrastructure and system of delivering food, water, sheltering and providing social or and insurance against environmental disasters. But for vulnerable communities, for example in SIDs, migration is one of the survival strategies utilized not only by individuals but also by governments. (McLeman & Smit, 2006). In the course of researching how migration and climate change are related to one another, physical vulnerabilities of people are assumed to be one of the reasons affecting environmental migrations. Environmentally induced human movements, as both a cause and result of climate change, mainly occurs in low-income countries

because the scale and effect of environmental changes have increased substantially (Mearns & Norton, 2010).

Irregular rainfalls and precipitation regimes, flood and overflows cause physical and moralistic damages in the environment, living spaces of people, animals, and other creatures. Formations and damages to soil structure consequence as destruction biological diversity of agricultural lands which are the workplaces of people. The loss of clean water resources leads to spread of diseases. Those ecological threats, natural disasters have become the predominant reason for climate induced migrations and displacements as a humanitarian emergency issue.

More than two billion people do not have access to sufficient food for a healthy life today, and it is projected that this number will rise to 3.5 billion by the year 2050 (IEP, 2020). Most of those displacements originating from natural disasters are within the country or to neighboring places. However, United Nations High Commissioner for Refugees (UNCHR) estimates that at least one of five people will migrate overseas, and ecologically driven migration of populations could exceed the European migration crisis of 2015 (UNCHR, 2020). Therefore, it is important to consider which countries are directly impacted and which ones have the power and capacity to resist against extreme ecological scenarios.

1.2.2.2 Conceptualizing Climate Change Induced Migration

Climate change induced/related migration concepts have been defined by different approaches with indicating several dimensions of environmental conflicts, human security issues and migration concepts. Most of the climate related migration cases have been directly associated with the vulnerability of both people and countries in terms of their adaptability and ability of dealing with vital environmental changes and natural disasters. Since the potentially detrimental consequences of environmental changes and climatic events on society and the economy have become more apparent, researchers and scientists from several disciplines started

conceptualizing the “environmental refugee”, “climate migration”, “climigrant”, “eco-refugees”, “climate change related migration” “environmentally induced displacements or populations” ... topics.

The “ecological refugees” term was firstly expressed and formally used in reports by the founder of World Watch Institute, environmentalist Lester Brown and Erik Eckholm in 1970s (Eckholm & Brown, 1977). In the same decade, writers of neo-malthusianist approach used the term when defining the migrations resulted from 1973 oil crises in the Organization of the Petroleum Exporting Countries (OPEC); and later in 1984 in briefing paper of International Institute for Environment and Development in London (Morrissey, 2009).

The environmental refugee concept was completely emerged in the middle of 1980s with dimensions of humanity and security related international problems (Ramlogan, 1996). In 1985, environmentalist author Essam El-Hinnawi and in 1988, English environmentalist and academician diplomat Sir Crispin Tickell firstly mentioned environmental refugees in their writings (El-Hinnawi, 1985; Tickell, 1986). El-Hinnawi published a booklet under UNEP about environmental refugees who were defined by him as “special category of people who had to leave their habitat, temporarily or permanently, because of a potential environmental hazard or disruption in their life-supporting ecosystems” (El-Hinnawi, 1985). Under this umbrella description, he pointed out the forced movement of people leaving their homes, for short-term or long-term, because of disruptive events that threatens their standards of living. He categorizes environmental refugees in three. The first category is temporarily displaced people who move for short term after natural disasters like earthquakes or hurricanes and come back after their habitat is reconstructed. The second category is permanently displaced people who migrate for long term and settle to a new place because their original habitats are totally and permanently damaged or changed. The third category comprises the first two categories of environmental refugees who seek for a better, sustainable, and healthy life. This categorization of El-Hinnawi

fundamentally shows that migration or human movement is related with refugees' reaction to change and their capacity to deal with its effects. No matter from what/which category from, environmental refugees have been in the center of socio-economic and cultural problems for both themselves and the inhabitants of receiving countries.

In 1988, Jodi Jacobson, again from the World Watch Institute, developed more general definitions and said about the environmental refugees that “people fleeing from environmental decline” and “now make up the largest group of refugees in the world” (Jacobson, 1988). She proposed that this term is firstly used for Haitian boat people who flee the country by boat and go to USA beginning in 1972. In her categorization of environmental refugees, we see the same classification with El-Hinnawi's as first category; temporarily displaced people related with local disasters; second one is people migrating because of continuous collapse of environment which threatens their daily living and health and third category; people who need to replace because of desertification, changes in soil structure, or other unrecoverable changes in habitat (Terminski, 2011). Both El-Hinnawi's and Jacobson's citing gave rise to studies on environmental refugees and climate related migration concept. Those introductory conceptualization studies of the “environmental refugees” have led up to other deep analysis of migrations driven from environmental changes in the world.

During 1990s, in parallel with the valuable scientific works of other influential authors like Norman Myers, Astri Suhrke, Anthony Richmond, Joann McGregor, S. O'Lear, and Arthur Westing, international organizations, agencies, and institutions started to utilize the concept and the concerning effects of climate change on human migration patterns have recently come under scrutiny as a new threat of the warmed world (McGregor, 1996; Myers, 1995; Suhrke, 1993; Richmond, 1993; O'Lear, 1997; Westing, 1992). In Myers' definition of environmental refugees, the main reasons of displacement were mentioned as both human and nature related. These reasons were pointed out in the following definition:

“Environmental refugees are persons who can no longer gain a secure livelihood in their erstwhile homelands because of environmental factors of unusual scope, notably drought, desertification, deforestation, soil erosion, water shortages and climate change, also natural disasters such as cyclones, storm surges and floods. In face of these environmental threats, people feel they have no alternative but to seek sustenance elsewhere, whether within their own countries or beyond and whether on a semipermanent or permanent basis. “Environmental factors of unusual scope, notably drought, desertification, deforestation, soil erosion, water shortages and climate change, also natural disasters such as cyclones, storm surges, and floods” (Myers & Kent, 1995).

After several arguments and studies, maximalist/alarmist and minimalist/sceptical approaches, migration have been accepted as a common consequence of environmental changes and conflicts and started to be seen as a threat for the world’s security (Gemenne, 2011). All the perspectives have lay emphasis on the importance and emergency of climate change adaptation policies, strategies, and actions since these years (Göransson, 2013). After a year from Jacobson’s numerical predictions of environmental refugees in 1988, Executive Director of UNEP, Mustafa Tolba stated that “as many as 50 million people could become environmental refugees’ if the world did not act to support sustainable development (Tolba, 1989). In 1990, the Intergovernmental Panel on Climate Change (IPCC) noticed that the extreme impact of climate change could be on human movements and millions of people would migrate because of erosion, flooding in coastal zones and corruption in agriculture (IOM, 2008). In the middle of the same decade, many scientific reports remarked the emergency of environmental conflicts and made estimations about forced migrations in the future. Myers again, one of the best-known researchers of the concept, drew attention to millions of people displacement, a mostly accepted experimental figure of 200 million climate migrants by 2050, as a direct consequence of climate change (IOM, 2008).

In 1992, Population Institute published a work on the concept and authors did not generalize the definition; they listed climate change as one of the main environmental problems which force migrations (Terminski, 2011). During 90s, different Non-Governmental Organizations (NGOs) and research groups used different definitions for climate change related migration and the refugee concept gained a new perspective. Conceptualizing environmental refugees and climate change induced migrations have always had gaps and it has never been easy to do the right and globally accepted definition. Some authors criticized this phenomenon and found these signifying practices unusual. One of those authors, Diana Bates used the following definition: "...environmental refugees are people who migrate from their usual residence due to ambient changes in their non-human environment." (Terminski, 2011). At the end of 90s, "environmentally displaced" term was preferred to be used more often to define people who relocate because of environmental changes. In 1996, the International Organization for Migration (IOM) symposium titled "Environmentally-Induced Population Displacements and Environmental Impacts Resulting from Mass Migration" gave the following definition:

"Persons who are displaced within their own country of habitual residence or who have crossed an international border and for whom environmental degradation, deterioration, or destruction is a major cause of their displacement, although not necessarily the sole one" (IOM, 1996).

In the mid-90s, universal reports noticed that 25 million people had left their homeland because of life-threatening environmental forces covering pollution, land degradation, droughts and natural disasters and this number of refugees had been recorded as higher than the number of refugees from wars and political despotism (IOM, 2008). The same amount of 25 million environmental refugees reworded in 2001 by World Disasters Report published by International Federation of Red Cross and Red Crescent Societies and pointed out the natural hazards as a reason of relocations, not socio-political conflicts (WDR, 2001). There is "stronger evidence that

these changes are due to people," an IPCC spokeswoman stated in early 2001, predicting an increase in the frequency and severity of extreme weather occurrences. Bangladesh and other coastal areas are in danger unless the international community takes swift action to reduce emissions of carbon dioxide and other greenhouse gases. Same year, United States, as one of the responsible countries on global greenhouse gas emissions, rejected to sign Kyoto Protocol which led to big concerns in the world; especially in European Union and developing countries. In March 2001, after the predictions of 20 million Bangladeshi environment refugees because of sea level rise, Bangladesh's environment minister stated:

"I would request developed countries of the world to rethink their immigration policies for the survival of these ecological refugees... America and other big countries, they must accommodate them."

In May 2005, Myers, in his paper presented in 13th Economic Forum, Prague, forecasted for the year 2050 and stated:

"There could be as many as 200 million people overtaken by disruptions of monsoon systems and other rainfall regimes, by droughts of unprecedented severity and duration, and by sea-level rise and coastal flooding" (Thornton, 2018).

In October 2005, environment and human security researchers from United Nations University served the estimation of 50 million environmental refugees by 2010 and underlined the urgent recognition of a new categorization of "refugee" (Bojanowski, 2011).

In 2007, International Organization for Migration (IOM) defined environmental migrants as follows (Laczko & Aghazarm, 2009):

"Environmental migrants are persons or groups of persons who, for compelling reasons of sudden or progressive change in the environment that adversely affects their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad."

This definition simply expresses the imperative reaction of people who face with sudden-onset and slow-onset natural disasters and extreme weather events that lead environmentally induced displacement of them. Those movements can be domestic and across borders. In the same year, a very serious and terrifying estimation came from UK-based official relief agency Christian Aid's report titled "Human tide: The real migration crisis", stating that there would be up to one billion human displacements by 2050: 50 million people by natural disasters and 250 million by climate change related nature events of floods, droughts, famines, and hurricanes (Christian Aid, 2007).

In July 2008, in the General Assembly meeting of UN under the theme of "Climate change and the most vulnerable countries: The imperative to act", relevant experts and authorities emphasized the accelerating impacts of climate change on possible mass migrations and security problems. President of the UN General Assembly Srgjan Kerim declared the past 10 years as warmest since 1850 and pointed out that climate change, as a sustainable-development challenge, would affect between 50 million to 200 million environmental refugees (UN, 2008).

In parallel with conceptualization of climate related migrations, the recognition of refugees under international law has also been discussed by several perspectives with different outcomes. As an important part of these conceptual and legalization studies, the naming problem have been issued at first place whether people who had to move or replace due to environmental factors should be called "refugees" or "migrants". The point where this labelling problem directly affected is that; it makes difficult to explain the recognition of these displaced people within the framework of international law and their position in terms of human security concept. The weaknesses of status in legal texts have been underlined in terms of protection mechanisms and human rights of ecological refugees. Most of the analysis have indicated that the recognition and new legal status of environmental or ecological refugees or extending the definition of "refugee" covering environmental refugees is a global responsibility for humanity and international justice

(Gemenne, 2011). The responsibility or duty of international law is to firstly start with legislating principles of preventing climate change, so the environmental disasters and developing adaptation plans. Models like Convention Against Torture, American Temporary Protected Status have been referred to cover the protection of environmentally displaced people. In 2010, a new and unique protection regime was promoted to be included under UN Framework Convention on Climate Change (UNFCCC). The authors of the advocating paper outlined the need of global governance to recognize and protect millions of people, densely in Africa and Asia, who had to leave their homes because of environmental changes as an impact of climate change. They proposed for the establishment of a new Protocol on Recognition, Protection, and Resettlement of Climate Refugees to the United Nations Framework Convention on Climate Change, not the extension of definition of refugees under 1951 Geneva Convention Relating to the Status of Refugees (Biermann and Boas, 2010).

Most significant side of this phenomenon is that climate refugees have not still been accepted as legally refugee and they do not have any protections like other refugees under international law and it has still been under discussion in United Nations with the initiatives and insists of UN Human Rights Committee (Garcia, 2020). The complexity and crux of the problem is highlighted with the following circumstances (Sciaccaluga, 2020).

- 1) climate change is seen “only” as a threat multiplier of climate related migrations
- 2) the legal difference of voluntary and forced climate migrants is confusing
- 3) most of the climate refugees migrate within their countries, not abroad

Therefore, the lack of legal definitions and legal recognition of the concept make difficult to analyze the complexity of socio-economic threats and human security issues posed by climate refugees against both themselves and the citizens of the countries they migrated to.

1.2.2.3 Remarkable Climate Change Related Migrations in the World History

Climate change and damaging natural disasters have been severe threats which force people to move within their countries or across international borders. The interaction between climate conditions, extreme hunger and poverty and other vulnerabilities of countries lead to complex and emergent social, economic, and humanitarian problems. Climate change related and environmental migrations have mainly driven from natural disasters which can also be regarded as epitomes of those migrations. In case of an extreme weather event, people living in countryside are luckier than the coastline residents because they have more powerful and steady infrastructure of health system, hospitals, emergency services and resources. Estimations shows that flooding will displace millions of coastal people by 2100 (Lombrana & Dodge, 2021).

The initial cases of climate change related migrations were seen in Sahel region of Africa. In between 1968 and 1973, a stream of devastating droughts damaged the croplands and dried-up vegetation areas of countries near Niger and Senegal rivers; Niger, Mali, Upper Volta, Senegal and Mauritania and 250.000 people were died as a direct consequence of drought; and thousands of people migrate to neighboring countries. As the droughts persisted in the years that followed, millions more Africans were compelled to abandon their homes and relocate, either inside their own countries or to neighboring ones. Considering that the socio-economic conditions and insufficient infrastructure of the neighboring countries that receive immigration were not good enough, even for their own citizens, environmental refugees caused conflicts, even violence for both themselves and indigenous people of hosting countries (El-Hinnawi, 1985).

During 1950s, 60s, countries of Bangladesh, India, Nepal, Bolivia, Ecuador, and many others faced with natural disaster of floods. As a result of lack of flood-control mechanisms and barrier systems, the damaging rate of floods are seriously destructive for those poor countries. Migration and relocation of people have been a routine system of that coastal and poor countries in dealing with destructive impacts of extreme consequences of events like flooding.

UN addresses the food insecurity as a major driver of conflictions and displacement and according to the statistics published in 2020; by the end of 2019, it was claimed that 135 million people in 55 countries and regions were suffering from food insecurity. Additionally, 75 million children were reported to be suffering from growth problems, and 17 million children were reported to be suffering from wasting (UNHCR, 2020). The impacts of climate change vary from region to region, so do the migrations. For example, earthquakes have been one of the foremost factors of migrations which have a devastating effect on human life and their livelihoods. In 1988, nearly 500 thousand people had to migrate to Russian and Northern regions because of an earthquake with magnitude of 7,2 in Armenia, Erivan. Migrations in California also are the most common examples of human movements driven from earthquakes. The increasing temperatures and lack of water are another predominant factor. In the period of “Five Relocations” of Chinese history, hard droughts and loss of natural resources and water shortages, Zhou dynasties of China forced to move and relocate from uplands to lowlands (Huang, et al., 2003).

Because of rising sea levels related soil erosion and floods, Native Americans living in Alaskan villages and people living in Louisiana islands, have preferred to resettle in somewhere in US. In the last decades, most of the Solomon Islands of Pacific Ocean are entirely underwater too. In Carteret Island, an atoll of the Autonomous Region of Bougainville, Papua New Guinea, migration is a livelihood strategy of indigenous people and islanders are become the world’s first entire community to be displaced by climate change (Connell, 2016).

Climate change related migrations have fundamentally been observed in Middle East, Asia and Africa since they have the serious vulnerability and sensitivity against environmental threats because of the biggest populations with poverty and deprivation of prosperity. With the sea level rise some regions, near sea areas and islands are expected to be below sea level soon. This threat is crystally clear in many islands of Pacific and Indian Oceans. According to IPCC, the most vulnerable islands are Marshall Islands, Kiribati, Tuvalu, Tonga, the Federated States of

Micronesia, and the Cook Islands (in the Pacific Ocean); Antigua and Nevis (in the Caribbean Sea); and the Maldives (in the Indian Ocean) (IPCC, 2014). Australia's Torres Strait Islands which are not more than one meter above sea level are facing with environmental threats including lack of clean water, soil erosion and devastation of properties. IPCC reported the prediction of sea level rise 30-110cm in 2100 due to the level of carbon emissions (Banister, 2020) and other scientific findings proposed that some of the islands below sea level will be uninhabitable in coming decades if the global temperatures keep rising (Park, McDonald and Ky, 2021). The case of these islands is now being discussed on the table of UN after the Torres Strait 8's (a group of 8 people) application to Human Rights Committee of UN claiming about human rights violation of indigenous people of Torres Strait Islands and lack of government protection against the impacts of climate change.

Niger, located in the west Africa is one of the places that we can observe the connection between environmental disasters and migration. There had been frequent and serious droughts in 1973 and 1984 in Niger, and Nigerian people are still suffering from the negative impacts of these droughts, such as soil quality, sand intrusion and siltation of local waterways and water pollution (Laczko & Aghazarm, 2009). The largest lake in Chad Basin, Lake Chad has been providing water more than 50 million people living in Chad, Cameroon, Niger, and Nigeria located around the river (Hassan, 2012). According to the Global Resource Information Database of the UNEP, Lake Chad shrank nearly 95% in between 1963 and 1998. This shrinking and environmental structural change of the lake had led to indirect migration of people living around and gain their livelihoods from the lake.

April 1991 Tropical Cyclone Gorky hit Bangladesh and Dhaka, the capital city of Bangladesh, residents of 70% of its high population, were forced to migrate because of climate change related weather events like cyclones and erosions (Lombrana & Dodge, 2021). IPCC, in 2011, pointed out that Bangladesh, experiencing the greatest sea level rise of the world, is under

threat of being obliterated if the world does not fight against global warming and reduce carbon dioxide and other greenhouse gases (IPCC, 2011). In the period of September 2020 and February 2021, 2.5 million people displaced because of climate change related events, especially flooding in coastal areas, in Bangladesh (Perrotto, 2021).

In 2004, the Asian Tsunami was one of the biggest and damaging disaster which took lives of 270.000 people in 11 different countries in Asia and Africa regions. Mostly and hardly effected provinces were Indonesia's Banda Aceh in northern Sumatra and Sri Lanka (Laczko & Collett, 2005). In this case, the out borders migration to neighboring countries were experienced less compared to displaced people within their own countries (Laczko & Aghazarm, 2009). The year after in August 2005, Hurricane Katrina struck the United States and caused tremendous damage and serious amount of deaths. It was recorded as the costliest extreme weather event that hit the country, after the Hurricane Andrew in 1992. After the Katrina Hurricane, approximately 1.5 million people from Alabama, Mississippi and Louisiana left their homes and migrated. Within a decade, the observations showed that thousands of people who were forced to migrate never turned back to their homelands, and they were relocated to different places. After the Dust Bowl or Dirty Thirties in between 1930 and 1936, Hurricane Katrina was recorded as the largest U.S movement of people forced to migrate (Baussan, 2015).

In both years of 2000 and 2007, Mozambique was faced with damaging tropical cyclones. Some people were stayed and reconstructed their homes against extreme storms, but on the contrary, water flood damages in the area resulted with displacement of thousands of people who live near riverside. Because of the flooding, people did not only lose their homes, but they also lose their fertile and vital areas that they use for harvesting and agriculture (Laczko & Aghazarm, 2009).

In 2008, 20 million people have been displaced because of extreme weather events when 4.6 million were internally relocated because of conflict and violence (Laczko & Aghazarm,

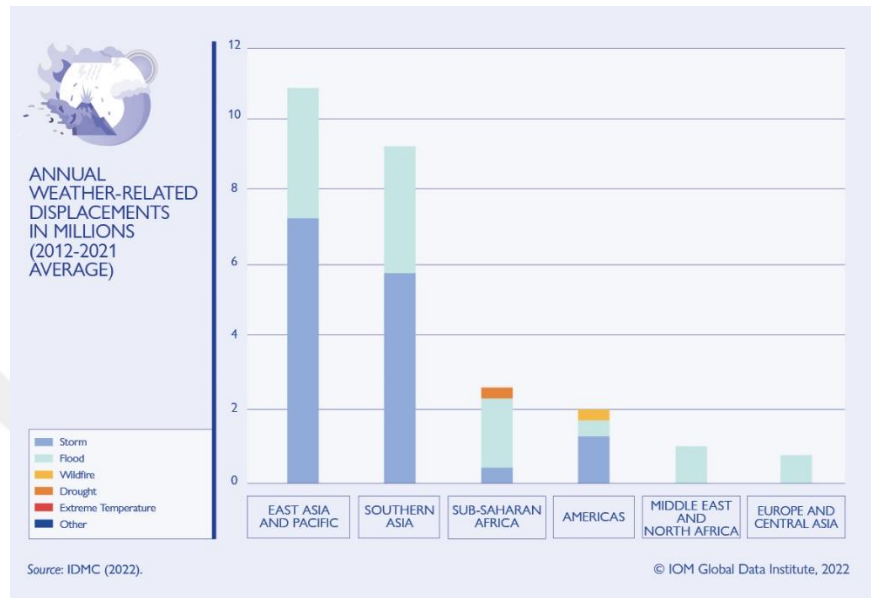
2009). The deliverables of the collectively prepared report by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), the Internal Displacement Monitoring Centre (IDMC) and the Norwegian Refugee Council (NRC) indicated that the main reason of displacement of 36 million people was natural disasters in the same year.

Climate change related disasters had continued to lead human displacements in many parts of the world during 2020 and 2022 mainly in China, the Philippines, Bangladesh, India, the United States of America, and Haiti (IOM, 2022). IOM reports highlight the historical human-induced and natural events of the last 50 years, such as Hungary in 1956, Czechoslovakia in 1968, Chile in 1973, the Vietnamese boat people in 1975, Kuwait in 1990, and the Asian tsunami and Pakistan earthquake in 2004 and 2005. These tenets that humane and orderly migration help migrants and other people in society to be accepted globally. According to the same report, in 2020, the number of displaced people related to natural disasters was nearly 7 million over 104 countries and regions.

At the end of 2020, this amount is multiplied as 40.5 million additionally across 144 countries and regions because of disasters. Central and West Africa have been suffering from extended droughts and inconsistent rain falls which effect the land use and harvesting activities of farmers and herdsmen. These extreme and frequent droughts directly impact the livelihoods and welfare, food security, access to water, and force people to displace. Democratic Republic of the Congo, Cameroon, Nigeria's Middle Belt region, borders of Burkina Faso and Mali, Kenya, Ethiopia, Somalia, South Sudan, United Republic of Tanzania had experienced disaster displacements during 2020s, as they faced with serious droughts. By the end of the year 2020, Asia, led by China, reported about 5 million people displaced due to natural disasters, while the Philippines recorded over 4 million. Next in line was Vietnam with about 1 million people, followed by India with roughly 4 million and Bangladesh with more than 4 million. Nearly 2

million people were forced to leave their homes in the Syrian Arab Republic, making it one of the countries in Asia with the highest number of displaced people (IOM, 2022).

Figure 3:



Note: Annual weather-related internal displacements in millions (2012-2021 average)

As seen in the Figure 3, in the last 10 years, the estimations show that nearly 22 million people annually internally displaced because of climate related disasters worldwide (IDMC, 2022) Climate change-related migration is a problem in both developed and developing nations. Migrant receiving places, so called climate havens, cities like Buffalo, New York have been expecting new residents of nearly 13 million displaced people by the end of the century (Poon, 2020). This demonstrates the need for both refugees and welcoming communities to examine climate change-related migration through the lens of the securitization method.

Chapter 2 - International Actors of Climate Change

2.1 Legal Instruments and Agreements under United Nations

2.1.1 The United Nations Conference on the Human Environment (the Stockholm Conference)

The United Nations Conference on the Human Environment (also known as the Stockholm Conference) is the first world conference which was held in Stockholm, Sweden on June 5-16, 1972. This international conference was convened under United Nations as a major global event and a milestone on international environmental issues focusing on the development of global environmental policies. As an outcome of this conference, participants were integrated for the adaptation of the Stockholm Declaration and Action Plan for the Human Environment. The Stockholm Declaration pronounced 26 common principles for inspiring and modelling Governments of industrialized developing countries to put a collective effort in managing environmental issues emphasizing the connection between economic growth, air and water pollution and wellness of communities around the world. The Action Plan was constrained of three main categories; a) Global Environmental Assessment Programme; b) Environmental management activities; (c) International measures to support assessment and management activities carried out at the national and international levels (UN Web site).

In an effort to create a fundamentally shared perspective on how to approach the problem of maintaining and improving the human environment, Stockholm Conference represented a first assessment of the global human effect on the environment. As a result, rather than advocating specific normative viewpoints, the Stockholm Declaration primarily promotes broad environmental policy goals and objectives. However, after Stockholm Conference, international environmental law-making as a whole and awareness of environmental challenges worldwide

both drastically increased. At the same time, environmental movement throughout the globe began to change its focus from transnational and global commons concerns to media-specific and cross-sector regulation and the incorporation of economic and development elements into environmental decision-making (Handl, 1972).

One of the major outcomes of this Conference was the establishment of the United Nations Environment Programme (UNEP).

2.1.1.1 UN Environment Programme (UNEP)

“Since its inception in 1972, the United Nations Environment Programme (UNEP) has been the global authority that sets the environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the UN system and serves as an authoritative advocate for the global environment.” (UNEP Web site, 2022).

The goal of UN Environment Programme is to inspire, enlighten, and enable nations and peoples to improve their quality of life without compromising that of future generations in order to give leadership and promote collaboration in environmental protection. By focusing on the underlying causes of the three global crises of climate change, nature and biodiversity loss, and pollution and waste, UNEP aims to create transformational change for people and wildlife. Climate Action, Chemicals and Pollutions Action, Nature Action, Science Policy, Environmental Governance, Finance and Economic Transformations, and Digital Transformations are the seven interconnected sub-programs used by UNEP to act.

UNEP promotes for effective environmental action through its campaigns, particularly those commemorating World Environment Day. With its headquarters in Nairobi, Kenya, UNEP employs a network of collaborating centers of excellence as well as regional, liaison, and out-posted offices.

To solve environmental issues, UNEP works closely with its 193 Member States and representatives from civil society, industry, and other key organizations and stakeholders through the United Nations Environment Assembly, the world's highest-level decision-making body on environmental issues. The group is home to the secretariats of numerous important multilateral environmental accords and environmental research organizations.

The Medium-Term Strategy (MTS) of UNEP is implemented under the direction of the Executive Director and Senior Management Team. The UN Conference on Sustainable Development (Rio+20) and its outcome document, "The Future We Want," as well as the 2030 Agenda for Sustainable Development, are both referenced in the four-year MTS.

UNEP helps Member States make sure that environmental sustainability is considered when planning investments and development projects, and it gives developing nations the tools and technologies they need to safeguard and repair the environment.

UNEP depends on voluntary financial contributions to the program budget to carry out its activities. The funding partners who contribute 95% of this funding do so willingly.

2.1.1.2 Intergovernmental Panel on Climate Change (IPCC)

The Intergovernmental Panel on Climate Change (IPCC) was established by World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) in 1988 with the goal of preparing scientific data for governments in order to help them develop climate policies. IPCC was founded to “provide policymakers with regular scientific assessments on the current state of knowledge about climate change.” (IPCC Official Website, 2022). IPCC’s assessment reports and scientific papers have been prepared by thousands of worldwide authors including voluntary researchers and contributors. These assessments and publications of the organization have been seen as one of the most reliable and objective resources which explains and analyses the climate change causes, its’ consequences, risks for the future and the necessity

of adaptation and mitigation policies. As of today, the organization has 195 member countries who are also the members of the UN and WMO. Representatives of IPCC member governments meet at least once a year in Plenary Sessions in which hundreds of international experts attend from related institutions or non-profit organizations of member countries. The IPCC has three main Working Groups and a Task Force. First group is on The Physical Science Basis of Climate Change; second group works for the Climate Change Impacts, Adaptation and Vulnerability and the third group deals with the Mitigation of Climate Change. It also has a Task Force on National Greenhouse Gas Inventories. Besides all these working groups and a task force operating under the IPCC Plenary, the IPCC Bureau and Executive Committee, there are also the Task Forces which are developed by the Panel for a specific topic and for a specific period of time (IPCC Official Website 2, 2022).

IPCC's climate change studies and reports have played a critical role on related research literature since the first IPCC First Impacts Assessment Report was established in 1990. With this report and the next ones, IPCC proved itself as an influential organization that lights the way for researchers, academicians and policy makers through understanding and analysing the impacts of climate change and risks for the future World with the Nobel Peace Prized authors. The IPCC was awarded the Nobel Peace Prize at the end of 2007, after the Fourth Assessment Report (AR4), for its works on climate change together with the former United States Vice President (in between 20th January 1993-20th January 2001) Albert Arnold Gore Jr. The Nobel Prize Committee stated that the IPCC and Mr. Gore were awarded with this prize "for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change." and added "Indications of changes in the earth's future climate must be treated with the utmost seriousness, and with the precautionary principle uppermost in our minds. Extensive climate changes may alter and threaten the living conditions of much of mankind. They may induce large-scale

migration and lead to greater competition for the earth's resources. Such changes will place particularly heavy burdens on the world's most vulnerable countries. There may be increased danger of violent conflicts and wars, within and between states." (The Nobel Peace Prize 2007 Press Release). As we can see from this release of Nobel Prize committee, IPCC assessment reports have been pointed out the cause-and-effect relation between human activities and climate change.

Following the establishment of IPCC in 1988, the period of global climate change negotiations was started. As a first action, Second World Climate Conference was organised by the World Meteorological Organization (WMO), the United Nations Environment Programme (UNEP) and other international institutions including United Nations Educational, Scientific and Cultural Organization (UNESCO), Food and Agriculture Organization of the United Nations (FAO), The International Council for Science (ICSU) on 29 October-7 November 1990 in Geneva. More than 750 scientists and technological professionals from 134 countries attended to The Conference and released a resounding statement emphasizing the danger posed by climate change. First Assessment Report of IPCC was published after this conference. This report emphasized how climate change is a crucial and critical problem with global repercussions and the need for international cooperation. The Report played a definite role in the establishment of United Nations Framework Convention on Climate Change (UNFCCC), the main international agreement to combat global warming and deal with its effects.

2.1.1.3 The United Nations Conference on Environment and Development (UNCED) / Rio de Janeiro Earth Summit, the Rio Summit, the Rio Conference, the Earth Summit – 1992

After 20 years from the first Human Environment Conference in Sweden in 1972 and the after the Cold War, the United Nations Conference on Environment and Development (UNCED), also known as the 'Earth Summit', was held in Rio de Janeiro, Brazil, from 3-14 June

1992 (UN Web site, 2022). The Earth Summit was the largest meeting that gathers leaders, scientists, non-governmental organizations (NGOs) and policy makers from 179 nations.

The Rio de Janeiro conference emphasized how various social, economic, and environmental elements are interconnected and progress together. The main goal of the "Earth Summit" in Rio was to create a comprehensive agenda and new framework for international action on environmental and development challenges that would help direct international cooperation and development strategy in the twenty-first century.

Regarding the agreements and other documents signed in that conference, it has been mentioned as an enormous act concentrating on the economic development and sustainability and the impact of social and economic activities through protecting the environment. Rio Declaration on Environment and Development, Agenda 21 and Forest Principles were the main documents resulted in the Summit. The most important accomplishment of the Summit was the Climate Change Conventions which paved the way for the Kyoto Protocol (1997) and the Paris Agreement (2015). A further agreement was to "not to carry out any activities on the lands of indigenous peoples that would cause environmental degradation or that would be culturally inappropriate" (Kumar, Riamei & Gupta, 2017).

The main legal and binding documents signed in that Summit were the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change (UNFCCC).

2.1.1.3.1 United Nations Framework Convention on Climate Change (UNFCCC) – 1994

Despite all the criticism, after the Cold War Period, the Earth Summit has been regarded as one of the progressive actions in which new approaches to environmental issues was emphasized. Most importantly, the Summit focused on another kind of security concept, environmental security and climate security and pointed out the gap between developed countries

and poorer ones, through equality (Speth, 1992). After the Summit, nation states have started to create collective movements and initiatives on building more sustainable and equal environment in the international system. With the signing in 1992 and its entering force in 21 March 1994, with the United Nations Framework Convention on Climate Change (UNFCCC) 198 countries - so called Parties to the Convention- agreed on the idea that governments should do the necessary to avoid dangerous human-induced intervention that would jeopardize the climate system.

The first decision taken under this Convention and related legal instruments was about industrialized countries on reducing their higher greenhouse gas emissions to the atmosphere. It was stated that; in an adequate period, a level must be reached to allow ecosystems adaption to climate change and to make sure that food supply is not jeopardized and to make economic development able to proceed in a sustainable way. In this context, UN's conference series of Conference of the Parties (COP) has started in 1995 and has been continued regularly every year.

2.1.1.3.1.1 United Nations Climate Conferences / Conference of Parties (COP) and Agreements coming with COP

The first conference of Conference of Parties, COP 1 was held in Berlin Germany in 1995, and it has been continued regularly every year, as shown in the **Table 1: List of COP**.

Conference of Parties (COP)	Date	Place	Milestone
COP 1	1995	Berlin, Germany	The first UNFCCC Conference of the Parties
COP 2	1996	Geneva, Switzerland	Second Assessment of Intergovernmental Panel on Climate Change (IPCC) was accepted
COP 3	1997	Kyoto, Japan	Kyoto Protocol was adapted
COP 4	1998	Buenos Aires, Argentina	A two-year "Plan of Action" for the implementation of Kyoto Protocol was prepared
COP 5	1999	Bonn, Germany	Technical meeting, no milestones

COP 6	2000	The Hague, Netherlands	The negotiations were collapsed because of UK and EU countries
COP 6	2001	Bonn, Germany	Despite the USA's rejection to the Kyoto Protocol, it was improved in second COP6
COP 7	2001	Marrakech, Morocco	Buenos Aires Plan of Action was prepared, Kyoto Protocol was improved
COP 8	2002	New Delhi, India	Delhi Ministerial Declaration was adopted, Russia declared hesitation against Kyoto Protocol
COP 9	2003	Milan, Italy	Adaptation Fund was established
COP 10	2004	Buenos Aires, Argentina	Special emphasis on climate change mitigation and adaptation with the adaptation of the Buenos Aires Plan of Action
COP 11	2005	Montreal, Canada	Meeting of the Parties to the Kyoto Protocol (CMP 1), the Montreal Action Plan was agreed
COP 12	2006	Nairobi, Kenya	5-year Climate Change Adaptation Plan was adopted
COP 13	2007	Bali, Indonesia	Bali Action Plan was adopted, the Ad Hoc Working Group on Long-term Cooperative Action under the Convention was established
COP 14	2008	Poznan, Poland	Vulnerable communities of climate change were mentioned
COP 15	2009	Copenhagen, Denmark	A 'political accord' was discussed among 25 parties including US and China
COP 16	2010	Cancun, Mexico	Agreement of Green Climate Fund was discussed, IPCC Fourth Assessment Report was emphasized regarding climate change as a threat, human mobility was recognized
COP 17	2011	Durban, South Africa	Negotiations on binding legal agreement and creation of a Green Climate Fund
COP 18	2012	Doha, Qatar	The Doha Climate Gateway was published
COP 19	2013	Warsaw Poland	Adoption of the Warsaw Framework for REDD-plus
COP 20	2014	Lima, Peru	Technical meeting, no milestones
COP 21	2015	Paris, France	Adoption of the Paris Agreement, The Task Force on Displacement (TFD) was established
COP 22	2016	Marrakech, Morocco	Negotiations on water and greenhouse emissions
COP 23	2017	Bonn, Germany	Plans about combating climate change
COP 24	2018	Katowice, Poland	Technical meeting, no milestones
SB50	2019	Bonn, Germany	Technical meeting, no milestones

COP 25	2019	Madrid, Spain	Technical meeting, no milestones
COP 26	2021	Glasgow, United Kingdom	Protection and pathways for displaced people by climate change were addressed
COP 27	2022	Sharm el Sheikh, Egypt	Addressed the human mobility driven by climate change
COP 28	2023	Dubai, UAE	Will be held on November 4-6th, 2023

COP 3 which was held in 1997 in Kyoto, can be defined as a milestone on avoiding the impacts of climate change and building adaptation processes. We have started to observe that the considerations related to climate change and its impacts are not only related with infinite environmental system itself, but it has also about the problems combined of economic, social, and cultural life-sustaining manners. According to the Convention's main document published by UNFCCC in 1992, it was emphasized that greenhouse gas concentrations venting through the atmosphere as a result of human related activities are "dangerous" (UNFCCC, 1992). As a result of UNFCCC's efforts, perceptions about the definition of long-term effects of global warming, climate change and its life-sustaining impacts have started to be expanded.

As a first act and as an important progression on the realization of the goals, the Kyoto Protocol was extended in 1992 and adopted for signature in COP 3 in Kyoto in 1997. The function of this international treaty was defined as "operationalizes the United Nations Framework Convention on Climate Change by committing industrialized countries and economies in transition to limit and reduce greenhouse gases (GHG) (such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and sulfur hexafluoride (SF₆)) emissions in accordance with agreed individual targets." (UNFCCC Web site, 2022). However, the Kyoto Protocol was entered into force in 2005, 90 days after its preparation, the ratification process was interrupted due to the rejections and not enough number of signatures were collected. In 2001, United States of America firstly withdrawn for the agreement. In 13 March 2001, in his letter of reply to the Republican senators' letter asking about USA's views about climate change, George W. Bush stated that "I oppose the

Kyoto Protocol because it exempts 80 percent of the world, including major population centers such as China and India, from compliance, and would cause serious harm to the U.S. economy. The Senate's vote, 95-0, shows that there is a clear consensus that the Kyoto Protocol is an unfair and ineffective means of addressing global climate change concerns.” (The White House Archives Online, 2022). Lately in 2004, Russia and Canada joined to Annex 1 (Annex I Parties are the industrialized countries that were members of the OECD (Organisation for Economic Co-operation and Development) in 1992, plus countries with economies in transition (the EIT Parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States) countries to protocol (UNFCCC Web site, 2022). The Protocol's first commitment period started in 2008 and ended in 2012. In this period, The EU and its Member States have met their commitments in reduction of emissions. International Organization for Migration (IOM) of UN System began to become involved in the UNFCCC processes with COP 14 in 2008. With this COP meeting, vulnerable communities of climate change, migration and displacement were mentioned as the first time. IOM continued to contribute the occasions and events of UNFCCC in order to develop technical recommendations to the attendees from different international stakeholders, scientists, NGOs, academicians and policy makers.

In COP 15 in 2009, The Copenhagen Accord was delivered, as a continuation of Kyoto Protocol. The Accord emphasized the climate change as one of the greatest problems and its impact on Least Developed Countries as well as Most Vulnerable Countries, the small island developing states and countries in Africa under the threat of natural disasters like drought, desertification and floods and the need for international adaptation policies.

Climate change induced human movements or mobilities were secondly acknowledged in international climate policy events was at COP 16, in 2010, in Mexico. The Cancun Adaptation Framework was adopted in that summit which emphasized the range of movements as a result of climate risks in the following paragraph 14;

“Invites all Parties to enhance action on adaptation under the Cancun Adaptation Framework... by undertaking, inter alia, the following: (f) Measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at national, regional and international levels; ” (Warner, 2017).

This overarching article of Cancun Adaptation Framework stresses the concepts of human mobility, displacement, migration, and planned relocation at regional, national or international levels.

COP 17 in 2011 was the conference of parties focusing on a new, completely extended and legally binding climate agreement by 2015. The second commitment period of the Kyoto Protocol begun in 2012 and it was extended to 2020, with a kind of additional protocol of Doha Amendment at COP 18, held in Doha, Qatar, in 2012. That Amendment enhanced developed country pledges to quantifiable emission limitations or reductions and established a target of an 18% decrease in GHG emissions from 1990 levels. As an international binding protocol, with the Doha Amendment, Kyoto had always put emphasis on common but differentiated responsibilities for countries in order to struggle with global warming and its damaging environmental impacts. Despite the insufficient vibe of the Kyoto Protocol, it has been regarded as the first step of stabilization of greenhouse gas emissions with its targets and Mechanisms (International Emissions Trading, Clean Development Mechanisms, Joint Implementation International Emission Trading). On the way of struggling against climate change problems, S. Patricia Espinosa, Executive Secretary of UN Climate Change called for an emergency and expressed the need for a more comprehensive and effective act. And in 2015, COP 21 was held as the stage of Paris Agreement which was prepared as a new instrument instead of Kyoto Protocol. The Paris Agreement is a “legally binding international treaty on climate change” (UNFCCC, 2022). On the 12th of December 2015, at COP 21 in Paris, 196 Parties unanimously

agreed to accept it, and it went into force on November 4th, 2016. The long-term goal of the Agreement is to reduce greenhouse gas emissions and increase the global warming rate below 2, ideally 1.5 degrees Celsius, for a normal and climate neutral world by mid-century. In 2020, binding countries declared their plans via Nationally Determined Contributions (NDCs) and long-term and mandate low greenhouse gas emission development strategies which are the actions to meet the targets of the Agreement. As a move forward, countries established an Enhanced Transparency Framework which will start in 2024 and comprehend transparent reports of what they have done.

As we look at the climate related migrations in that period, it is obvious that the damaging results of climate change have devastating impact on vulnerable communities and lead people to move. It was very well understood that the global communities and authorities should develop policies for helping vulnerable countries in their struggle with adapting climate disasters. In COP 21, the Task Force on Displacement (TFD) was established, and in 2016, IOM arranged the UNFCCC Executive Committee of the Warsaw International Mechanism for Loss and Damage by 2018. This meeting concentrated on the loss and damages as a result of climate change induced human displacements.

These strategically functioning mechanisms of international climate policy have been firstly and squarely focused on human mobility, including migration, displacement, and planned relocation, and drawn strategies and recommendations in minimizing the impacts of climate change on displacement. So, the Paris Agreement can be defined as the beginning of discussions related to climate change induced migration at global level.

COP 23 which was held in Bonn in 2017, addressed the climate migration again and the Executive Committee of the Warsaw International Mechanism released the five-year rolling workplan on human mobility and migration. This proved that climate change migration has

become one of the most substantial and critical issues that cannot be excluded from climate related policy negotiations.

As discussed in the first Chapter, human related climate change has been happening, continuing, and growing so fast, in a so damaging way. In contravention of all these global attempts, scientific studies, predictions, warnings; the extend and complexity of climate change problems have not been understood. Human has been in the center of this complex problem; when the humanity is directly or indirectly threatened by any life-sustaining situation, security concerns rise.

A remarkable and warning developments about climate change induced migration were furthered in COP 26 in Glasgow in 2021. As the loss and damage from climate related displacement were the focus point of COP 26, the “African Climate Mobility Initiative” was announced by the Bosch Foundation in collaboration with the African Union Commission, the United Nations, the World Bank, and others. As it can be understood from the name of the initiative, the goal was to create political impetus to find solutions to climate-forced migration on the African region (Ober, 2021). The leaders of island nations gave important messages pointing out rising sea levels as a strong damaging factor which leads people to change their places.

During COP 26, representatives of IOM, WHO and Lancet Migration called world leaders for a clear and certain action to mitigate the impacts of climate change on migration (Cornacchione, 2021).

Right before the 27th UN Climate Change Conference of the Parties, IOM Director General António Vitorino stated that;

“Climate change affects the livelihoods, health, and safety of people; and it shapes people's decisions to migrate. Over 200 million people could become internal climate migrants or

displaced by 2050. We must act jointly across all levels, while involving everyone. At COP 27 we must deliver for humanity, for its dignity and for future generations.” (IOM, 2021).

Last year in COP 27 in Egypt, UN representatives professionalized on refugees claimed that displaced people should be recognized under the summit’s final agreement, and given a say in future negotiations (Siegfried, 2022). It was an alarming meeting focusing on climate change induced migrations and future crisis waiting for displaced people. Displaced people from different African countries gave speeches and told their stories as a first-hand life experience. It is obviously observed that displaced people should have seats again in COP 28 this year (UNHCR, 2022).

Paris Agreement, as one of the biggest outcomes of UNFCCC’s Conference of Parties and other initiatives aims to strengthen global socioeconomic resilience against the threat of climate change. At the same time, for the first time in history, people who had to migrate due to climate were officially recognized in an international environmental convention. In addition, the agreement brought the concerns about the increase in the number of immigrants with climate change to the political decision makers.

The underlined approach to the relation between climate change and migration argues that the defensive walls built against the climate change crisis and triggered human migration waves are also preparing the way for a “securitized” world that wants to refer the crisis to technocrats. According to some analysis, although there are plenty of speculations and sensational figures that do not have empirical sources, it is possible to talk about different approaches in the discussions in the context of climate change induced migration. More realistic analysis of climate change agree that migration is one of the most fundamental ways of adapting to climate change. As a result, human societies have been both nomadic throughout history and have adapted to changing climatic conditions, social, cultural, political, and economic transformations.” (Vatandaş, 2019).

Chapter 3 – Securitization of Climate Change Induced Migration

3.1 Human Security and Climate Migration

Before defining the human security and its relationship with climate change, we need to define and understand the concept of human security first. The definition of human security concept varies from discipline to discipline. In this thesis, human security concept will be analysed through climate change as it is a global phenomenon which influence humans and threaten their stability of livelihoods, culture, health and economy as a result of extreme natural changes and disasters and lead indigenous people to replace and migrate to other places.

In terms of international politics and international relations, human security has mainly and traditionally been concentrated on state itself, national sovereignty, and territory; and connected with protection of state borders, territorial integrity, political and economic stability of the state, national defence, and military power (Jolly & Ray, 2006). According to this traditional approach, security means securing the order and stability of the state; not the safeness, peace, and wellness or wellbeing of people.

In 1940s, the concept of security had started to be reconsidered by political leaders and strategists. The first centralization of human being in terms of security was established in the declaration of United Nation's Universal Declaration of Human Rights (UDHR) in 1948. Although the definition of "refugee" was legally broadened in the 1951 Refugee Convention (also known as the Convention Relating to the Status of Refugees or the Geneva Convention of 28 July 1951), there was still a big gap in the legal recognition and protection of refugees who are forced to move because of environmental changes (Hartley, 2012). The first proposition of "environmental refugee" was by Lester Brown in 1976 and in these years the effects of extreme natural events had started to be observed and experts from different disciplines started to develop policies and re-define the concept of human security. During the Cold War, martial and statist

approach of human security concept was continued. But in the middle of 1970s, despite the Cold War's consolidation of state-centric approach, the UN's reports and declarations had focused on security concept in terms of underdevelopment and emphasized basic needs of human being, poverty, hunger, inequality, and environmental threats. During 1970s and 1980s, human wellbeing had been directly connected to environmentally equal conditions and the notion of vulnerability was expressed by environmental and social scientists (Timmerman, 1981).

During 1990s, with the attempts of UN again, the scope of security had been broadened and it had been re-conceptualized in terms of sustainable development, human being and maintaining human rights. The Earth Summit held in Rio de Janeiro in 1992 (also known as the United Nations Conference on Environment and Development (UNCED)) was a milestone of discussions of environmental problems globally. After that date, various UN Conventions, focusing on environmental issues effecting human security, like UN Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity and the United Nations Convention to Combat- Desertification (UNCCD) were declared (Warner et al., 2008). In 1994, the UN Report on Human Development (New Dimensions of Human Security) defined the human security concept comprehensively and stated that; "It means, first, safety from such chronic threats as hunger, disease, and repression. And second, it means protection from sudden and hurtful disruptions in the patterns of daily life – whether in homes, in jobs or in." (World Atlas of Global Issues, 2018). In addition to providing this definition of security that is centered on individuals and is universal, the study outlined seven other types of security, which are as follows: economic security, food security, health security, personal security, communal security, and political security. The United Nations Trust Fund for Human Security (UNTFHS) was established in 1999 by the Japanese government and the United Nations Secretariat with the purpose of providing financial support to human security projects and increasing the impact of such projects. In the same year, another collective initiative titled Human Security Network

(HSN) was established to maintain a mechanism to identify human security as a concept of international politics threatening individual and societal peace and development. Austria, Canada, Chile, Costa Rica, Greece, Ireland, Jordan, Mali, the Netherlands, Norway, Switzerland, Slovenia, and Thailand are all members of the HSN, while South Africa is an observer.

At the beginning of 2000s, extreme climate events and disasters like droughts and hurricanes started to be resulted with human replacements or movements because of lack of natural resources and unstable socio-economic conditions. As an outcome of those movements, human security paradigm was conceptually broadened with “freedom from hazard impact” which aims to protect vulnerabilities of individuals and improve the struggling skills of communities facing with climate change events like floods and cyclones (Jayaram, 2018). In the UN Millennium Summit of 2000, Kofi Annan (General Secretary of UN) pointed out that human security is the new millennium’s main agenda expressing “freedom from fear”, “freedom from want” and “freedom from future generations” (CHS, 2003). In 2003, the report of “Human Security Now” was published by Sadako Ogata, the UN High Commissioner for Refugees, which emphasized the freedom and fulfilment of human lives. In 2004, the Human Security Unit (HSU) was established as a managing leader authority for UNTFHS and improved the implementations of the initiative in terms of promoting the concept of human security in international community and political arena. The UN’s World Summit 2005 stressed out again the vulnerability of individuals and the importance of freedom, equality of human rights and being free from poverty. The first step of institutionalization of human security was the establishment of The Friends of Human Security under UN in 2006 with the participation of 34 member states. This attempt was unofficial but paved the way for discussing the concept of human security from different perspectives and extend the definition of the term through human-centred notions. UN discussed the human security concept thematically in General Assembly meetings of 2005, 2008 and 2010 with the participation of various countries and their representatives. In these years, human

security concept had started to be associated with global vulnerabilities of individuals rather than the states and the scope of human security now has the meaning of people-centred perspective and symbolizes the need of national, regional, and international stability (Matlary, 2008). The first report about human security was published by UN Secretary General in 2010 and eliminate the potential “use of force” in the application of human security and broadened the concept providing a more human-centred protection and securitization policies (Chandler, 2012). Many other reports were established in the following years and UN member states gathered several times during general assembly meetings and international authorities agreed on a common definition and understanding of human security that the concept is prior for the sustainable development and peace. In 2017, the human-centred security principles were underlined in the 2030 Agenda for Sustainable Development, the New York Declaration for Refugees and Migrants and the direct relationship between climate change and environmentally forcibly displaced people was mentioned with the following statement:

“Migration should be recognized as an integral component in climate change policies and practices. Priorities in this regard include minimizing forced migration due to environmental and climate change through local adaption where possible, facilitating safe migration as an adaptation strategy where this becomes necessary, and including migrants and other vulnerable groups in disaster risk reduction and management (IOM, 2018).

Accessing to natural resources; food and clean water is the domain principle of human security notion. All humans should have the conditions and dependence for realizing the access to natural resources, food, and water without any discrimination for a secure, healthier, and sustainable livelihood. Environmental risks from climate change are the fundamental reducing dynamics for human beings to access natural resources and this also led to violent conflicts. Climate change has the capacity of posing a risk to human security through changes in living conditions since it drives extreme and frequent natural and environmental disasters. The main

factors that create conflicts are vulnerable livelihoods, poverty, infrastructurally weak states, and migration (Barnett & Adger, 2007).

Climate change and degradations in the environment have present a threat to sustainable development of communities in both social and economic manner. As a result of global warming changes in climate system, environmental degradations like desertification, soil erosion, salinization, deforestation affect the living space of human and natural habitat of other bios. Extreme weather passages pose a risk for the productivity level of soil, with more destructive events like heat waves, floods and droughts occur and sea level rises jeopardize the low-lying coastal areas (IOM, 2017). These progressive and instant changes in the environment result as serious human movements and displacements which have a unique impact on lives and livelihoods whether they are internal or cross-border.

“In Africa there is no food security, a result of ecological instability or ecological insecurity. One of the root causes of human insecurity is ecological or resource degradation.... without ecological stability we cannot have food security. We need to promote community-based natural resource management ... to address this.” — Sudanese participant at the Commission on Human Security’s Public Hearing in Johannesburg, August 2002 (Human Security Now, 2003).

3.2 Securitization Theory and Copenhagen School

Before analyzing the Securitization Theory of Copenhagen School approaches, briefly outlining the many definitions and frameworks of the idea of security will help us comprehend the various approaches to security that exist across various theoretical frameworks. Different security approaches have been adopted by states, and these approaches have evolved and shifted over time. The idea of security, which has been widely explored in the domains of international relations and security studies, may be described in its most fundamental form as the condition in

which persons are free from a real or perceived threat to their safety (Holland & Jarvis, 2014). Similarly, if we are discussing the security of someone or something, we may define security as the absence of any condition that threatens its continued existence, based on the meaning of "insecurity." Some of the most common security definitions in international relations characterize national security as an "ambiguous symbol" that objectively evaluates risks to acquired values, while subjectively defining it as the lack of fear and concern that these values would be challenged. (Wolfers, 1952).

The Copenhagen School is widely acknowledged as one of the theoretical frameworks that enhances in the analysis of security issues. The concept of securitization, within Copenhagen School, has been introduced as the widening of state-centered, military and political power perspective of traditional security approaches. In contrast to traditional security approaches, which assume that security policies are triggered by concrete security problems, the Copenhagen School is based on the understanding that both security problems and the associated security policies are constructed by actors, and based on the constructivist approach, the Copenhagen school conceptualizes security as a speech act (Türkeş, 2018). The concept, which was firstly brought to the agenda and originally formulated by Ole Wæver, later gained a theoretical framework with the contributions of writers such as Barry Buzan, Ole Wæver and Jaap de Wilde, broadened the scope of security to include threats and problems that traditional security approaches regarded as low politics (Buzan, Wæver and Wilde, 1998).

Traditionalists, who prefer to restrict the subject to politico-military concerns, and wideners, who want to extend the security concept to the economic, sociological, and environmental sectors, represent the two distinct security perspectives (Buzan, Wæver and Wilde, 1998). In the following period, the concept of securitization has become a widely used concept in the analysis of security dynamics with its easy-to-understand analytical and methodological framework. Currently, its effectiveness in the field of security studies continues with new contributions.

Specifically, the concept and theoretical framework are described in depth in the 1998 book titled *Security: A New Framework of Analysis*, which was authored by three researchers from the Copenhagen Peace Research Institute (COPRII) Buzan and other authors' analysis, securitization can be placed in five political arenas: military, political, economic, society and environment (Does, 2013). When we talk about security in the context of the environment, we are referring to the field of environmental security, which investigates the threats that natural disasters and environmental events offer to individuals, communities, and even entire nations. It might concentrate on how human conflict and international politics affect the environment, or how environmental issues transcend national boundaries. In securitization approach, Buzan and other authors warn against the connection between environmental problems and security arguing that negative effects of environmental degradation caused by human activities tend to violent conflict (Baysal & Karakaş, 2017). And the argument coming after is: if the environmental security concept can be adopted and included in the daily political security notions, covered by global, regional, national, and subnational levels, it will be possible to move forward from dominating state-centered approach of security and this can be used as multilevel approach fighting against environmental issues threatening the human security and sustainable future (Buzan et al., 1998).

After the Cold War, the security approach has been expanded as it started to include non-conventional and non-military threats for national security. Environmental issues, like climate change had started to be analyzed and defined as a threat to human, national and ecological security concepts (Hughes, 2018).

Environmental security concept has been influenced from both traditional and Copenhagen school security approaches. Traditional security approach, mostly driven with military paradigm, has been focusing on the threats that have the potential of war between the parties (Walt, 1991). This military-based security approach had started to be evolved and broadened with including new range of non-military security concepts such as economy, migration, and environment

(Allenby, 2000). Even though research into the connections between the environment and security dates back to the 1960s and 1970s, it was the Copenhagen School that introduced the term "environmental security" to refer to these connections and identified the concept as a field whose particularities must be taken into account when examining the dynamics of modern security. The School's development coincided with the rise of environmental concerns in the European security debate. In the late 1980s as well as the 1990s, the environment was one of the non-military aspects of security that generated the most severe discussions. On the one hand, global environmental threats, such as global warming or the ozone layer hole, showed up as the priorities, and the Brundtland Commission introduced the term "environmental insecurity" to the United Nations' discussions (Maria and Trombetta, 2007). The School acknowledges that in order to properly analyze the dynamics of modern security, it is necessary to take into account the environmental issues, and thus the theory of securitization, which determines what characteristics of a problem qualify it as a security threat, must be applicable to environmental problems as well as military ones. Because the process of securitization generates new ideas about who should be protected and by whom, it suggests that awareness of environmental issues can play a critical role in identifying and consolidating political communities, their concerns, and their identities. In an age of increasing globalization, researchers have argued for substantially expanding the context in which security priorities are established (Pirages & DeGeest, 2004). In this context, it posed the question of which of the many security-related problems may be considered as the subject of security. As a solution, the School presented the concept of "securitization" and analyzed security on a sectoral basis as military, political, economic, social and environmental security. The environmental and other problems brought on by rapid globalization were addressed by the ideas put forth by the Copenhagen School.

With the global warming other critical problems in climate system, the policy makers and researchers have started to focus on the environmental threats like climate change and its

outcomes. With her article "Redefining Security," which was published in America's most influential publication *Foreign Affairs* in 1989, Jessica Tuchmann Mathews played a crucial role in redefining the security. She argued that the national security would be necessarily rethought and redefined and proposed to expand the explanation in terms of resources, environmental, and demographic challenges (Mathews, 1989). In that period, many other researchers represented the rapid and growing domination of crucial environmental and climate issues on human security.

After the 9/11 (on September 11, 2001, al-Qaeda organized a coordinated series of suicide terrorist strikes against the United States) the securitization concept had initiated to cover the arenas of immigration and refugees, as it is directly related with the control of borders of countries. Since then, decision makers, scholars, the media, and organizations such as the United Nations High Commissioner for Refugees have begun to focus human migration and refugees in the context of security concerns. The conventional approach to military and national security, which focuses on the defense of state sovereignty and territorial integrity, has been given a broader definition as a result of the inclusion of human migrations as potential security concerns (Hammerstad, 2010). Forcing people to migrate for whatever reason has been a major contributor to the human security crisis, and its securitization has been seen as crucial to understanding the problem and finding a solution.

Global warming and climate change, as one of the most crucial problems of 21st century, lead to climate change induced human movements. Climate change induced movements have emerged as a problem because of deterioration of natural balance due to destructive human activities and industrial activities. As a result of disruptive climate disasters, people began to leave their places of residence. As we look at the current amounts and predictions for the future, this movements can be accepted as a security issue for both migrants and people of receiving countries.

3.3 Global Milestones on Securitization of Climate Change Induced Migration

With the emergence of problems like depletion of the ozone layer, global warming, and the loss of biological variety beginning in the 1970s, environmental disaster and climate-related concerns have become a new subject of international relations discipline (Ovalı, 2009). Following its conclusion at the United Nations Conference on Human Environment in 1972, the international community came together to declare that protecting natural resources is a common responsibility for all nations, given the importance of environmental preservation to people's well-being and economic growth (UN, 1972). As it mentioned in previous chapters, the concept of environmental refugees and environmental disaster related displacements were firstly pointed out in 1980s in reports prepared by United Nations Environment Programme (by El-Hinnawi in 1985, by Brundtland in 1987, in Agenda 21 by UNCED in 1992). With the establishment of United Nation bodies like The United Nations Environment Program (UNEP) and other entities, environmental problems have started to be examined in international politics. The intersection between environmental concerns and security research is becoming increasingly relevant. The impacts of climate change related environmental degradation have been obviously seen on social, economic, and environmental status which also create insecurity at regional and international level. The linkage between security and climate change have risen from the competition over limited natural resources, clean water, food, and other livelihood resources. As a natural outcome of those competitions, forced migration and displacement of poor and vulnerable communities have been surging and leading to instability, lack of governance of security risks, lack of integration in conflict resolution and peacebuilding.

Climate change induced migration have started to be discussed as a new security threat in early 2000s. The big actors of international politics such as UK and USA, mass media initiatives, NGOs, IOM, United Nation initiatives like UNEP, UNFCCC, IPCC commenced reports and

documentaries regarding the serious impacts of climate change and remarked the interaction between climate change and conflicts.

In 2007, UN General Secretary have appointed special envoys in order to organize negotiations between governments and international initiatives for the implementation of climate change treaties. The first determination case of the UN Special Envoy group was about Sahel Region in 2008 that the region was “ground zero” for climate change related hazards due to extreme climate events and notably vulnerable community. Then in 2009, with the contributions and partnership of IOM, OCHA and other organizations, UNEP published a Report titled “Livelihood Security: Climate Change, Migration and Conflict in the Sahel” and pointed out that the competition through scarce resources led to migration (Zhongming et al., 2011).

UN Security Council debates of those years were the stage of discussions which underlined the between climate change, migration, and security. United Nations Security Council talks in 2007, 2009, and 2011 witnessed the first and most prominent initiatives to securitize migration caused by climate change.

In UN Security Council 2007, there were more than 50 participant states focusing on “Energy, Security and Climate” and discussing their relationship (The Concept paper was about United Kingdom). The debate's overarching goal was to highlight the complexity of climate change and raise public consciousness about the potential threats to international security that may arise if these issues were not addressed. It was also indicated in the Council’s report that 2007 Security Council was the first international meeting which concentrated on the results and conflicts of climate change and security relations including population shifts and border disputes stemming from competition for scarce resources like water, food, and energy (UN, 2007). The negative impacts of climate change on vital resources leading environmental scarcity were negotiated early in UN 2005 World Summit and the representative of the participant countries agreed on the necessity and urgency of acting to solve those challenges in combating with climate

change for a stable and sustainable development. Inadequately, the focus of that Council 2005 was more on the conflicts regarding socio-political crises and armed forces. In September 2007, IPCC published the Fourth Assessment Report of Climate Change Synthesis which had the serious predictions and estimations on the impacts of climate change on vulnerable communities in terms of “humanity”. In addition to security risks on energy, food and water, the Report was remarking the threats for human well-being and potential for population movements in coastal zones (IPCC, 2007). The UN Security Council 2007, with reference to UN 2005 World Summit and IPCC 4th Assessment Report, proposed a universal and in-dept discussion for the potential impacts of climate change regarding international security and peace and threats for human security and contextualized the following titles: a) border disputes, b) migration, c) energy supplies, d) other resource shortages, e) societal stress, f) humanitarian crisis. Title ‘a’ was specifically referring to the effects of rising sea levels on small island nations and the possibility for their physical land mass and borders to experience significant change. Title ‘b’ was drawing attention to human movements because of decrease in agricultural activities due to limited freshwater resources and adding:

“.... This will exacerbate existing migratory pressures from rural areas to cities, from unproductive land to more fertile land, and across international borders. Some estimates suggest up to 200 million people may be displaced by the middle of the century. Migration does not in itself lead directly to conflict. But it can alter the ethnic composition and/or population distribution within and between States, which can increase the potential for instability and conflict — particularly in situations of resource scarcity, and in already sensitive cross-border areas.” (UN, 2007).

In the same report, the Security Council mentioned that the conflicts posed by climate change should be analyzed through the interaction between resource scarcity and human movements which lead inequality and vulnerability in communities. The Report also remarked

the continuity and extremity of climate disasters which will be the drivers of socio-political, economical, national, and international tensions and humanitarian crisis. As a result of those crisis, it was remarkably stated that there will be decrease in the amount of displacement of populations, uncontrollable domestic and international migratory flows.

In UN Security Council 2011, with 62 attendant countries, focused on international peace and security and remarked climate change as a challenging threat. The agenda of the meeting, referring the Security Council 2007, again took up the issues of climate change and related impacts of devastating extreme weather events including scarcity, hunger, droughts and so on. Emphatic point that the debate mentioned was the new security dilemmas of competing for clean water, resources and food as a new type of a conflict and threat to human security. The damaging impacts of extreme environmental changes were spotted; sea level rises, flooding, drought and insufficient resources lead people to move, cross or across national boundaries, as happening in numerous African countries, especially in the Horn of Africa in those days. The Security Council 2011 called for acting in advance and creating a new, multidimensional security perspective instead of old, military approaches to truly define the Century's threats and develop strategies to fight against those threats. The following statement in the report clearly indicates that climate change related human movements should be in the global security agenda of countries as of now, as a notion of international peace and security:

“...Environmental refugees are reshaping the human geography of the planet, a trend that will only increase as deserts advance, forests are felled, and sea-levels rise. Mega-crises may well become the new normal. Those are all threats to human security, as well as to international peace and security.” (UN, 2011).

Both the United Nations Security Council in 2007 and in 2011, with the involvement of delegations, focused on global warming and climate change, have marked the beginning of the securitization of migration caused by climate change (Brauch, 2009). The United Kingdom's

stance was seen as one of the key securitisers and active promoters of the interaction of climate change, security and migration with the initiative of UK's Foreign and Commonwealth Office (FCO) (Boas, 2015). While China and Russia were acting as an abstainer, the UK was trying to convince United States as USA was the key factor of climate change. Both debates of Security Council, including the one in 2013, were the arena of countries those who oppose or support the securitization policies against climate change induced migration. The supporting countries were mainly covering UK, European states (under the leadership of Germany), Pacific Small Island Developing States and a few Latin American countries (Mexico, as a leading one). The characteristic side of these Security Council meetings was that the arguments regarding climate change induced migration were projecting or representing the securitization theory of Copenhagen School in terms of pointing out out-of-control and massive structure of population displacements and migratory flows. Representatives of countries like UK, France, Denmark, Solomon Islands, Tuvalu signified that extreme natural events would lead to competition for resources and uncontrollable displacements, not only inside the countries' borders, but also across the borders. They argued and alarmed that these displacements would cause national and international human insecurity in terms of socio-economic development, sustainability, and human well-being. The key point was that there were no suggestion or guidance in the alarming discourses of representatives representing old, traditional, military defensive security approaches. The proposals of securitization supporter countries were focused on preventing climate change and its threatening results with a people-centered approach. The combating way of preventing the security conflicts have been structured around Copenhagen School's approach and the securitisers suggested for adaptation policies, disaster management, low carbon economy models, and climate policies.

In 2007, IOM published the Report titled "Discussion Note: Migration and The Environment" which emphasized that human security as well as sustainable economic growth is

significantly threatened by environmental degradation and climate change (IOM, 2007). The Report alarmed the international community stating that sudden-onset climate disasters will result substantial human movements and displacements and pointed out the importance of an adequate plan to control these movements for human security. The Report also examined the interaction between migration, environmental change, human security and conflict and suggested these proactive management tools; a) Proactive policy and early action, b) Comprehensive and coherent policies, c) Bilateral and regional cooperation and d) Multi-stakeholder partnerships (IOM, 2007).

President Barack Obama of the United States made the statement in 2013 that climate change is a worldwide issue that causes significant natural disasters such as severe storms and floods, which in turn lead to new waves of refugees (Dalby, 2013). In September 2014, UN Climate Summit was held in New York and addressed the risks of climate change. A civil society representative from Marshall Islands underlined the problem of climate refugees and current year's Pakistani Foreign Minister mentioned that serious environmental disasters like floods leading millions of people to displace and defined the issue with these words: "The world is facing not just a threat, but also a threat multiplier." (IISD, 2014).

After the Nansen Conference on Climate Change and Displacement that took place in Oslo in June 2011, the Nansen Initiative Disaster-Induced Cross-Border Displacement was jointly funded by Norway and Switzerland in 2012 with the goal of establishing a common sense on the creation of a protection agenda that takes into consideration the requirements of those who are displaced across international borders due to disasters and the effects of climate change. In other words, the Nansen Initiative aims to establish a consensus on how to best protect people. The Initiative functioned until and figured out three main items; first is the need for an International Cooperation and Solidarity, second is the creation of Standards for the Treatment of moved people in terms of admission and status, third is the Operational Response for the roles of

international actors and funding systems. As a result of Initiative's consultations, in October 2015, a new state-led Platform on Disaster Displacement (PDD) was agreed in Global Consultation meeting and launched at the World Humanitarian Summit in 2016. In response to the Nansen Initiative and with the support of over a hundred states, that platform published a Protection Agenda that calls for States and sub-regional actors to adopt effective policies and procedures and incorporate them into their own social and political frameworks tailored to their specific needs and circumstances (Platform on Disaster Displacement, 2017). The Platform claims that individuals being forced to move because of disasters caused by climate change is one of the most significant humanitarian issues of our time. That platform has still been one of the important initiatives with its strategy reports, summits, and task forces, examining the climate change induced migration and security nexus.

Another essential milestone in 2015, was the publication of "A New Climate for Peace; Taking Action on Climate and Fragility Risks" report prepared by G7 leaders. Again, with the goal-directed contributions of UNEP, the Report was an alarming document identifying climate risks, scarce resources, water management problems, insecurity, and migration (Rüttinger et al., 2015).

Another act was the agreement of Sendai Framework for Disaster Risk Reduction 2015-2030 which was adopted by 187 UN Member States at the Third UN World Conference in March 2015. The Framework predicted for a 15-year plan to avoid natural disasters and eliminate the risks across the World with the objective of strengthening the societies against damaging impacts of environmental disasters and making societies more resilient economically, socially, and environmentally (IOM Website, 2022). The Framework played a great role in the recognition of climate induced migration with its actions and known as the consolidator of the implementation of the Sustainable Development Goals (SDGs), the Paris Agreement and Global Compact for Migration (GCM).

In 2017, the European Union (EU) and the UN Environment Programme (UNEP) formed a partnership on climate change and security. This was done so that countries and international partners could find environmental and climate-related security risks at the global, national, and local levels and plan appropriate risk reduction and response measures (UNEP & EU, 2022).

In September 2016, the United Nations General Assembly, by common consent of members, adopted the New York Declaration for Refugees and Migrants. The New York Declaration contains a wide variety of promises by Member States to strengthen and improve measures to safeguard individuals who are on the moving or replacing, and it reiterates the significance of the international refugee regime (UNHCR Website, 2022). The importance of this Declaration was that it opened the way on adaptation of “global compact on refugees and global compact for safe, orderly and regular migration”. In the same month as the New York Declaration, the UN Secretary-General and seven Member States convened the Leaders' Summit on Refugees in order to increase global responsibility sharing for refugees. At the summit, 47 states made commitments to significantly increase the amount of humanitarian aid they provide, to change their laws or policies so that refugees have improved access to social services, employment opportunities, and education, and to increase the amount of access refugees have to third-country solutions.

The United Nations Environment Program (UNEP) had made significant contributions toward a deeper understanding of the relationship between climate change and security, and it had brought attention to security threats and their unequal distribution among vulnerable people. In June 2020, the Programme in conjunction with UN Women headquarters, UNDP, and Department of Political Affairs, published a Report on “Gender, Climate and Security: Sustaining Inclusive Peace on the Frontlines of Climate Change” bringing gender inequality issue on the agenda of resilience building policies for climate change (Anwar et al., 2020)

Because of these securitizing moves and speech acts about climate change induced migration, mainly developed by the political representatives of European countries and Small Island Developing States in United Nations Security Council Initiatives, UK's FCO of 2000s, IOM and other global initiatives' contributions fighting against climate change, had started to be included in the security agendas of countries, with modern securitization tools.

The European Union has also been playing a critical role with its policies, particularly those related to climate change, climate migration and securitization, as one of the largest regional organizations of the international politics. In the next Heading, I will try to figure out how European Union handles with climate change induced migration and securitization of the phenomenon, as an immigrant-receiving regional institution.

3.4 Analysis of European Union Policies

Climate change related issues need to be solved with a sustainable and interdisciplinary political approach and required focalizing on global mobilization. The European Union has been using its foreign policy making tools of policy dialogues and engagements with climate related initiatives like UNFCCC, high level collaborations and unities with non-EU countries, EU level and global level negotiations, and financial funding mechanisms to maintain sustainable development and propose climate change for the agenda of policy making processes.

Literature on European Union's political approach and instruments on the climate change induced migration and securitization nexus have indicated that there have been several EU policy tools and frameworks addressing the issue. Although the data and information are inadequate and uncertain for the cross-border movements, EU is one of the regions placing internal climate migration. The conference paper that was undertaken by American academics Cottier and Salehyan is one of the first to conduct a comprehensive analysis of the influence

that weather shocks have had on irregular migration across a wide range of nations and in Europe (Cottier & Salehyan, 2021).

According to the World Migration Report 2020, the majority of new internal displacements in Europe in 2020 were caused by natural disasters rather than other conflicts. The highest number of people forced to relocate as a result of a natural disaster was in Croatia with 42,000 people. In March 2020, towards the beginning of the worldwide COVID-19 pandemic, an earthquake of magnitude 5.4 struck Zagreb, which resulted in 1,600 additional people being forced to relocate. In the nine months that followed this quake's occurrence, the region was shaken by the strongest earthquake that has ever been measured in its history, which registered a 6.4 on the Richter scale. The earthquake occurred around 50 kilometers south-east of Zagreb, and as a result, over 10,000 homes were rendered unusable, and 40,000 people were forced to relocate for an extended period. Other countries that were affected by people having to relocate owing to natural disasters in 2020 were Greece with 13,000 people, France with 10,000 people, and Spain with almost 8,000 people. This was mostly the result of severe storms and flooding. Despite the fact that nations with low incomes are most likely to be negatively affected and hurt by climate change, thousands of people in the subregion have also been forced to move because of sudden disasters, some of which were caused by climate change. In 2020, wildfires in Greece, Spain, and France caused 23,000 more people to move. The year 2020 was the warmest year ever recorded in Europe. Temperatures went up in all four seasons. Thousands of people had to leave their homes in France and Spain in the same year because of Storm Gloria (World Migration Report, 2020). Huge waves destroyed homes and rivers overflowed their banks. In Spain, several people died. More than a thousand people in the United Kingdom had to relocate because to storms like Dennis, and about five thousand people in France had to leave their homes because of floods at the end of the year. Towards the end of the year, more than 3,000 people were forced to leave their

homes in the two countries as Storm Bella hit. By the middle of the year 2021, it was abundantly evident that similar patterns of relocation were playing out across Europe during the summer, mostly because of major wildfires, storms, and flooding (IOM, 2022).

Over the past decade, EU have developed considerable number of strategies, initiatives, policy departments and forums referring the conflicts related with climate change induced displacement and migration. Since the climate change related migrations, environmental security and human security issues have become into prominence in international politics in 2000s, EU policy makers have started to enhance several systems functioning for preventing climate change related environmental degradation and build up regional resilience plans and adaptation strategies. Furthermore, the socio-political framework and initiatives of EU emphasizes the significance of addressing climate and environmental concerns together, as well as mainstreaming climate and nature across all policy sectors.

In January 1999, Committee on Foreign Affairs, Security and Defence Policy under European Parliament (EP) presented a report titled as ‘The Environment, Security and Foreign Policy’, with an explanatory statement of “a defence against environmental threats” (EP, 1999). This report was focusing on developing a strategy on using military resources for environmental purposes and drew a security scenario of non-military approach;

“...whereas threats to the environment, the flow of refugees, ethnic tension, terrorism and international crime are new and serious threats to security and that the ability to deal with various forms of conflict is increasing in importance as the security scene changes; whereas as some of the threats to security are non-military it is important that resources allocated to military activities are also used for non-military purposes.”

With this statement the Parliament described environmental problems, including massive displacements as new and modern security threats which should be managed with balanced and well-distributed integration of military-related resources into environmental

strategies. With reference to UN and IPCC's alarming predictions and estimations about environmental refugees, this Report put emphasis on the rise of human flows from climate change related disasters like drought, soil erosion, pollution, radioactive fallout, floods and other environmental changes and underlines that these movements have the potential of creating the "worst humanitarian crises of our time" (Myers & Kent, 1995). The environmental refugees moving across national borders were defined as new serious threats for peace, stability and security in the Report which called for mobilizing military resources against those challenges. Mobilizing the military resources is defined in EU's immigration and justice policies as limited use of military forces to protect the environment, its sustainability, the biodiversity and as spending the resources for humanitarian aid in regional manner. This Report can be regarded as the first attempt of addressing climate change induced migration and security linkage in EU policy history.

In 2003, the European Security Strategy was prepared with a discussion sentence on climate related migration stating that:

"Competition for natural resources - notably water - which will be aggravated by global warming over the next decades, is likely to create further turbulence and migratory movements in various regions." (EC, 2003).

In January 2007, European Commission, as an executive and legislative power of EU security policy, gave support to a Project called "Environmental Change and Forced Migration Scenarios" (EACH-FOR) which was as a representative of multi-country research-based study of environmental issues including human mobility happening in all parts of the world. The EACH-FOR Project was led by Head of Hungarian research and development company 'Research and Development Department of Atlas Geo Ltd.' Andras Vag and Project Officer in the EU Marc Goffart and conducted by several researchers from different European universities. The main targets of the Project were to analyze the drivers of environmentally

forced migration and to develop future actions and plans about environmentally induced migrations, going through 23 case study regions. This was one of the research-based study on relation between environment and security which recommended implementation of sustainable development policies, improving the capacity of vulnerable regions to adapt climate change, improving the conditions of seasonal migrants, developing mitigation policies and resettlement programs for displaced people (EACH-FOR, 2007) The funding and support of this Project by EU, can be recorded as one of the milestones for the issue to be taken under consideration and kept on the agenda within the framework of security policies.

A green paper on climate change and a letter from EU High Representative for the Common Foreign and Security Policy Javier Solana Madariaga to the Council combining climate change with security issues marked the beginning of the EU's participation in environmental change and migration. According to the findings of a study that was conducted and released in 2007 by Madariaga (Ferrara, 2019):

“Climate change is best viewed as a threat multiplier which exacerbates existing trends, tensions, and instability. The core challenge is that climate change threatens to overburden states and regions which are already fragile and conflict prone. It is important to recognize that the risks are not just of a humanitarian nature; they also include political and security risks that directly affect European interests.”

As an example, desertification impacts enormous swaths of the planet and has a significant negative impact on the ability of millions of people to maintain their standard of living. Because of the lack of natural resources and the structural shifts that have occurred in terms of the availability of water and the production of food, there is a possibility that conflicts may break out either between states or within states. As a result of United Nations debate of 2007 and its emergent call for humanitarian aid for impacts of climate change to protect international security and with a reflection of IPCC's alarming estimations on the number of

future emissions, the European Council and European Commission representatives gathered in 2008 to prepare a collective work and published “Climate Change and International Security: Paper from the High Representative and the European Commission to the European Council” which was firstly published in 2003, attributed migration caused by environmental factors as one of the dangers to European security identified by the Council noticing that (EC, 2008);

“Natural disasters, environmental degradation and competition for resources exacerbate conflict, especially in situations of poverty and population growth, with humanitarian, health, political and security consequences, including greater migration.”

This study of strategy takes a regional approach, recognizing vulnerabilities that certain nations are more at risk from climate change than others, but also calling for the global acknowledgement of environmental migration. Compared to the first version of 2003, this strategy not only discusses environmentally driven migration, but also urges public policy to address it. The Report annominated climate change as a threat multiplier posing political and security risks that directly strike European interests (EC, 2008) and list the threats as; 1) Conflict over resources, 2) Economic damage and risk to coastal cities and critical infrastructure, 3) Loss of territory and border disputes, 4) Environmentally induced migration, 5) Situations of fragility and radicalization, 6) Tension over energy supply, 7) Pressure on international governance. Under the title of number 4, the Report underscores that poor, fragile and vulnerable communities will trigger cross-border migration and underlined the gap of international recognition of environmentally induced migration. That Report concludes that Europe will be under pressure of increased migratory and called for international preventive security policies. With this Report, EU located itself in the center of global climate policies as a leading actor with wide range of instruments and claims that Europe's comprehensive approach to conflict prevention, crisis management, and post-conflict rehabilitation, and as a leading

proponent of successful multilateralism, play to the region's strengths" in the face of the security problem (EC, 2008). The instruments presented in that report were the Common Foreign and Security Policy (CFSP) and the European Security and Defence Policy (ESDP) for the implementation of mitigation and adaptation policies through security risks and laid emphasis on cooperation with third countries.

On June 11, 2008, the Greens Party / European Free Alliance (EFA) Group held a one-day climate refugee seminar. The statement sought to refocus European institutions on climate migrations. This paper should be recorded as guidance for EU's future efforts. The European Parliament organized an "Agora on climate change: the European Parliament asks for citizens' input" in June 2008. Nearly 500 European nongovernmental organizations, EU decision makers and international experts, many representatives from different sectors debated and proposed solutions for environmental migrations (Sgro, 2008).

In December 2008, European Parliament's Temporary Committee on Climate Change published a Report on "2050: The future begins today - Recommendations for the EU's future integrated policy on climate change" which emphasizes the significance of expanding international diplomatic efforts to address climate change issue and to include climate related challenges such as climate induced migration into strategies of foreign policy (EP, 2008). Long-term planning and risk-management strategies were also called for in the list of political proposals, which included recommendations for study into probable patterns of climate-induced migration and the resulting strains on local authorities.

The day after that committee report, the EU published the report "Implementation of the European Security Strategy - Providing Security in a Changing World" in which climate change was described as a 'threat multiplier' with reference to the 2003 and March 2008 security strategies by opening a special title on Climate Change (EC, 2008). EU improved conflict prevention and crisis management, according to the Commission, but the organization

still has room to grow in terms of its analytical prowess and early warning systems. The report also stressed the need of bolstering the resilience of the nations that are most at risk. Cooperation on an international scale, particularly with the United Nations and regional organizations pointed as crucial.

These were the first years that fascinating lines of study on climate change traced the linkages between climate insecurity, human security, and conflict. In December 2008 again, the Parliamentary Assembly of the Council of Europe (PACE) published “Environmentally induced migration and displacement: a 21st century challenge” and brought to light the fact that international legal texts on human movement due to environmental catastrophes and degradation are not universally agreed upon, making progress on the identification and legal protection of environmental migrants difficult to achieve. Further, the paper recommends conducting research into existing inconsistencies in legislation and protection mechanisms with the end goal of developing a unique system for the protection of environmental migrants, either as a separate international agreement or as part of relevant multilateral agreements (Acketoft, 2008). That paper argued that the European Convention on Human Rights (ECHR) should take into consideration including an extra protocol on the right to a healthy and safe environment. Same year, the European Consensus on Humanitarian Aid acknowledges that, given that humanitarian crises have resulted in huge numbers of people being forced to relocate, it is essential to reduce risk and vulnerability by increasing levels of preparedness in regions that are susceptible to natural disasters and changes in climate.

The implications of climate change should be factored into larger conversations about security, development, and migration policy within the European Union, according to a White Paper published in 2009 (Wagner, 2020).

Committee on Civil Liberties, Justice and Home Affairs of European Parliament published a report on “Common Immigration Policy for Europe: Principles, actions and tools”

in April 2009 (EP, 2009). This policy resolution paper addressed governments to think about ‘environmental refugees’, a category of people who don't fit the criteria for being either economic migrants or legally recognized as refugees under the Geneva Convention.

The Stockholm Programme was approved by the EU Council later in 2009. For the first time, the Stockholm Programme (which covered the years 2010–2014) investigated the connection between climate and migration, and it urged the European Commission to assess the effects of climate change on international migration, including their potential effects on immigration to the Union.

In 2011, authors and advisors from International Centre for Migration Policy Development (ICMPD) which was founded in 1993, upon the initiative of Austria and Switzerland, with 19 member states now working on regional approach for migration management including Africa, Eastern Europe and Central Asia, Mediterranean, Silk Routes, Western Balkans and Turkey (ICMPD Website, 2022), published a report requested by the European Parliament on “‘Climate Refugees’: Legal and policy responses to environmentally induced migration”. This report analyzed the efficiency of EU’s approach and policy tools in that period for climate change induced migration and asylum. As concerns grow about the connection between environmental deterioration, conflict, and national security, the Report pointed out the competition for resources and underlined that most of the authors indicate no direct connection between environmental problems and armed conflict. According to that approach, climate change can lead to limited resources for livelihood and migration flows, but this should be defined as destabilization and violence, not a conflict regarding army or military (EC, 2011).

At the end of EU Foreign Affairs Council Meeting in 2011, Council Conclusion Paper was published about EU Climate Diplomacy and the first statement of the Paper was clearly indicated that climate change is acting as a “threat multiplier” and creating challenges for the

world on development, prosperity, and stability regarding security implications; increasing tensions and competitions over livelihood resources and leading migratory. The Paper expressing the diplomatic approach of EU regarding climate change and security nexus stated that: “The Council recognizes the need to build on the work already undertaken on climate change and international security. The EU will continue to raise global awareness of the security risks to, and threat multiplier nature, of climate change, particularly in vulnerable regions. The Council recognizes the need to drive the global debate on climate change and international security forwards. The EU welcomes the increasing attention of the United Nations Security Council on the security related aspects of climate change.” (EU, 2011). For the first time, a clear and obvious EU climate diplomacy policy was developed in 2011, when the High Representative of the Union for Foreign Affairs and Security Policy and the European Commission's Directorate General for Climate Action issued a Joint Reflection Paper titled ‘Towards a renewed and strengthened European Union Climate Diplomacy’ (Biedenkopf & Petri, 2021). The Paper strangled of thoughts for strong collaboration of actors, sustention of developing countries and reducing security risks. These years were the consolidation of the opinion that climate change induced migration could have an impact on European security due to the potential large flow of people from regions damaged by climate change (Peri & Cattaneo, 2016). This paved the way for the first Foreign Affairs Council (FAC) decisions on climate diplomacy, as well as a new horizon for EU diplomatic outreach on climate change. Since then, the FAC has adopted conclusions on climate diplomacy on a regular basis, and since 2015, on an annual basis.

The adaptation of the Global Approach to Migration and Mobility (GAMM: The revised version of Global Approach to Migration launched in 2005) in 2012 was the overall framework of the European Union's external migration policy, focused on true collaboration with non-EU nations and tackling all elements of migration and mobility challenges in an

integrated, comprehensive, and balanced manner. Furnishing the reference of Stockholm Programme's recognition of climate change induced migration as a global challenge, GAMM emphasized the need for legalizing migration and mobility, reducing irregular human flows, and an extended asylum policy. In EU Commission staff working document published in 2013, further studies of EC roundtables in July and September 2012 were underlined for that migration was focused as an adaptation to climate change (EC, 2013). This Commission Staff Working Document titled "Climate change, environmental degradation, and migration" is a strategy document that was produced as part of the EU's adaptation strategies that were prepared for climate change challenges. This groundbreaking research and data analysis was the first of its kind to establish a connection between climate change, migration, and security. As a response paper to the 2009 Stockholm Programme for an investigation of the implications of climate change on international migration, particularly its possible effects on immigration to the European Union, the Commission submitted the report. The suggestions in the paper are particularly pertinent to EU policies that have an external orientation, such as those on development, foreign policy, and humanitarian aid, focusing specifically on human mobility as a result of environmental deterioration and calamities connected to the climate, especially those brought on by climate change. In that paper, Commission referred the IPCC's unique report 'Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation' which was drawing attention to the connection between climate change and migration, published in 2012. With that reference point given how important this issue is getting, the Commission said that the next assessment report, which would be finished in 2014, would have a chapter for the first time about the link between climate change and security. This chapter was outlined to look at how well states can deal with climate change, conflict, and migration. In 2014, the Council of European Union had agreed on some Conclusions on Migration in EU Development Cooperation, in which EU Member States

encouraged the Commission to design a cohesive and integrated development strategy towards refugees and IDPs concerns (EU Council Conclusions, 2014). According to the findings of the study, migration is a complex phenomenon that has various inter-linkages with other areas of action. These other areas include employment, health, education, social protection, and climate change.

2015 was the year of unparagoned developments in the acknowledgements of migration and climate change for the World and in course for the EU with the adoption of UNFCCC Paris Agreement (McAuliffe & Triandafyllidou, 2021). Almost immediately after the signing of the Paris Agreement, which was the first legally enforceable international agreement for the purpose of combating climate change and the effects of it, the European Union announced that it would play a significant role and serve as a global leader in the agreement process. Unlike the previous international negotiations and treaties, Paris Agreement presented fully inclusive roadmap for countries which covers legally binding goals for reducing gas emissions, catalyzing environmentally sustainable economic development and encouraging adaptation and mitigation policies for combating climate change impacts (UN, 2015). 12th President of the European Commission from 2014 to 2019, Jean-Claude Juncker ratified the Agreement with his speech and stated: "Today the European Union turned climate ambition into climate action. The Paris Agreement is the first of its kind and it would not have been possible were it not for the European Union. Today we continued to show leadership and prove that, together, the European Union can deliver." (EC, 2016). 2015 was the year of refugee crisis in EU; as a result of several wars in the Middle East, millions of people were compelled to escape their homes during the 2015 refugee crisis in Europe, causing a humanitarian catastrophe to spread over its borders and on its seas (Moran, 2022). Not only from Syria, EU received high amount of asylum seekers also from Afghanistan and Iraq; 1.3 million migrant was recorded as applicants for asylum in the 28 member states of the

European Union, Norway, and Switzerland in 2015 which was the largest number of refugees and flow of migrants counted since World War II (Pew Research Center, 2016). As a consequential situation of these two very important events, the adoption of Paris Agreement and EU Refugee Crisis, both occurred in 2015, had influenced and conceivably directed EU's migration policies on migration security axis. After that year, European Commission have enhanced to develop published materials like research study papers, strategy reports, press releases and policy documents related to the climate change induced migration and securitization approach of European countries.

In the following European Agenda on Migration from 2015, the European Commission emphasized climate change as one of the underlying reasons of irregular migration and forced displacement. Other major factors include civil strife, persecution, and poverty. This prompted the need for a proactive and involved European Union foreign strategy. On the other hand, in the messages that came thereafter, the European Commission placed a significant amount of emphasis on the happenings around the so-called 'refugee crisis' and the actions that were implemented. Climate change was just one of several causes blamed for the unprecedented influx of migrants and refugees into the European Union in 2015.

Same year, in terms of European Security Strategy, the Parliament published "Towards a new European security strategy? Assessing the impact of changes in the global security environment" briefing paper and underlined migration under the title of strategic threats due to climate change (EP, 2015). The paper stressed the need of planning ahead and being cautious while adapting to climate change since migration is a serious problem due to climatic and environmental stress. Another point emphasized by Parliament was that climate change will make it hard for poorer and vulnerable countries, especially those that are already struggling with violence and poverty, to meet the challenges it brings. However, wealthier

countries with strong infrastructure, good long-term planning, and stable political and economic systems may be able to adapt well (Anthony et al., 2015).

European Commission's State of the Union: Time for Honesty, Unity and Solidarity 2015 was held in September, in Strasbourg (EC, 2015). In his speech, President of the Commission Jean Claude Juncker stated that: "Climate change is even one the root causes of a new migration phenomenon. Climate refugees will become a new challenge – if we do not act swiftly." (Junker, 2015). This tremendous securitization maneuver by one of the most elite characters in the EU lobbying for climate migration can be seen in Juncker's statement, which is an example of a forceful securitization move.

European Economic and Social Committee Trainees' Initiative hosted a conference in Brussels in January 2016 with the theme "The Challenge of Climate Migration: an EU Perspective," and key-note speakers included representatives from the institutions like IOM, UNHCR, EEAS, EESC. In that conference, the link between climate change and security was underlined in climate policy speeches and EU's approach to climate related migrants was framed as EU attempts for climate resilience policies, works for mitigation and adaptation strategies, and concentrates on enhancing legal frameworks on displacements (European Economic and Social Committee, 2016). A month later, the European Commission held a 2-day conference titled "Understanding and Tackling the Migration Challenge" to highlight how European research can assist policymakers in creating successful and long-lasting migration policies and regulations. There was a special session on Climate Change and Migration in which senior researchers from IOM and academicians discussed different cases and perspectives through climate migration (EC, 2016). As a result, climate change induced migration was addressed with securitization moves, which resulted in the convening of both summits.

In June 2016, “A Global Strategy for the European Union’s Foreign and Security Policy” was published and A More Effective Migration Policy was launched. Migration and climate change were underlined in the same nexus as constituting threats for the prosperity and peace in Mediterranean, Middle East and Africa.

In December 2016, the Commission adopted a communication paper on ‘Lives in Dignity: from Aid-dependence to Self-reliance Forced Displacement and Development’ which underlined ‘violence’ as a crucial component pushing people to move and emphasized that the economic and psychological safety of residents is coming under growing threat from natural disasters and climate-related occurrences. The effects of climate change may amplify the risks associated with insecurity, conflict, and the fragility of states, as a threat multiplier (EC, 2016). It was noted that migration is being negatively impacted by climate change in a variety of ways already, making this an issue that requires governmental attention. A primary worry in the Sahel and elsewhere in Africa is the role that a lack of water may play in sparking conflict and leading to population relocation. The vast bulk of flows will be domestic or inside their own regions. When it comes to work on disaster risk reduction, resilience, and adaptation to climate change, more emphasis needs to be paid to the issue of displacement as focused on United Nations Office for Disaster Risk Reduction. The idea that migration can positively contribute to adaptation is gaining more and more traction, notably in the context of debates on loss and harm brought about by climate change. In parallel to that Commission working paper, the European Economic and Social Committee had published another accompanying paper. Although there is no direct emphasis on climate change induced migration in this document, it is obvious that a significant proportion of forced migration from vulnerable regions to Europe in those years was based on environmental changes and the Paper proposed the following activities to be taken regarding persons who have been forcibly displaced (EC, 2016):

- Economic action in the affected areas to encourage and grow entrepreneurship as a potential development route for many people who have been forcibly displaced.
- The education and training solutions should be based on a lifelong learning perspective, and the idea of making EU programs accessible to persons who have been forcefully displaced should be addressed wherever it is applicable.

The securitization issue was considered in 2016, when the PACE prepared a report in which the argument of member states to devote more importance to the development of protection laws and standards for victims of natural disasters and victims of the repercussions of climate change. At that time, the Assembly's main recommendation was prioritizing the development of protective laws and standards for those affected by natural, chemical, or nuclear catastrophes, as well as those affected by the effects of climate change and as a real legal enforcement and implementation step was recommended for revising the 1951 Geneva Convention relating to the Status of Refugees, using measures such as an extra protocol.

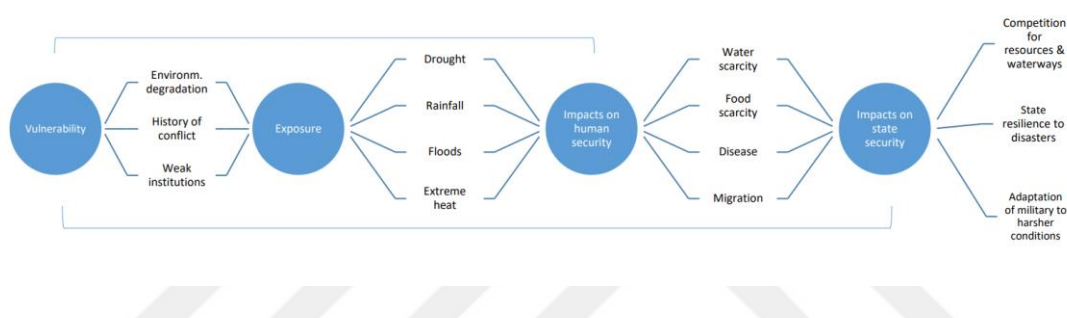
In the year 2017, the human-centered security principles were highlighted in the 2030 Agenda for Sustainable Development, the New York Declaration for Refugees and Migrants, and it was mentioned that there is a direct relationship between climate change and people who have been forcibly displaced due to environmental factors. EU's climate resilience approach and adaptation strategy were specified in detail under the Joint Communication Paper on 'A Strategic Approach to Resilience in the EU's External Action' published in 2017. The item about resilience strategy was a step toward increasing the impact of EU external action in bolstering state, social, and community resilience in developing nations. With the release of this Paper, the Union has made a commitment to continue working on the Resilience Action Plan 2013-2020, which aims to reduce the effects of long-term crises and threats of violent conflict, in addition to other structural tensions such as environmental devastation, climate change, mobility, and forced relocation (EC, 2017). Notably, the paper acknowledged

that the amount of humanitarian aid that is required as a direct result of people being forced to relocate as a direct result of violent conflict has reached an all-time high. This is notable because the paper acknowledged that the amount of humanitarian aid that is required has reached an all-time high. Whole regions are caught in a state of protracted crisis and inadequacy, where the effects of persistent catastrophic events, environmental degradation, and violence overlap with one another and intensify each other's effects. This is because natural disasters, environmental degradation, and violence all have a cumulative effect on one another. It also gave the estimation that by the year 2030, there would have been an even greater rise in the number of people living in difficult situations, which would have amounted to 22% of the world's population, or 1.6 billion individuals. As a suggestion, the Paper underlined that poverty, population increase, climate change, fast urbanization, competition for limited resources, conflict, and violent extremism are all contributing to widespread instability, and the EU's present model for responding to crises must be better adapted to this reality. The suggestions on strategy can be summarized as:

- Respecting the specific roles set out by the Treaties and humanitarian fundamentals, and promoting and expanding close collaboration between EU political, humanist, and development actors on long-term crises and long-term displacement.
- - A political dialogue between governments, with the help of development partners, to hold governments more accountable for persistent security vulnerabilities and build local capacities for managing risk and faster, local responses.
- Improving the common assessment of all factors, such as socioeconomic, diplomatic, and environmental and social issues that make people more vulnerable to current risks, and then using that analysis to organize diplomatic engagement, sector policy discourse, and aid programs.

As it was mentioned as a milestone in Global Milestones on Securitization of Climate Change Induced Migration title, in December 2018, Global Compact for Safe, Orderly and Regular Migration (GCM) was written with UN oversight and approval. It is regarded as the first international agreement of its kind to address migration from a global perspective (UN, 2018). European states had the majority vote in GCM means that EU puts emphasis on presenting to global securitization acts.

Figure 4:



Note: Climate change's impact on human and state security (European Parliament Report on “Preparing the CSDP for the new security environment created by climate change”, 2021)

Subcommittee on Security and Defence requested from European Parliament to prepare a deeply analyzed report on describing the situation of the Common Security and Defence Policy (CSDP) regarding climate change and security nexus. This study paper titled “Preparing the CSDP for the new security environment created by climate change” published in 2021, reviewed and examined how climate change would affect security in the EU neighborhood and offers suggestions for how the CSDP should include climate change considerations into its goals and deliverables. The paper suggested that the CSDP would take a regionally specialized strategy that emphasizes the unique social, political, and economic dynamics that make climate issues manifest in various partner nations. As stated, CSDP had already focused on the Sahel and the Horn of Africa and the operating system of CSDP should be extended in the future covering the highly vulnerable regions where communities are in the middle of humanitarian crises and

competing against scarce resources in an insecure and instable degraded environment. These competitions and conflicts have escalated migration related security concerns of EU. From this point forth, EU could develop climate change proofing strategies under the CSDP. Adaptation of resourced mandates, financial investment models for infrastructure and facilities, and ways to integrate domestic social and organizational forces were identified as these options. This deeply analyzed report proffered pointedly that the collaboration with United Nations is considerably important to find political solutions. As seen in Figure 4, vulnerable countries who have weak managerial and institutional capacity against impacts of climate change like droughts, rainfalls, floods, and extreme heat, are under threat of human security at first stage. As a second stage, these extreme climate events create scarce of livelihood resources of food and water, diseases, and displacement of people; migration. The migration is situated between the implications on human security and the impacts on state security, as stated in the report's graphic illustration of the relationship between climate change and human and state security. This cause-and-effect relationship schema prepared by the EU initiatives show that EU put climate change related migration on a position that is derived as a human security issue and turns to state security problem which should be controlled and managed under competition for scarce resources, state resilience to disasters, and adaptation of military to harder conditions. In 1994, UNDP presented human security approach which handles the security, conflict and development concepts focusing on individuals with the idea of “freedom from fear” and “freedom from want” (Hanlon & Christie). United Nations resolution reports have been clearly expressing that human security does not replace with state security approach and does not confront threats with enforcement and intercept operations (UN, 2012). According to UN, human security has a comprehensive people-centered perspective, especially for vulnerable people, where every individual has freedom and dignity, free from poverty and despair. IPCC reports address climate change as a threat for human security because it creates atmosphere of uncertainty for societies and ecosystems and it has

negative impacts on socio-economic development and increases involuntary displacement of people, particularly in developing countries with low income (IPCC, 2014). UN and IPCC propose human-centred adaptation measures and policies in order to protect vulnerable communities against the impacts of climate change such as adopting powerful social protection systems, improving public health care programmes and increasing capacity for sudden natural disasters. On the contrary, EU's Global Strategy reports have maintained more integrated security policy, encouraging human security as a base approach but drawing near to state security perspective. As the priority of Union's Global Strategy, EU concentrates that the Security of the Union should be protected within and beyond, with a more effective migration policy through collaboration with NATO, UN agencies, G20, ASEAN, and international treaties. Under this integrated migration policy, EU presented following determination in Shared Vision, Common Action: A Stronger Europe in 2016, regarding climate change, environmental degradation, social tensions, and other potential conflicts threatening security:

“Together with countries of origin and transit, we will develop common and tailor-made approaches to migration featuring development, diplomacy, mobility, legal migration, border management, readmission and return. We will work with our international partners to ensure shared global responsibilities and solidarity.” (EUFSP, 2016).

All the methods and regulations developed and adopted by EU security policy demonstrate that climate change is a threat that must be addressed and combatted under any security approach. Climate change, owing to the environmental change and turmoil that it produces, does represent a threat to the security of the state as well as the security of individuals. To avoid this threat from occurring, climate change prevention and adaptation measures must firstly be devised. One of the most important of these policies is the development of state security strategy. Pursuing a state security strategy in this context does not imply adopting an armed, military state security approach for securitization. The militaristic approach here indicates the policy of restricting

disarmament and weapon usage in a way that respects the environment and minimizes higher emissions and carbon footprints associated with armed forces.

EC announced European Green Deal in Communication Paper of 2019 and adopted in 2020 as a set of policy actions with the overarching objective of reaching the European Union climate neutrality; zero greenhouse gas emissions by 2050, with reference to more economic strategy of Strategic Long-Term Vision 2018 named A Clean Planet for all (Wachsmuth, 2022). EU underlined that global climate change and environmental challenges are important threat multipliers and roots of instability and states that this ecological transition will trigger geopolitical, economic, and security-related stability problems in states and societies and continued:

“... The EU will work with all partners to increase climate and environmental resilience to prevent these challenges from becoming sources of conflict, food insecurity, population displacement and forced migration, and support a just transition globally. Climate policy implications should become an integral part of the EU’s thinking and action on external issues, including in the context of the Common Security and Defence Policy.” (EC, 2019).

As a result, the Commission is placing a clear emphasis on the problem posed by the migration of populations as a direct result of climate change. The Commission acknowledges that the CSDP should consider all the implications and repercussions of climate change, which would imply that the CSDP should also deal with climate change induced migration. As a result, the Commission has made this observation. In reference to this citation, climate change induced migration and other related challenges are framed as questions of security, which suggests that there are some indicants of a securitization process inside the Commission (EC, 2019). Here, the Commission presents several consequences of climate change, including but not limited to migration caused by climate change. The Commission paper emphasizes the role that climate change will play in the emergence of several other conflicts and issues, such as migration and

security. Whether the phenomenon of climate-change induced migration is presented as a major threat or a secondary threat in the Green Deal Communication paper, the mode of presentation gives the impression that the Commission is working toward the process of securitizing climate change induced migration.

According to IOM experts, in the papers of the European Green Deal, migration in its many manifestations does not play a prominent role and it should be integrated into the measures of the Green Deal (Berends, 2020). In the Communication on the European Green Deal, just one direct mention is made to the relationship between climate change and migration/displacement, and current plans tend to focus primarily on EU people as constituents, goals, or beneficiaries of the Deal (Barwise, 2020). Many migrants in Europe are at a higher risk of socioeconomic deprivation and are more likely to be subjected to environmental stressors such as poor indoor air quality, heat and cold stress, noise, and air pollution. In addition, migration, as acknowledged by global policy frameworks, may be a development accelerator and an adaptation strategy for families and communities susceptible to climate change's effects. Recognizing the important role that migrants play in the sectors that will be touched by the transition – particularly agriculture and fisheries, energy, and manufacturing and construction – might be of tremendous assistance in advancing the Deal (Barwise, 2020).

Several important components under Green Deal have also been revealed by the European Commission; the European Green Deal Investment Plan; the Just Transition Mechanism; the European Climate Law; the European Climate Pact; the European Industrial Strategy; the Circular Economy Action Plan; the Farm to Fork Strategy; the EU Biodiversity Strategy for 2030, and the EU strategies for energy system integration and hydrogen.

On the other hand, PACE's assessment from the same year was a bit more cautious. It didn't suggest any new rules, but it did point out that lessons could be learned from the IDP protection system. It shows how prevention, emergency help, and the search for long-term solutions all

work together to make the process of adapting to climate change faster. The PACE came to the conclusion that the lack of a legally binding definition of the term "climate refugees" does not mean that measures can't be taken to protect people who have to move because of climate change. In this situation, the Assembly has asked that protections be built into the asylum systems of Council Member States so that people who have to move because of climate change can get "appropriate asylum." The goal of the resolution was to recognize that migration is a way to improve "livelihood resilience" and a good way to deal with climate change.

As part of the larger climate and security nexus, the Council invited the High Representative (HR) to propose, in close dialogue with Member States and in conjunction with the Commission and the European Defence Agency, a set of concrete short-, medium-, and long-term actions mentioning the linkage between security and climate change in the context of the 2020 Conclusions on Security and Defence (EC, 2021). Following the Green Deal and 2020 Conclusions on Security and Defence, as a contribution to addressing the broader climate and security nexus, the European External Action Service (EEAS), in conjunction with the European Commission and the European Defense Agency, developed a specific roadmap of European Climate Pact in November 2020 centered on the difficulties that climate change poses for the defense industry. The roadmap places a significant focus on multilateralism and partnerships, both of which will contribute to the European Union's position as a worldwide leader on climate change concerns. Because climate change is a complex problem with many facets, it is essential for the various players within the EU to take an integrated strategy in order to locate synergies and maximize their effect. If one were to take such an approach, global cooperation and multilateral channels would be more effective means of addressing issues relating to the reduction of risks brought on by climate change and the reduction of environmental pressure. Considering this, EU and its Member States have played a crucial role in pushing the issue of climate security to the forefront of international negotiations. The Climate Change and Defence

Roadmap seeks to broaden the European Union's (EU) network by analyzing the part played by civilian and military CSDP assignments and operational activities in multilateral settings and with partner countries, and by establishing connections to ongoing or emerging activities in a wider climate and security zone. In the European Green Deal that the Commission put forward, climate and environmental problems are also seen as major sources of instability and threats that make other problems worse. The ecological transition will change global economic, trade, and security interests, as well as geopolitics. These problems can lead to wars, lack of food, people being moved, and people being forced to move. All of these factors have close ties to the three interconnected areas covered in this Roadmap, which suggests ways to prevent and deal with climate change. The EU's Common Security and Defense Policy (CSDP) and other initiatives, such as defense R&D, industry, and infrastructure, should be rethought and reworked to account for climate policy consequences (Council of the European Union, 2020).

2020 was also the year in which another initiative on migration was established. The Lives in Dignity (LiD) Grant Facility was established with the intention of efficiently and effectively allocating funds to encourage development-oriented approaches to new, recurring, and chronic displacement crises, with a primary emphasis on early operational involvement. Disaster and climate-related human mobility are one of the five different subject matters that the Facility is mostly concerned with. Because of its adaptable design, the LiD Grant Facility can quickly adapt to changing circumstances and contribute effectively to the three interconnected fields of humanitarian aid, sustainable development, and peaceful coexistence. The LiD Grant Facility will disseminate fund of €24 million to several partners in the implementation process between 2021 and 2025. It serves people from all around Asia, Latin America, and sub-Saharan Africa. Countries affected by the forced displacement situation in Myanmar, as well as countries affected by catastrophe and climate-related displacement, were the primary focus of one of the calls for ideas (Myanmar, Bangladesh, Malaysia and Thailand). With support of UN Office for Project

Services, The Grant Facility's budget, as well as its overall strategic direction and disbursement of cash, are within the purview of the European Commission (EC, 2022). The establishment and distribution of these and similar financial supports and funds, and the support of research and implementation projects applying to these funds is an important indicator that the EU is not only producing solutions in the axis of combating climate change and migration problems not only in discourses but also financially, developing support mechanisms and making efforts to solve the issue with financial investments.

In July 2020, ICMPD's Policy Unit collaborated on recent research that offered suggestions for improving responses to environmental migration and displacement. The Policy Unit of the ICMPD collaborated with the Department of Migration and Globalization at Danube University Krems to produce a report titled "Climate Change and Migration; Legal and policy challenges and responses to environmentally induced migration" examines the global reactions to environmental migration and displacement from a legal and policy perspective. The LIBE Committee of the European Parliament requested this research to inform their efforts to better meet the protection requirements of those who have been displaced or uprooted due to environmental factors throughout Europe and the world. This in-depth research paper highlighted how a recent study that examined the correlation between extreme weather events and asylum applications in the EU and argued that asylum applications will increase in the future due to global warming can be criticized for similar reasons, specifically a simplistic interpretation of correlations found between variables. The study in question was titled "Migration, environment and climate change: Literature review" and was prepared by an independent consultant named Alex Flavell and researchers from the IOM (Flavell, et al. 2020).

The communication paper of the EC on a New Pact on Migration and Asylum dated September 2020, indicated that climate change is one of the significant societal concerns that the world is currently confronted with and stressed that migration would continue to be an important

phenomena and worldwide concern for the near future due to demographic and economic factors, weak governance and conflicts, and climate change. This Pact offers an all-encompassing strategy of a common response, which must include the EU's interactions with third countries to support well-managed legal migration; tackle the reasons of irregular migration; aid refugees living in third countries. With the aim of improving the administration of immigration and asylum applications by establishing a unified European framework, the Pact presented under Migration and Asylum Package emphasized new border procedures, solidarity mechanisms, integration policies, an effective return system regarding migration related security conflicts (EC, 2020).

At the beginning of 2021, on 25 January, EU published the outcome of proceedings of Council conclusions on Climate and Energy Diplomacy. The Council declares again that it is crucial to intensify and influential work on the link between climate and security, especially in support of UN activities, such as work with multilateral organizations and within the UN Security Council, especially with the new unofficial expert committee of UN Security Council Member States on Climate and Security (EC, 2021). It was underlined that the potential for increased coordination with the UN system, NATO, OSCE, and the African Union, as well as with partner nations, must be explored in a way that is consistent with the EU's institutional structure and fully respects the EU's sovereignty in making decisions.

The European Commission released a new climate change adaptation strategy for the European Union on February 24 of that year (2021). This new strategy lays out the measures that must be done by the EU to become climate resilient by 2050 and adapt to the inevitable effects of climate change. The Adaptation Strategy places a primary emphasis on the following four types of adaptations: adaptations that are more intelligent, adaptations that are quicker, adaptations that are more systematic, and adaptations that increase international action to adapt to climate change. This new EU strategy pointed out that EU is and will become more vulnerable

to climate consequences occurring elsewhere due to escalating and spillover effects on commerce and migration. Therefore, the EU and its Member States must prioritize international climate resilience as a question of open strategic autonomy and self-interest, not just solidarity (EC, 2021). That strategy emphasized the importance of adaptation policies, innovative financial systems, and a collective international action for reducing the impacts of climate change as interconnected societies have the common challenges of migration, displacement, and conflict.

On March 2021, EU published ‘Communication on the EU’s humanitarian action: new challenges, same principles’ and specified new and old challenges for humanitarian aid. According to that communication report, the number of people who require assistance from humanitarian organizations is at an all-time high. This is largely due to the resurgence of state-based conflicts, which, when combined with the impact of climate change, environmental degradation, global population growth, and failed governance, has contributed to this unprecedented level of need (EC, 2021). The escalation of violence, the worsening of food shortages, and the displacement of people as a result of climate change and other forms of environmental degradation are all caused by or contributed to by climate change and other forms of environmental degradation. The action gave the statistics to indicate the seriousness of the results of climate change related disasters and stated: “In 2018, around 108 million people required international humanitarian assistance because of storms, floods, droughts, and wildfires. By 2050, over 200 million people could need humanitarian assistance every year...” (EC, 2021). The Commission suggested pre-planning early humanitarian action plans to assist in strengthening the resilience of communities, especially populations who have been forcefully displaced, in locations that are susceptible to hazards associated to climate change and other dangers. EU has proposed as a potential action for the future that it would utilize its chairmanship of the PDD in 2022 to encourage worldwide efforts to safeguard individuals who have been displaced as a result of natural catastrophes and climate change. The Disaster Preparedness

Guidance Note that was published in May 2021 by the Commission Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO) also provides suggestions on how to enhance resilience for displacement, particularly in the situation of disasters. It also invites partners of DG ECHO to act for policy and legislative guidelines on disaster preparedness that also consolidate questions concerning displacement in addition to other risks. The Guidance Note also underlines the shock responsiveness to social protection and preparedness for displacement as a way of dealing with the problems of poverty, being vulnerable, and being left out of society of climate change related refugees and internally displaced persons (EC, DG ECHO, 2021).

Along the axis of climate change and security, the EU took a number of important steps forward, one of which was the publishing, in October 2021, of the ‘Concept for an Integrated Approach on Climate Change and Security’. The EU has provided the following activities it plans to take on the axis of climate change and security in this dossier (EC, 2021):

- *Incorporating aspects of the climate-security nexus into EU tools and policies*
- *Taking an approach to climate change and security that is centered on human rights*
- *Supporting context-specific approaches and local ownership*
- *Ensuring that there is a consistent and well-coordinated strategy at the EU level*
- *Supporting multilateralism and partnerships*
- *Enhancing expertise and monitoring progress on climate change and security*

During 2022, diplomatic efforts to combat climate change continued to be a fundamental aspect of the European Union's (EU) foreign and security policy, and a major priority for the EU and its Member States in their relations with countries and regions beyond Europe. The Council recognizes that climate change, habitat loss, and destruction of the environment pose threats to the promotion and protection of human freedoms and rights and state security, compromise international peace and stability, and frequently exacerbate or increase existing vulnerabilities

and destabilization in its February 2022 document titled "Council conclusions on EU Climate Diplomacy: accelerating the implementation of Glasgow outcomes." The Council applauds the United Nations Security Council and other UN entities for paying more attention to the connection between climate change and international stability (EC, 2022).

The Strategic Compass for Security and Defense, which was approved by the EC's External Action under the Diplomatic Service of the EU on March 21, 2022, remarked that climate change, environmental damage, and natural disasters are a threat multiplier and a consistent cause of instability and conflict, which in turn cause a lot of suffering for people and force them to move (EU, 2022). With this proceeding, EU declared that Climate change, environmental degradation, and natural disasters are all proven drivers of instability and conflict across the globe, from the Sahel to the Amazon to the Arctic region and will have an impact on our security landscape over the next few decades. These factors will have an impact on our security landscape over the next few decades. And added: 'This is evident in the struggle over farmland and water, as well as the use of energy supplies for political ends. Access to essential raw materials, value chain management and sustainability, and economic and political developments brought on by the move away from fossil fuels all pose unique security issues as we work to decarbonize and make our economies more resource-efficient and circular.'

To place an emphasis on climate change as a top priority in EU foreign and security policy, member states of the EU came together on October 17, 2022, to establish an inclusive Group of Friends (GoF) for an ambitious EU climate diplomacy. The GoF said emphatically that after COP27 (held in November 2022), the climate change is the most significant problem facing our generation. The potential for millions of people to lose their homes and their means of livelihood as a direct result of environmental catastrophes makes this a significant danger not just to humankind but also to the stability and safety of the international community (FFO, 2022). They listed their priorities as; strengthening the link between climate and security within EU

foreign policy, promote the external implementation of the EU ‘Green Deal’ which is aimed at speeding up a worldwide energy transition and phasing out fossil fuels in line with the Paris Agreement, and coordinating GoF climate diplomacy and mainstreaming climate action throughout EU foreign and security policy. After COP27 again, European Parliament published a resolution paper titled “UN Climate Change Conference 2022 in Sharm-el-Sheikh, Egypt (COP27)” and presented an ambitious climate policy, emphasizing that EU recalls for climate crisis and expresses deep concerns; whereas IOM estimates that climate change might compel over 200 million people to move; whereas the poorest and most climate-vulnerable areas will see the greatest extent of internal climate migration; and the number of people moving inside their own country due to climate change might be slowed by as much as 80% by 2050 if global action is taken to cut greenhouse gas emissions (EP, 2022).

CONCLUSION

This thesis aims to examine climate change, one of the biggest and most complex problems of the 21st Century for humanity and the universe, and climate change induced migration, which is a natural and consequential impact of climate change.

In addition to the literature on climate change and the environment, the literature on political science and international relations is dominated by the view that climate change induced migration is a threat to security. Based on this view, this thesis tries to investigate the securitization of climate change induced migration and analyze how the European Union, an important region affected by these migration movements, securitizes the issue.

In the first chapter of the thesis, the definition of climate change is given, and the ecological, physical, economic, and social impacts of climate change are explained. In the second chapter, the international actors working on climate change are presented. These institutions and organizations are described in chronological order, and it is explained what important steps have been taken on climate change in the international arena with the initiatives of these institutions. In the last section, to analyze the securitization of climate change induced migration, the concept of human security and the securitization theory of the Copenhagen School are first explained, the developments and the securitization of climate change in international politics in recent years are discussed, and finally the securitization studies within the scope of the European Union are reviewed.

It is a certain fact that climate change is caused by human activities that increase with industrialization. Scientific studies make predictions and warnings that human displacement, which is one of the impacts of climate change, will reach very serious numbers in the coming years. Migration movements due to climate change are mostly realized in regions whose livelihoods and living standards are indexed to nature. These regions are defined as vulnerable regions in the face of the impacts of climate change and are the most affected by catastrophic

environmental disasters due to climate change. People living in these regions start to experience resource scarcity due to weather changes affecting sectors such as agriculture, animal husbandry and fisheries, such as rising water levels and drought due to extreme temperatures, and therefore have to relocate to improve their living conditions. Depending on the circumstances, these displacements sometimes remain within the borders of the country, and sometimes cross borders turning into an international migration mobility. Regardless of their level, these displacements pose a threat to environmental and human security.

The solutions and methods proposed by traditional security approaches do not provide an inclusive solution to the problems created by climate induced migration. These traditional realist and idealist theories cannot contribute to the creation of a sustainable world peace because they operate with a military security approach and interpret threats by focusing on the axis of war and peace. In the light of these questionings, new security approaches emerged after the Cold War, which put humanitarian norms at the center of security efforts. While new problems caused by increasing human activities with globalization have created a new conflict area for the world, this new conflict environment and threats have also been effective in widening the concept of security. The Copenhagen School, pioneered by many researchers, notably Buzan, argues that security should be examined holistically in the context of military, political, economic, social, and environmental sectors. In doing so, it primarily emphasizes ensuring the existence and security of the individual. The fact that climate change is also recognized as a direct threat to the security of individuals and the environment, the idea that factors that threaten the individual and the environment will turn into a security issue that will affect the state and the entire system in the future is recognized.

Population growth and human activities in a globalizing and industrializing world are drivers of climate change. Environmental disasters caused by climate change led to major social and economic challenges for individuals and societies, and these challenges and tensions

constitute one of the greatest security threats of our time. The notion of climate change as a threat multiplier in terms of security due to the problems it poses for humanity has been and continues to be put forward by many international organizations recognized for their scientific studies. With the scientific studies and efforts of international institutions such as the UN, NATO, EU, environmental organizations, non-governmental organizations and independent research groups, states have started to gain awareness of this problem that threatens the world and humanity. The biggest development and binding legal arrangement on this issue is the Paris Agreement on climate change mitigation, adaptation, and financing, which entered into force in 2016 under the United Nations Framework Convention on Climate Change (UNFCCC). The European Union is one of the first and one of the largest economies to ratify the Paris Agreement and put forward action plans with its work on both climate policies and migration policies. It is also one of the leading actors in adaptation and combating climate change. Although not as vulnerable, the European Union is one of the regions most affected and will be affected by climate change-related migration. As the most prominent example, the climate crisis and climate migrants in the Sahel region of Africa are seen as one of the biggest global security threats of the future. It is estimated that the number of climate migrants in this region will exceed 30 million by 2050. Climate migrants in this region, which does not have the economic and social capacity to solve this problem within its own borders, have the potential to forcibly cross borders and move northward. Due to the geographical proximity of Africa and the EU, it is impossible for the EU not to be concerned about this migratory mobility.

Due to both environmental degradation within its own borders and disasters in neighboring countries, the EU is experiencing both internal displacement and external migration. The EU's struggle against climate change and how it securitizes climate induced migration is the main research topic of this thesis.

With the climate policies started to develop in the 1990s, the EU started to reduce carbon emissions and set energy targets for itself. The Council of Europe has prepared many draft laws and reports on this issue. In 2000, it signed the Kyoto Protocol and continued its efforts to become a leader on this issue. The EU has also played a lead role in the negotiations on the Paris Agreement, which focuses on climate protection, adaptation to the consequences of climate change and financial solutions. It then developed its own Green Deal policy and adopted the Climate Act. In recent years, the EU has been addressing climate change and climate induced migration as an international security issue and has given extensive coverage to the issue in its domestic and foreign policy work. The EU has also emphasized the threats posed by social, economic, and environmental crises in African countries and has given a special place to security in its foreign policy. As can be understood from the studies of the Council of Europe, which constitute the main sources of this thesis, the conclusion of this thesis is that the EU is trying to securitize the issue of climate change in every aspect. Whether these securitization efforts are sufficient or not is a matter of debate.

In summary, this thesis has argued that the issue should be addressed within the sectors of the Copenhagen School's securitization theory, namely societal and environmental, and that countries should incorporate an expanded understanding of security into their political agendas as suggested by this theory. The work of the European Union as a major regional and political actor on this issue has proven that climate induced migration has been seen as a security threat within the Union (with speech acts and acceptance by audiences) and that the securitization within the EU can be pronounced as an ongoing debate. The EU recognizes climate change as a threat multiplier and migratory driver, but its actions seem to be more private and internal. The securitization actions in the Union politicizes climate migration and promotes public policy on climate refugees but it has no legal definition or legislation. Fortunately, Council Conclusions, Parliament actions and global security strategy documents operate a direction and guidance on

securitization actions to adopt. Since the beginning of 2000s, gaining momentum with the Paris Agreement, the European Union has been actively engaging in securitization activities since the turn of the millennium.

The securitization of climate change induced migration needs a transdisciplinary holistic approach to transcend through the politicization of the issue, collectively.

There is still a need to fill the gap in the political science and international relations literature where climate change, migration and security have not been studied in sufficient depth on the same axis. In addition, for a better world, states should recognize that the problems that they previously characterized as soft politics now have the capacity to cause bigger problems and develop and implement policies to combat climate change in a way that covers all humanity and the entire ecology.

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