



# THE IMPACT OF CLIMATE CHANGE ON INTERNATIONAL SECURITY

HOCINE SALEM<sup>1</sup>

<sup>1</sup>University of Mohamed Boudiaf M'sila, Laboratory: Communication and Society (Algeria).

The E-mail Author: hocine.salem@univ-msila.dz

Received: 16/10/2024

Published: 04/04/2025

**Abstract:** *There is no doubt that change is God's law in His creation, and the international community has witnessed several changes in all economic, political, social and cultural fields, so that the areas and borders of countries have changed over the centuries. One of the reasons for this change is the climate. Recently, the issue of climate change has become the main concern of all researchers and specialists, especially those in international public law, and through the efforts made by the United Nations. The goal of this was to protect the international community from the effects of climate change and the unexpected results that resulted from it, which led to the threat to international peace and security. This research paper aims to identify the most important causes of climate change, and to attempt to highlight the role of international efforts in formulating and controlling effective agreements binding on all countries that would reduce greenhouse gases that cause climate change, and to highlight and determine the impact of climate change on international security and political and economic stability of countries. Through my vision and interest in this sensitive and important topic in the daily life of man and his surroundings, and his security, and in light of this study, the most important ideas of researchers and specialists in this field are highlighted, and that this topic deserves research, discussion and analysis because it is related to man and his activities and the environmental changes surrounding him, and to international security and peace, so a number of questions arise on this topic, including: What do we mean by climate change? What are its causes? What are its effects and risks on international security?*

**Keywords:** *Climate, Change, International Security, Impact.*

## INTRODUCTION:

The threats and risks of climate change to international security and global stability are becoming more evident, prompting countries worldwide to recognize the challenges of global warming and environmental degradation. As a result, addressing climate-related risks has become a priority in national security strategies. Concerns are growing that climate change could trigger conflicts, escalate the threat of nuclear war, and contribute to the rise of terrorism and violence on a global scale. Additionally, the number of displaced and forcibly displaced individuals continues to rise due to these environmental challenges.

The ocean and atmospheric system that regulates the world's climate is highly susceptible to adverse changes. For a long time, despite widespread awareness of the severity of these changes, global warming was not taken seriously—except by a few who foresaw its potential threat. For the majority, it was viewed primarily as an environmental and economic issue. Notably, the concept of climate security has emerged as a recognition that global warming carries significant international and national security implications. The most severe impacts of climate change are expected to affect countries that are too poor or fragile to respond and adapt effectively. To mitigate the major geopolitical and human security consequences, climate change must be elevated beyond scientific discourse and treated as a strategic challenge requiring a coordinated global response built on broad international consensus.

The challenges of climate change are fundamentally challenges of sustainable development, particularly as nations compete to secure economic, military, food, energy, and water resources on a national scale. The world now faces the stark reality that no nation's security can be considered in isolation from others, and climate change is a direct consequence of the relentless pursuit of national interests. The crisis has been further intensified by the rapid economic growth of Asian nations, particularly China, which has the world's fastest-growing economy, rising military expenditures, and some of the most volatile geopolitical hotspots. As highlighted in the 2015 Human Development Report, China is poised to shape the future of globalization and play a pivotal role in addressing climate change.

## Objective of the Study

This study aims to assess the impact of climate change on international security. It seeks to analyze the potential effects of climate change on political and economic stability while also proposing strategies to enhance international security in response to climate-related challenges. Given its direct implications for human societies and global stability, this topic warrants thorough research, discussion, and analysis.

## Research Problem

In this context, the study addresses the following central question: *To what extent does climate change influence international security, as well as political and economic stability?*

From this main question, several sub-questions emerge:

- What is the concept of climate change, and what are its primary causes?
- How does climate change affect the environment and public health?
- What are the economic consequences of climate change?
- In what ways does climate change impact international security?

## Hypotheses

### General Hypothesis:

Climate change exacerbates political and economic tensions, thereby affecting international security.

This general hypothesis gives rise to the following specific hypotheses:

- Climate change contributes to increased migration and displacement, which in turn destabilizes political and economic conditions.
- Climate change intensifies competition for natural resources, heightening global security risks.

## Research methodology:

This study employs a descriptive analytical approach to examine the phenomenon of climate change, its accelerating progression, and its implications for international security, as well as the political and economic stability of nations. By describing, interpreting, and analyzing the phenomenon, the study seeks to derive meaningful conclusions regarding its impact and potential mitigation strategies.

## Study Structure

### Chapter One: Climate Change and Its Effects

- Section 1: Definition of Climate Change
- Section 2: Causes of Climate Change
- Section 3: Effects of Climate Change on the Environment and Public Health
- Section 4: Economic Consequences of Climate Change

### Chapter Two: International Security and the Impact of Climate Change

- Section 1: Definition of International Security
- Section 2: The Impact of Climate Change on International Security
- Section 3: United Nations Efforts to Safeguard International Security from Climate Change
- Section 4: Proposed Solutions for Addressing Climate Change

## CHAPTER ONE: CLIMATE CHANGE AND ITS EFFECTS

### Section one: Definition of climate change

Recent research trends have increasingly focused on climate change at both regional and international levels. The term "change" denotes a significant shift in a particular direction over an extended period, often spanning decades. The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as: *"A direct or indirect consequence of human activity that alters the composition of the global atmosphere and is observed alongside natural climate fluctuations."*<sup>1</sup>

Climate change refers to long-term variations in weather patterns and temperature levels. These changes can occur naturally, such as through fluctuations in the solar cycle, or they can be primarily driven by human activities. The burning of fossil fuels—such as coal, oil, and natural gas—releases greenhouse gases into the atmosphere, creating a thermal blanket around the Earth. This process leads to global warming, contributing to rising temperatures and widespread climatic disruptions.<sup>2</sup>

Hayes describes climate change as a "creeping catastrophe," highlighting the intrinsic link between temperature fluctuations and broader climatic transformations. The definitions previously mentioned suggest that climate changes can result from natural processes, such as volcanic activity, or human-induced factors, including alterations in radiation intensity due to industrial and technological advancements. From this perspective, climate change encompasses both natural and anthropogenic influences that disrupt established climatic conditions. These shifts give rise to profound environmental, social, political, economic, and security implications, the full extent of which remains difficult to predict or quantify.<sup>3</sup>

#### **Section two: Causes of climate change:**

The causes of climate change can be categorized into natural and anthropogenic (human-induced) factors. Natural causes include variations in the Earth's orbit around the Sun, which alter the amount of solar radiation reaching the planet, significantly influencing climate patterns. Additionally, volcanic eruptions contribute to natural climate change by releasing large quantities of gases and particles into the atmosphere, which can temporarily alter global temperatures.

Anthropogenic causes primarily stem from human activities that disrupt the atmospheric balance. Activities such as deforestation, burning fossil fuels (coal, oil, and natural gas), and excessive reliance on traditional energy sources contribute to rising carbon dioxide levels. This accumulation of greenhouse gases intensifies the global warming phenomenon, leading to long-term climatic shifts.

Since the late 19th century, atmospheric imbalances have become increasingly evident, largely due to the Industrial Revolution and subsequent technological advancements. These human-induced factors have played a pivotal role in accelerating climate change, with far-reaching environmental and societal consequences.<sup>4</sup>

In 1920, the Yugoslav geophysicist Milutin Milankovitch was the first to propose a theory suggesting that recent climate changes on Earth are linked to variations in the amount of solar radiation the planet receives. Small shifts in the Earth's axis of rotation have altered the seasonal distribution of solar radiation, contributing to past climatic fluctuations, including the occurrence of ice ages and the interglacial periods between them.

Among the most significant contributors to climate change is carbon dioxide (CO<sub>2</sub>), which accounts for over 70% of greenhouse gas emissions resulting from human activities, as recorded in 1996. Another major natural factor is methane (CH<sub>4</sub>), which is released through the anaerobic decomposition of organic materials, such as waste in landfills. Additionally, ruminant animals like sheep and cattle produce methane as a byproduct of digestion.

Nitrous oxide (N<sub>2</sub>O) is another potent greenhouse gas, primarily emitted from burning fossil fuels and vehicle exhausts. Agricultural activities, such as plowing fields, also release significant amounts of nitrous oxide into the atmosphere. Collectively, these gases contribute to the intensification of climate change, exacerbating its environmental and societal impacts.<sup>5</sup>

#### **Section Three: the effects of climate change on the environment and public health**

The effects of climate change are not uniform across the Earth's surface; they vary based on the specific characteristics and vulnerabilities of ecosystems in different regions. Understanding and addressing climate change and its impacts are crucial, particularly in the face of its growing global challenges.

### 3.1. Effects of Climate Change on the Environment

- **Rising Temperatures** lead to shifts in weather patterns, which have a direct impact on both plant and animal species, altering ecosystems and biodiversity.
- **Changes in Rainfall Patterns** result in more frequent and intense floods and droughts, which disrupt environmental stability and have detrimental effects on agriculture.
- **Rising Sea Levels** cause coastal areas to flood, threatening infrastructure, submerging land, and destroying critical natural habitats.
- **Shifts in Wind Patterns** affect weather conditions and can have significant consequences on agricultural productivity and ecological balance.
- **Coral Reef Changes**—such as the increase in water temperatures—cause coral bleaching, severely impacting marine biodiversity and the health of ocean ecosystems.<sup>6</sup>

Climate change has led to significant alterations in various environmental patterns, including shifts in rainfall rates, ice formation, snowmelt timing, and soil freezing frequency. These changes have serious implications for the ecosystems of both aquatic and terrestrial life in mountainous regions and their surrounding plains. Additionally, climate change has influenced the behavior of various animal species, affecting activities such as migration schedules, breeding patterns, and other critical behaviors. Between **1971 and 1999**, the geographical range of many tropical bird species shifted to higher altitudes due to climate fluctuations, particularly **global warming**. This migration towards higher elevations is a direct result of changing climatic conditions, highlighting the profound impact of climate change on biodiversity and species distribution.<sup>7</sup>

### 3.2. Impact of environmental change on public health:

The impact of climate change on public health is as critical as its environmental consequences. Environmental health plays a fundamental role in human well-being and development. Air pollution, which is one of the most severe health threats, is responsible for approximately seven million deaths annually. Despite advancements in addressing public health risks, such as improving access to clean drinking water, a significant portion of the global population—nearly half—continues to suffer from unsafe water, inadequate sanitation, and poor hygiene, contributing to a rising number of preventable deaths each year.

Although there have been efforts to mitigate traditional public health risks, including those associated with water safety, **climate change** continues to present a substantial and growing threat to public health, exacerbating these existing challenges and introducing new health risks.<sup>8</sup>

It is noted that climate change is the greatest health threat facing humanity. Its impact on health is reflected in air pollution, diseases, extreme weather events, mental health stress, and an increase in hunger and malnutrition in areas where people are unable to grow crops or find sufficient food. Extreme weather events are also contributing to rising deaths, straining healthcare systems that are struggling to keep pace.<sup>9</sup>

There is no doubt that both current and anticipated future climate change will have a significant impact on essential health needs, including clean water, air, and safe food supplies for both present and future generations. Climate change introduces new challenges in addressing infectious diseases and illnesses that are highly sensitive to variations in temperature, rainfall, and humidity, such as cholera, diarrheal diseases, and malaria. The health effects of these climate changes will be most severe for the elderly and individuals with chronic conditions, while children and the impoverished are also particularly vulnerable.<sup>10</sup>

### *Section Four: The effects of climate change on the economy:*

Environmental expert Tahseen Shaala highlights that climate change will significantly affect the global economy due to the growing frequency and intensity of climate-related disasters, such as hurricanes. One example is Hurricane Daniel, which had a devastating impact on Greece, resulting in financial losses estimated in the millions. This same hurricane also caused widespread destruction in Libya.<sup>11</sup>

The effects of climate change on developed countries, including those in high-latitude regions, may bring certain benefits, such as increased agricultural production, lower mortality rates, and a boost in tourism activity, particularly if temperatures rise by 2-3 degrees Celsius. However, in the United States, it is anticipated that hurricane wind speeds will increase by 5-10% annually, leading to average annual losses of approximately 0.13% of the gross domestic product. Energy remains the fastest-growing source of emissions, with emissions increasing at a rate of 2.2% annually between 1990 and 2002. This trend is expected to quadruple by 2050. Similarly, emissions from agriculture, including non-carbon emissions, are projected to double in the future, while emissions from transportation are expected to more than double in the coming years.<sup>12</sup>

Numerous studies and research are being conducted to evaluate the impact of climate change, a highly complex process with significant uncertainties regarding future global temperature trends. Economic researchers are examining how climate change will affect the global economy, with expectations that it will impede global growth and potentially result in a decline in annual GDP growth. Researchers also highlight that developing economies will be disproportionately affected by these changes.

Key climate impacts on the global economy include:

- **Growth and inflation** will be influenced by rising temperatures, which will negatively affect global economic activity over the long term.
- **Global warming** will increase the frequency and intensity of extreme weather events, leading to property and infrastructure damage, as seen with **Hurricane Sandy** in 2012, which devastated large parts of New York.
- Climate change will threaten **food security**, contributing to the spread of **epidemics and infectious diseases**, further exacerbating disability and social unrest.
- **Tourism** will be affected by shifts in weather patterns, which will have significant implications for both the tourism industry and the broader economy.<sup>13</sup>

## CHAPTER TWO: INTERNATIONAL SECURITY AND THE IMPACT OF CLIMATE CHANGE ON IT

### *Section one: definition of international security*

The term security has been widely discussed since the end of World War II, with numerous studies emerging to explore ways to achieve security and prevent war. Human security goes beyond preserving the life of the individual; it also aims to ensure a dignified existence, encompassing freedom, equality, and equal opportunity. Moreover, it involves protecting individuals' basic freedoms and safeguarding them from various threats and harsh conditions.<sup>14</sup>

The United Nations has recognized climate change as a threat to international peace and security. Its impacts on international security are profound, leading to food resource scarcity, widespread drought, and desertification. These effects contribute to the escalation of both internal and international conflicts, as well as the rise of terrorist groups. There is a strong interconnection between climate change and international security, with each influencing the other. One significant consequence of climate change is its ability to cross borders, affecting various economic, social, and cultural sectors.

International dynamics have played a role in reshaping the concept of security, which is often defined as freedom from threat or the absence of fear. The most accurate definition of security can be found in the Quran, in Surah Quraysh, where Allah states: "So let them worship this House, which has fed them against hunger and made them safe from fear." In this context, security refers to the absence of threats that disrupt stability, including those from political, economic, and social sources, among others.<sup>15</sup>

International security, in its broadest sense, has gained widespread international recognition. The Security Council views any threat to international peace and security as a threat to humanity itself. For instance, the Ebola epidemic represented a significant threat to global peace and security, prompting the Council, in collaboration with the World Health Organization, to launch the first-ever UN public health mission to provide humanitarian assistance in West Africa. The Security Council has also addressed issues such as the water crisis, all in an effort to safeguard human security and the security of nations. Some define international security as the security provided by international organizations with the primary goal of maintaining global peace and security. From this perspective, international security in its modern form can be defined as the security supported and protected by both international and regional organizations, aimed at shielding countries from both immediate and future threats that jeopardize humanity and global stability.

### **What Do We Mean by Climate?**

Climate refers to the overall set of conditions and factors that dominate the Earth's natural environment, with the sun being the sole energy source regulating the Earth's climate. Climate change is defined as the presence of abnormalities in normal weather conditions, such as temperature fluctuations, shifts in wind patterns, and changes in rainfall. These disruptions lead to significant alterations in biological systems—human, plant, and animal—and occur over relatively short periods of time.<sup>16</sup>

### ***Section Two: Climate change and its impact on international security***

There are many different dimensions of international security, including economic, food, health, and environmental dimensions. We will attempt to explain each of these dimensions separately, as follows:

**2.1. The economic security dimension:** After the end of the Cold War and the decline of global military and political polarization, **economic issues** became a priority for nations, as they are seen as crucial tasks for governance and an urgent necessity to meet the needs and demands of populations. This shift has become especially pressing given the lack of adequate income or fair returns from work. The issue is compounded by the fact that only a quarter of the global population enjoys economic security. **Ongoing inflation, advancing technologies, and market mechanisms** have further exacerbated these challenges, with wages stagnating or failing to increase, particularly in developing countries.

In addition, the global population has faced widespread unemployment due to various factors, contributing to growing political and social tensions, especially in developing nations. In these regions, more than a third of the population lives below the poverty line, and it is expected that poverty will increase under current conditions and the expansion of the market system.

One of the most severe consequences of economic insecurity is the lack of adequate housing or shelter. This issue is not confined to poor countries; even developed nations have been affected. The problem has been further exacerbated by the increasing numbers of refugees, displaced persons, and individuals forced from their homes due to wars and armed conflicts.

### **2.2. Food security dimension:**

**Food Security:** Food security refers to the ability to provide sufficient, nutritious food for all individuals at all times, ensuring both the material and economic means to obtain essential food items. The issue extends beyond food availability to include its distribution and individuals' purchasing power. One of the key threats to national systems, particularly in many African countries, is the hunger crisis, which affects approximately **800 million** people worldwide. Therefore, the challenge is not merely food availability, but the **ability** of individuals to access food and the **quality** of that food.

**Health Security:** Health security involves ensuring access to affordable health services for all individuals, either through health insurance or protection from diseases. Around 17 million deaths annually are attributed to infectious diseases, and malnutrition and contaminated water also pose significant threats to health, especially in both developing and industrialized nations. There are notable disparities in healthcare access and spending across countries. For example, in the mid-1990s, South Korea spent \$377 per person on



healthcare annually, while Bangladesh spent only \$7. The presence of global health threats such as AIDS and hepatitis, coupled with a lack of health awareness, exacerbates the health risks for many populations.

**Environmental Security:** Environmental security is critical on both a global and local scale, as it directly impacts human well-being. Threats such as water scarcity and air pollution in industrialized nations are serious concerns. Cities like Los Angeles emit around 3,400 tons of pollutants annually, and London produces 1,200 tons. These emissions contribute to the depletion of the ozone layer, driving global warming and resulting in the destruction of forests across the globe. Environmental threats are unique in that they tend to accumulate and persist over time, often due to human neglect in safeguarding the environment for the sake of health. While industrialized countries contribute the most waste, developing countries are often blamed for causing significant environmental damage.<sup>17</sup>

***Section Three: United Nations efforts to protect international security from the effects of climate change.***

Due to the unforeseen impacts of climate change, countries and the international community, through the **United Nations**, which aims to safeguard international peace and security from various threats, have made concerted efforts to urge member states to prepare an international agreement. This agreement would establish binding rules for limiting or reducing the effects of climate change. Some key agreements include:

**United Nations Framework Convention on Climate Change (1992):** This agreement serves as the foundational framework for countries to address climate change. One of its main objectives is to limit the increase in greenhouse gas concentrations, which contribute to climate change. It encompasses several principles aimed at achieving international security, with a strong focus on **common but differentiated responsibilities**. According to this principle, developed countries bear a greater responsibility in assisting developing nations to address the impacts of climate change.

Key principles of the agreement emphasize **international security, equality, and justice** among nations. Binding provisions for state parties include:

- The **transfer of climate-friendly technologies** through cooperation between parties.
- **Financial support** from developed countries to help developing nations overcome economic and health crises triggered by climate change.
- The agreement also aims to protect international security through collaboration between countries and environmental conservation efforts.

**Intergovernmental Panel on Climate Change (IPCC):** Founded in 1988, the IPCC's purpose is to provide comprehensive assessments of climate change. It reports on the influence of human activities on the warming of the atmosphere, oceans, and land, highlighting rapid and widespread changes across the **atmosphere, oceans, cryosphere, and biosphere**. Notable findings from the IPCC's reports include:

- The current state of many climate systems and the magnitude of recent changes are **unprecedented** over several centuries, and potentially even millennia.
- An estimated **3.3 to 3.6 billion people** live in areas highly vulnerable to climate change.
- Vulnerability varies significantly between regions, and both ecosystems and populations are differently affected by climate change.
- If global warming exceeds **1.5°C** in the coming decades, **human and natural systems** will face **severe risks**, compared to maintaining a temperature rise below 1.5°C.<sup>18</sup>

One of the key conclusions in the report is that human activity is a primary driver of climate change. It was found that human actions are responsible for **90%** of the global climate deterioration. The report stressed the importance of limiting global warming, highlighting that doing so would not only benefit the environment but also improve livelihoods and create new opportunities. However, achieving this goal requires collective efforts from all sectors of society, both locally and internationally.<sup>19</sup>

**C- United Nations Summit on the Environment (Earth Summit ):**

This summit was held in Rio de Janeiro, Brazil, in 1992. Three major international environmental agreements were negotiated during this summit: the Convention on Biological Diversity, the Convention on Climate Change, and the Convention to Combat Desertification. The parties to the convention agreed unanimously to regularly outline and formulate future policy guidelines.

**D- Johannesburg Summit on Sustainable Development:**

This summit was held in 2002 to define a new philosophy that could inspire economic growth. The growth process must not neglect social and economic needs and their balance, in addition to the process of protecting the environment.

**e- Kyoto Protocol Agreement:**

This protocol builds upon the Earth Summit Agreement, where member states pledged to limit greenhouse gas emissions to enable the ecosystem to adapt naturally to climate changes and to prevent risks to food production. Adopted in 1997, the agreement saw industrially advanced countries commit to reducing harmful gas emissions between 2008 and 2012.<sup>20</sup>

The Convention on the Prohibition of Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water: This agreement aims to prevent states from using all nuclear weapons and prohibit their use in the atmosphere, space, and underwater, whether for military or peaceful tests. This is to protect the environment from the effects of this radiation when it is used. There is no doubt that the latter leads to climate change, because when the air is polluted with these nuclear materials, it leads to a change in the physical composition of the air, due to its mixing with radioactive elements, which makes it difficult to control the intensity of their effect later.

**Q- International Convention to Combat Desertification:**

One of the key objectives of this agreement is to develop an integrated strategy for international and regional cooperation aimed at achieving sustainable development, improving food security, and reducing forced migration. This is particularly important for countries suffering from drought and desertification, especially in Africa, which is among the most affected by these phenomena, largely driven by climate change.<sup>21</sup>

***Section Four: Suggestions for solving the problem of climate change***

Fossil fuels, including oil, gas, and coal, are extracted from deep underground, and their extraction and combustion significantly exacerbate climate change. To address this, the following actions should be prioritized:

1. **Investing in Renewable Energy:** Renewable energy sources such as solar, wind, wave, tidal, and geothermal offer environmentally friendly alternatives to fossil fuels, helping to reduce reliance on carbon-emitting energy production.
2. **Reducing the Use of Vehicles, Aircraft, and Ships:** Shifting away from gasoline and diesel-powered transportation in favor of electric cars, public transit, cycling, and other sustainable alternatives is essential. Notably, aircraft are a significant source of greenhouse gas emissions, as these gases are released at high altitudes, where their impact is particularly harmful.
3. **Improving Agriculture and Promoting Plant-Based Diets:** Encouraging a transition from meat and dairy consumption to plant-based diets can reduce the environmental footprint. Support for farmers and companies to adopt more sustainable agricultural practices and provide a wider range of plant-based options will facilitate this shift.
4. **Protecting Forests:** Forests play a crucial role in mitigating climate change. Strong legal frameworks are necessary to protect forests from exploitation and ensure their role in carbon sequestration is preserved.



5. **Reducing Food Waste:** Approximately 8% of global human-caused greenhouse gas emissions are linked to food waste, which occurs in both low- and high-income settings. Solutions include halving per capita food waste, enhancing infrastructure for storing, processing, and transporting food in low-income countries, and ensuring that surplus food is properly redistributed.<sup>22</sup>

#### CONCLUSION:

Climate change represents one of the most significant challenges to both the environment and international security in the 21st century. The political, social, and economic tensions arising from climate change are increasingly destabilizing, with far-reaching consequences for international peace and security. Some of the major impacts include:

- **Impact on International Security:** As global changes unfold, threats to human life increase, highlighting the vulnerability of international security to these shifts, particularly when they occur across borders.
- **Human Activity as a Key Cause:** The primary driver of climate change is human activity, particularly industrial practices that contribute to global warming, which exacerbates the planet's environmental challenges.
- **Resource-Driven Conflicts:** Rising tensions and armed conflicts, particularly over access to natural resources, are becoming more frequent due to climate change, which directly undermines global stability and security.
- **Health and Social Stability:** Climate change's impact on public health further undermines social stability, exacerbating the risks to international security.
- **Historical Link to Armed Conflict:** The connection between climate change and armed conflict has existed for centuries, but in the 21st century—an era of technological advancement—the use of harmful weapons has worsened the global environment, affecting not only the belligerent parties but also the international community at large.
- **International Action:** The growing risks of climate change have spurred stronger international efforts to address these threats. Countries are now required to develop and enforce domestic strategies aimed at reducing greenhouse gas emissions, contributing to a global effort to mitigate climate change.
- **Climate Justice:** International agreements have focused on implementing climate justice, emphasizing principles of equality, transparency, and shared responsibility. Developed nations are obligated to provide financial assistance to those countries most affected by climate change.
- **Food Security and Stability:** Climate change's negative impacts on food security contribute to disruptions in human health, economic stability, and social well-being, further destabilizing countries and regions.
- **Role of International Conferences:** International conferences play a critical role in formulating agreements to combat climate change. These conferences serve as platforms for global cooperation, aiming to protect the climate, preserve the environment, and achieve sustainable development, particularly in developing nations.

In conclusion, urgent and effective measures must be taken to address climate change and its impact on international security, as well as on social and economic stability. It is essential for all countries and international organizations to intensify efforts collectively to meet this challenge.

#### LIST OF REFERENCES

- [1] Abdelhakim Yanoud, *Climate Change and Sustainable Development*, 1st ed., Zayed International Foundation for the Environment, United Arab Emirates, 2022.
- [2] Ali Mansour, *Climate Change, Global Warming and Their Impact on the Environment*, Al-Manara University Journal, Vol. 3, No. 1, 2023.

- [3] *Climate change, United Nations, more details available at the following link: <https://www.un.org/ar/global-issues/climate-change>.*
- [4] *Climate Crisis Exacerbates Global Economic Loss Bill, November 23, 2023. More details available at the following link: <https://www.snabusiness.com/article/1672477>.*
- [5] *Ezza Abdel Fattah Mohamed Okasha, Climate Change and its Impact on International Security and its Impact, Journal of the College of Islamic and Arabic Studies for Girls, Damanhour, Issue 8, Issue 4, Volume 1, 2023.*
- [6] *Hind Fouad, Human Security: Concept, Relationships, and Dimensions, Al-Jananiah National Journal, Volume 63, Issue 2, 2020.*
- [7] *International Islamic Charitable Organization, Climate Change Situation Assessment: Manifestations, Impacts, and Solution Scenarios, March 2023, International Center for Charitable Studies.*
- [8] *Khaled Al-Sayed Hassan, Climate Change and the Global Goals for Sustainable Development, 1st ed., Jazirat Al-Ward Library, Cairo 2021.*
- [9] *M.M. Drid Rasmi Muhammad Abd, Climate Change and Its Impact on the Environment: Challenges and Opportunities in Confronting Planetary Transformation, 03-09-2024, more details available at the following link: [https://www.uoanbar.edu.iq/AppliedScincesHeet/News\\_Details.php?ID=1067](https://www.uoanbar.edu.iq/AppliedScincesHeet/News_Details.php?ID=1067)*
- [10] *Mahmoud Mohamed Fawaz, Sarhan Ahmed Abdel Latif Suleiman, The Egyptian Journal of Economics and Agriculture, 25th Edition, Issue 3, September 2021.*
- [11] *Mohammad Naaman Noufal, Climate Change Economics (Impacts and Policies), Expert Meeting Series "B", Arab Planning Institute, Kuwait, Issue 24, 2007.*
- [12] *Sameh El-Sherif, The Impact of Climate Change on Human Security in the Asian Continent, Asian Horizons Magazine, Issue 10, September 2022.*
- [13] *Shadha Khalil, Climate Change and Its Impact on the Global Economy, 2021: <https://rawabetcenter.com/archives/129721>.*
- [14] *Solutions to the climate change problem, more details are available at the following link: <https://mawdooe.com>.*
- [15] *World Health Organization, Seventy-second World Health Assembly, Item 11.6 of the Provisional Agenda, April 2019.*

## Footnotes

- <sup>1</sup> Sameh El-Sherif, The Impact of Climate Change on Human Security in the Asian Continent, Asian Horizons Magazine, Issue 10, September 2022, pp. 42-43.
- <sup>2</sup> International Islamic Charitable Organization, Climate Change Situation Assessment: Manifestations, Impacts, and Solution Scenarios, March 2023, International Center for Charitable Studies.
- <sup>3</sup> Sameh Al-Sherif, previously mentioned reference, p. 44.
- <sup>4</sup> Khaled Al-Sayed Hassan, Climate Change and the Global Goals for Sustainable Development, 1st ed., Jazirat Al-Ward Library, Cairo 2021, p. 13.
- <sup>5</sup> Abdelhakim Yanoud, Climate Change and Sustainable Development, 1st ed., Zayed International Foundation for the Environment, United Arab Emirates, 2022, pp. 155-156-160-161.
- <sup>6</sup> M.M. Drid Rasmi Muhammad Abd, Climate Change and Its Impact on the Environment: Challenges and Opportunities in Confronting Planetary Transformation, 03-09-2024, more details available at the following link: [https://www.uoanbar.edu.iq/AppliedScincesHeet/News\\_Details.php?ID=1067](https://www.uoanbar.edu.iq/AppliedScincesHeet/News_Details.php?ID=1067)
- <sup>7</sup> Ali Mansour, Climate Change, Global Warming and Their Impact on the Environment, Al-Manara University Journal, Vol. 3, No. 1, 2023, p. 5.
- <sup>8</sup> World Health Organization, Seventy-second World Health Assembly, Item 11.6 of the Provisional Agenda, April 2019, pp. 2-3.
- <sup>9</sup> International Islamic Charitable Organization, Climate Change Situation Assessment: Manifestations, Impacts, and Solution Scenarios, op. cit., p. 14.
- <sup>10</sup> Khaled Al-Sayed Hassan, previously cited reference, pp. 99-100.
- <sup>11</sup> Climate Crisis Exacerbates Global Economic Loss Bill, November 23, 2023. More details available at the following link: <https://www.snabusiness.com/article/1672477>, Date of site visit: 01-03-2025.
- <sup>12</sup> Mohammad Naaman Noufal, Climate Change Economics (Impacts and Policies), Expert Meeting Series "B", Arab Planning Institute, Kuwait, Issue 24, 2007, pp: 16-19-20.

- 
- <sup>13</sup> Shadha Khalil, Climate Change and Its Impact on the Global Economy, 2021: <https://rawabetcenter.com/archives/129721>, date of website visit: 01-01-2025.
- <sup>14</sup> Sameh Al-Sherif, previously mentioned reference, pp. 48-49.
- <sup>15</sup> Ezza Abdel Fattah Mohamed Okasha, Climate Change and its Impact on International Security and its Impact, Journal of the College of Islamic and Arabic Studies for Girls, Damanhour, Issue 8, Issue 4, Volume 1, 2023, pp. 783-786.
- <sup>16</sup> The same reference, pp. 787-788.
- <sup>17</sup> Hind Fouad, Human Security: Concept, Relationships, and Dimensions, Al-Jananiah National Journal, Volume 63, Issue 2, 2020, pp. 14-15-16-17-19.
- <sup>18</sup> Climate change, United Nations, more details available at the following link: <https://www.un.org/ar/global-issues/climate-change>, date of visit to the site: 05-01-2025.
- <sup>19</sup> Ezzat Abdel Fattah Muhammad Okasha, previously mentioned reference, pp. 816-817.
- <sup>20</sup> Mahmoud Mohamed Fawaz, Sarhan Ahmed Abdel Latif Suleiman, The Egyptian Journal of Economics and Agriculture, 25th Edition, Issue 3, September 2021, p. 1191.
- <sup>21</sup> Ezzat Abdel Fattah Muhammad Okasha, Ibid, pp . 831-833.
- <sup>22</sup> Solutions to the climate change problem, more details are available at the following link: <https://mawdooe.com>, date of site visit: 01-21-2025.