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**HUMAN SECURITY AND CLIMATE CHANGE:
RESEARCH FROM RESILIENCE PERSPECTIVE**

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Abstract:

According to the recent Intergovernmental Panel on Climate Change (IPCC) reports, human security has been exposed to threats such as food insecurity and forced migration as climate change continues at this pace. Therefore, being a threat multiplier, climate change necessitates multilayered precautions to be taken on a global scale. Herein, resilience research offers a useful application-based framework for climate-related hazards. The concept is defined as the development of the ability to act, resist, and adapt comfortably against crises, extraordinary events, and man-made or nature-related disasters. Accordingly, this study aims to examine the relationship between human security and climate change while discussing the potential precautions from a resilience-based perspective.

Key words: climate change, disaster resilience, human security, risk management.

1. Introduction

Being a relatively new concept, human security refers to safety from threats related to “want” (i.e. lack of water, food, and shelter) and “fear” (i.e. deteriorating social order). Climate change and its associated risks have increasingly been impacting human security on a global scale. Storms, floods, sea-level rise, and droughts have forced more than 20 million people to abandon their living places [1]. That’s why climate change is seen as a threat multiplier. It is also expected that climate change will intensify resource scarcity and worsen current environmental, economic, and social factors.

Based on recent developments, this study examines the relationship between human security and climate change from disaster resilience perspective. Therefore, this study aims

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to discuss the potential precautions for ensuring human security during disasters from a resilience-based perspective.

2. The Relationship between Climate Change and Human Security

The definition of human security differs according to different disciplines. That's why this study focuses on the definition in the context of climate change in which individuals are protected and yet there are threats to livelihoods, political stability, and culture. There are specific dimensions of human security such as food security, livelihoods, public health and well-being, and regional perspectives [2].

The United Nations (UN) defines human security as security against chronic threats such as hunger, disease, and oppression, as well as protection against sudden and negative disruptions at home, work environments, or daily life patterns [3]. The concept has been placed on the priority agenda by the UN Security Council since 2017. Besides, the Commission on Human Security was established in 2011. They started to organize training to raise awareness on this issue and encourage the participation of all its stakeholders and the human security concept has become a part of international politics providing a human-centered perspective with a focus on protecting individuals. Human security has four essential characteristics, and they can be seen in Figure 1 below.

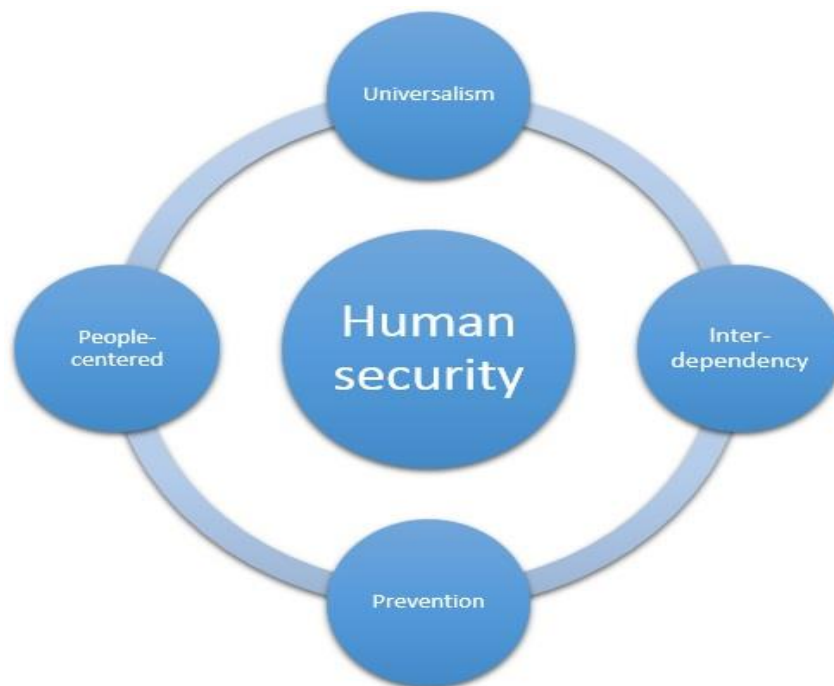


Figure 1. Essential Characteristics of Human Security [4]

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Several studies focus on the relationship between climate change and human security; and how climate change affects individuals and communities in terms of how economic, cultural, political, and demographic forces interact with climate change-related impacts [5], [6], [7]. It is found that climate-related disasters pose a risk of poverty and large human losses [8], [9]. It is also suggested that climate-related disasters affect economic stability and human health while posing significant challenges for adaptation. The next session further discusses human security from a resilience perspective.

3. Rethinking Human Security Concept from a Resilience Perspective

Nature-related disasters have forced more than 24 million people to abandon their homes in 2016. The term resilience was initially defined in 1975. The concept mainly refers to available preventive measures for mitigating hazards and disaster risk, improving response concurrently [10]. The significance of resilience has been highlighted since the Hyogo Framework in 2005 upon being further encapsulated as a term in 1999 [11]. Therefore, it is possible to mitigate risks through preventive measures such as resilient urban planning and effective evacuation plans. In order to enhance human security against disasters, the resilience perspective offers adaptation strategies for reducing vulnerability [12].

Recent reports summarize important climate-related risks to human security such as warming trends, extreme temperatures, drying trends, extreme precipitation, damaging cyclones, storm surges, sea levels, ocean acidification, and carbon dioxide fertilization [2]. These risks have become priorities for risk reduction and ensuring adaptation as well. On the other hand, the cultural background of the communities is directly linked to the level of impact. For instance, in the Sahel region, farmers are concerned about whether weather-related extremes pose a risk to their livelihoods [13] while Tuvalu people are more concerned about migration rather than climate change [14]. Accordingly, priorities and preventive measures related to human security vary from one culture to another which necessitates different strategies and frameworks for planning.

4. Conclusion

In recent years, the negative effects of climate change have transformed even basic concepts such as security, disaster, and resilience. While the UN's call for immediate preventive measures to be taken on a global scale highlights the urgency of the issue, response strategies of different states underline different approaches based on cultural

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backgrounds. Therefore, uniting these resilience efforts have become as essential as implementing new ones.

This study examines the relationship between human security and climate change and aims to discuss potential precautions from a resilience-based perspective. Being defined as the development of the ability to act, resist, and adapt comfortably against crises, extraordinary events, and man-made or nature-related disasters, the resilience framework offers application-based risk mitigation. Therefore, the dynamic resilience framework, which is given in Figure 2, is suggested for mitigating human security risks. Since this framework focuses on extreme weather, cyber risks, as well as geo-spatial analysis, it is concluded that it can be an application-based model for addressing climate change while mitigating security risks.

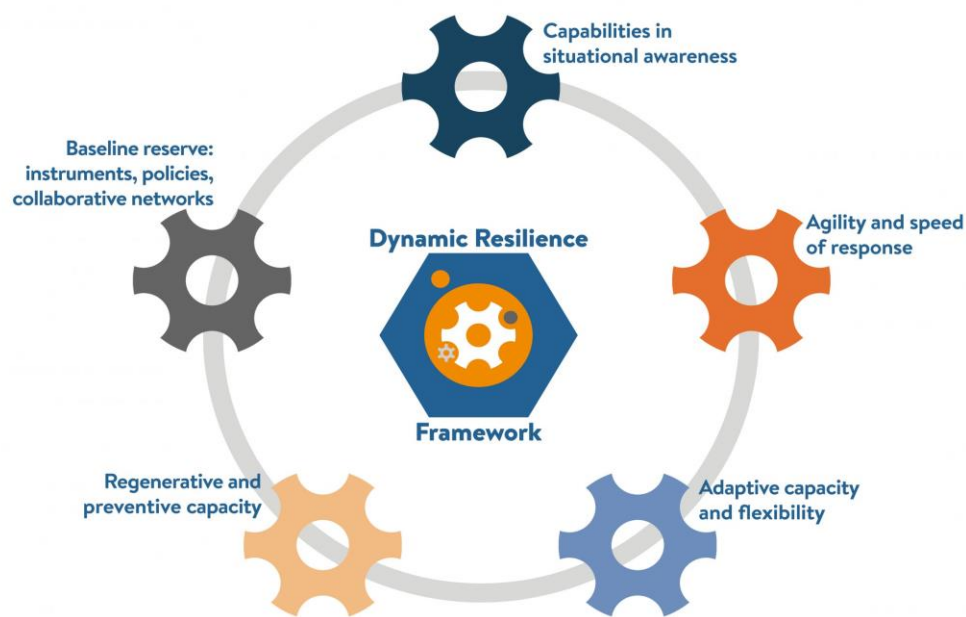


Figure 2. Dynamic Resilience Framework [15]

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