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# Socio-Economic Impact of Climate Change on Livelihood of Internal Displaced People, A Case Study of Bamyan Province

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#### **ABSTRACT**

Internal displacement and environmental factors have been debatable for developed and developing countries. Climate change may not directly displace people but accelerates the displacement waves. Environmental changes have influenced every aspect of life. The socioeconomic impact of climate change is a challenge for internally displaced Afghans. Displaced people are counted as one of the most vulnerable parts of the community. This study aims to demonstrate the socio-economic impact of climate change on the livelihood of displaced people. This case study is conducted in Bamyan province, Yakawlang district, and the center of Bamyan has been selected as the study area. The snowball sampling method has been applied for conducting this study and the total sample size is (n=235) which includes 88% male and 12% female in the interval of 25-65 years old, targeted people are guardians of their households. Primary data has been collected via questionnaires, questionnaires mainly covered factors that cause people displacement. Data has been analyzed by SPSS 26 with the help of Hayes Process Macro Model 1. The study found that social, economic, and environmental factors have a significant role in the rate of displacement. The study exposed that changes in livelihood among displaced people are usual. The relationship between displacement and food insecurity is recommended for future studies.

Keywords: Climate Change, Internal Displaced People, Livelihood, Socio-Economic

#### INTRODUCTION

Migration, environment, economy, and climate change have been the most amenable issues for both developed and developing countries for the last decades. The linkage among them and the impact of environmental and climate change on human mobility and internal displacement are the most important scope of international organizations' projects. The topic of migration and the environment and its interlinkage was mainly ignored by migration specialists and policymakers until recently. Indeed, in the last few years, the issue has been re-focused and experts have increasingly promoted the linkages between climate change and human movement at local, regional, national, and global levels (Alarcón, 2011; schemper, 2019).

Climate change itself does not directly displace humans but produces some environmental effects to cause and accelerate the displacement of people. Climate change can affect human displacement in four ways. 1-intensification of natural disasters, 2- increased global warming and drought, 3- rising sea levels and causing coastal areas uninhabitable, and 4- competition for natural resources (Alarcón,2011). The people who are displaced by the impact of climate change are called "environmental migrants". And IOM defined the term as follows.

Environmental migrants are people or groups of people who for compelling reasons of sudden or progressive change in the environment that adversely affects their living conditions, are obliged to leave their own homes temporarily or permanently and move within the country or abroad (Alarcón,2011). There are some factors to cause where people to be displaced so the area in which they live becomes uninhabited due to climate change (Ferris, 2011). When people move from their own homes and lose some primary livelihood sources and

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become more vulnerable. Although some studies have been conducted on different aspects of climate change, this is the first time socio-economic aspects of climate change are being considered in Afghanistan.

In Afghanistan, the main causes of internally displaced people are usually considered social and environmental factors, and climate change can widely affect internally displaced people in different aspects of their lives. In this paper, only the socio-economic impact of climate change is considered. Droughts, storms, and floods have enlarged three-fold during the last 30 years and there is a relationship between migration and climate change (Přívara & Přívarová, 2019). Afghanistan has recorded drought cycles such as 1963-64, 1966-67, 1970-72, and the longest period 1998-2006 (Rizvi, 2010; loft, 2021). As of 8 July 2019, drought influenced migration and caused 287,000 to become displaced only in the north-western and western regions of Afghanistan (Aich et al., 2017). Displaced people in Afghanistan do not have enough access to livelihood resources are deprived of basic life necessities and are counted as the most vulnerable group of the nation. Climate change is associated with increasing temperature. Afghanistan has recorded a temperature rise which is higher than the mean worldwide, amounting to 1.8 °C from 1951 to 2010. The temperature is forecasted to rise from 1.7-2.3 °C by 2050 (Aich et al., 2017).

Internal displacement in Afghanistan has been historically linked to competition for political power, natural disasters, and a high poverty rate (Majidi & Hennion, 2014). Thus natural disasters have been always a factor of displacement in Afghanistan. The livelihood of most people in Bamyan is Agriculture specifically potato, wheat, sheep, cattle, and nonfarm activities. This study aims to investigate the socioeconomic fluencies of climate change on displaced people's income resources.

#### MATERIALS AND METHODS

#### Study Area

Afghanistan has a high rate of displaced people in every province. Bamyan province has been selected as the study site of the study which has (244392) a population and 8 districts, this city of Afghanistan has a 18029 km² area and consists of 2,8% of the total area of the country. Bamyan is one of the most ancient and coldest cities of Afghanistan which has extremely cold and snowy winter and moderate summer. Bamyan like the other cities of Afghanistan has a high rate of internal displacements. Displaced people are originally from Lal and Sari Jangle districts of Ghor province, the Balkhab district of Sar-e-Pul, and the majority of them are from other districts of Bamyan. Displaced people are the most vulnerable social class of people in this province.

## Study Design

This study was conducted in a finite population and respondents were selected from Bamyan and Yakawlang District. The snowball sampling method has been used in this study. Respondents based on their socioeconomic characteristics were interviewed face-to-face by researchers. This Study is designed in the framework of a large study. The total sample size is (n=235). 135 displaced households are in Bamyan city and 100 households are currently living in Yakawlang District. The survey was conducted in two phases in July and August of 2023. Regarding the cultures of people, 88% of respondents are males and 12% of respondents are females. Respondents are between interval ages of 25-65 years old. Questions in schedules have been responded to by leaders of households.

#### Statistical Analysis

Statistical analysis and statistical tests have been conducted with the help of SPSS 26 Version. The model which is applied in this study is Hayes Process Macro modal 1.

# **RESULTS**

The analysis of primary data shows that the socioeconomic impact of climate change on resources of livelihood varies from place to place and is timely. The result of this study indicates that displaced people in Bamyan province suffer more socially than economically. There is a significant change in the livelihood resources of internally displaced people.

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Table 1. changes in the livelihood of displaced people

		Change in livelihood			
		yes	no	Total	
Before displacement resources of livelihood	potato	71	12	83	
	cereal	32	0	32	
	vegetables	15	0	15	
	livestock	55	0	55	
	other	0	50	50	
Total		173	62	235	

Table 1 states that potato was the main livelihood of displaced people, but after the movement, they lost their livelihood and there is seen a significant change. But other livelihood resources remain consistent and there is not seen any changes.

Table 2. Interaction between variables

	coeff	se	t	p	LLCI	ULCI
Economic	1.7181	.0500	34.3498	.0000	1.6195	1.8166
Social	0343	.0587	5845	.5594	1498	.0813
En-Cause	.6017	.0851	7.0690	.0000	.4340	.7694
Int-1	.0873	.0945	.9240	.3564	2735	.0989

Table 2 indicates that economic and environmental causes have a significant impact on displacement as the p-value shows it is less than .5000. But, the impact of the Social factor is not significant and the p-value is more than .5000. And table 2 shows that overall interactions among variables are positively significant. This expresses that by the appearance of economic factors social and environmental factors impact increase, too.

# **DISCUSSION**

Socio-economic factors play the main role in changing the people's livelihood sources. Studies show that social factors have been counted as a major reason for people's internal migration. The findings of this study show that economic and environmental causes are the drivers that have caused internal displacement. Conducted research showed that one of the basic factors of climate change is drought; in Bamyan province, most of the displaced people lost their habitats due to environmental factors, especially drought. In addition, economic factors are also mentionable, in developing countries including Afghanistan undesirable economic situations cause people to become displaced. The modal proved this fact, too. Economic, and environmental causes accelerate the impact of climate change.

#### **CONCLUSION**

According to Hayes Process Macro analysis, there are some interactions between variables that accelerate the impact of climate change on displaced people. Displaced people usually lose their livelihood and tend to select a new livelihood. Socially people feel isolated, miss their origin place and their relatives, and those who have become displaced by economic necessity they located in a better economic situation than earlier and look satisfied. The socio-economic impact of climate change on displaced people caused the number of poor and vulnerable people to increase and raised some social problems in urban. Based on the findings of this study, it is suggested that people have to take all the required measures to make sure they protect their environment in every possible way and that the government has to implement such policies that will make sure the basic needs of all citizens are met in all parts of the country, so they will not be forced to migrate to other areas because of economic causes.

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## **REFERENCES**

- Aich, V., Akhundzadah, N. A., Knuerr, A., Khoshbeen, A. J., Hattermann, F., Paeth, H., ... & Paton, E. N. (2017). Climate change in Afghanistan deduced from reanalysis and coordinated regional climate downscaling experiment (CORDEX)—South Asia simulations. *Climate*, *5*(2), 38.
- Alarcón, J. C. C. (2011). Migration, environment and climate change: assessing the evidence.
- Ferris, E. (2011). Climate change and internal displacement: a contribution to the discussion. *Brookings-Bern Project on Internal Displacement February* 2011.
- Loft, P. (2021). Afghanistan: Refugees and displaced people in 2021. Online.] In: House of Commons Library.
- Majidi, N., & Hennion, C. (2014). Resilience in displacement. Journal of Internal Displacement, 4(1), 78-91.
- Přívara, A., & Přívarová, M. (2019). Nexus between climate change, displacement and conflict: Afghanistan case. *Sustainability*, 11(20), 5586.
- Rizvi, S. (2010). Internal Displacement in Afghanistan. *Middle East Institute-Fondation pour la Recherche Stratégique*, 25.
- Schemper, L. (2019). Science Diplomacy and the Making of the United Nations International Decade for Natural Disaster Reduction. *Diplomatica*, 1(2), 243-267.

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