

Migration and Climate Change

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Abstract- The sheer fact of global climate change is no more an issue that must be overlooked on this present epoch. It is the propellant which has heightened the misery owing to natural and climatic calamities. The recent effects can be evidenced in Africa and Middle East Asia, where change in weather pattern has overall altered the lifestyle, subsistence, demographic, social and political phenomena of the aforesaid places. Due to increasing problems people are migrated and shifted themselves to a comparatively save climatic zone. The global climate change has changed the parameters of weather and also the nature of seasons. The adversity of climate change is escalating in such a manner that within few decades, without a timely venture the issue may slip beyond the grip of mankind.

Index Terms- 1.Global climate change 2.Demographic 3.Climate change, 4.Climatic calamities, 5. Aforesaid places.

INTRODUCTION

The global climate change has been a vital issue, since last few decades. The change of planets climate system has been so chronic that it's effects are reaching further beyond the limit of environmental degradation towards major demographic changes. This era is evidencing the horrid incident of forced migration assisted by climate change, not only in animal kingdom, but surprisingly within human habitat. The climate change here owes much contribution from global temperature rise and abundance of green house gases in the atmosphere. The uprising effect of global warming causing serious disruption in global climatic system, giving rise to frequent drought, flood, famine etc different natural calamities, which leads to mass migrational move concluding population pressure, resources crisis, increased dependency ratio, and many other uncountable socio-economic issues.

OBJECTIVE

The discussion covers an important issue that is the role of climate change in pushed migration, whose recent evidence has been observed in the Middle Eastern and African countries. The objective of this study is to explore solution for this arising problem. Discerning out how the climate change plays an active role in depletion of human civilization, and how future expectations are supposed to be if initiative not taken. Drawing on practical perspective, to aware the people regarding possible result that can be expected and also attempts and step that can be taken globally to elude this mishap.

METHODOLOGY

The methodology to identify the link between two decades exploring through different valuable information regarding climate change, causes of migration and different recent data which are available digitally, composed together to conclude the humble endeavour of highlighting the seriousness of the issue.

Types of climate change migrations:

IOM pointed three types of migrations fuelled by climate change.

1. Firstly; The immediate migration due to sudden horrid disaster such as earthquake, volcano, Tsunami, flood, landslide etc. These factors lead abrupt dislocation of huge number of people from their root.
2. Secondly; Migration due to slow destruction of land and environment, such as, desertification, slow degradation of arable land, coastal degradation etc. These factors lead to slowly but steadily a mass movement of people across the country or within territory.

3. And Thirdly; Migration due to lack of subsistence which has been hampered due to climate change, such as desertification leading degradation of arable land, forcing the farmers and livestock ranchers to move to the urban area in search of subsistence and coastal degradation forcing to the fishermen to go elsewhere and find another means of living.

ROLE OF CLIMATE CHANGE ON MIGRATION, RECENT ISSUES AND POSSIBLE FORECAST

A large number of migrants and refugees have reported to be migrated to Western Europe via Hungary, fleeing impoverished, conflict-ravaged homelands of Middle East and Africa to find a more secured life. A large swath of Syrian and other Middle Eastern dweller suffering from extreme drought, forced to vacate their homeland, which eventually gave rise to immense poverty and relocation to urban areas. The drought which is said to be exacerbated by Climate change, contributed to the displacement of about 2 million of Syrian. The internal displacement may have caused social unrest and civil war, and finally generated refugee flow to Europe. Thus this is obvious that Climate change plays a catalytic role causing social unrest and refugee migration.

Inadequate, rain, frequent disasters like draught, flood, heat wave causes killing of crops, causing harm to grazing animals, destroying agricultural land. A long-term changing the weather pattern, forces the farmers, animal grazers, fishermen to abandon their primary subsistence and move to urban areas in search to new subsistence.

It is reported that about 1.5 million people of rural communities of Syria, Jordan, Iraq, Lebanon fled from their homeland. African countries such as Somalia and Sudan are also vulnerable to drought fuelled conflicts. Sub Saharan area, likely to see increased incident of drought, lower resource availability, adding stress and pressure to the community where they are migrating. More environmental pushed migration is anticipated from Coastal areas of Burma, Louisiana owing to rise of sea level exacerbated by global warming. The Sahel band of desert, stretching from Senegal to Eretria, including parts of Mali, Burkina, Faso and Nigeria is forecasted to suffer a huge level of displacement. A report from the group Organizing to Advance

Solutions in the Sahel suggested that over the next three to four decades about 200 million people are supposed to be deprived of sustainable food supplies. This also assumes that temperature in that region is about to rise by as much as 5°C by 2050, with the population expected to grow from about presently 100 million to about 300 millions in 2050, and about 600 million by the end of the century. This result may aggravate serious flood, possible drought, assisted with famine, food crises, resource crisis, possible civil wars and conflicts. The global climate change has much deeper and sevre impact on world's socio-economic grounds, which is indeed an unavoidable issue.

POSSIBLE SOLUTIONS

This crisis needs immediate endeavour of Solution before situation runs beyond any grip.

♦The very first endeavour towards solution should be made by attempting prevention to temperature rise. Taking in account, the agreement of the UFCC in 21st conference of Paris, to take serious initiative holding the average temperature to well below 2°C above pre-industrial level and pursue effort to the temperature increase to 1.5°C above pre-industrial levels. And also control over greenhouse gas.

Different techniques and Policies can be applied to realize this purpose. Taking advantage of different geo-engineering application, this goal can be obtained. Like taking in account the solar reflection idea, various geo-engineering application can be utilized such as, Pumping Sulphur Aerosol in the stratosphere, increasing surface brightness of the land, placing solar reflectors in space. Other ideas such a as removing excess carbon from atmosphere includes mechanisms such as Tapping Carbon dioxide in Carbon scrubbers, fertilizing soils with nitrogen; which makes plants absorb more Carbon dioxide from air and increase leaf's albedo rate. Other technical enthusiasm includes Ariel afforestation, dumping limestone into the ocean, enrich soils with Biochars etc. These are the direct attempt on having grip on temperature rise, which is the base cause of environmental pushed migrations.

To mitigate the pushed migrational factors some solutions can be framed out as follows.

◆ More research and study on this issue should be conducted and identification of zones where these effects are mostly seen. In this case more priority to be given to vulnerable countries like Syria, Jordan, Iraq, Sudan, Senegal etc. Apart from research and zoning, ecosystem management should also to be done, with special initiative to climate change, adaptation techniques, that may help the habitat to survive the climate change.

◆The second initiative that supposed to be done is rise of awareness with international humanitarian and development communities, about environmental sustainability. Endeavour should be taken on different rural development programs, highlighting the role of forced migration due to environmental changes.

◆Different developmental projects can be arranged to assist, policy directing plans and programs to identify the most vulnerable countries to be prioritize and also Thus sub-nations to be taken into account. These areas should be strictly considered into ecosystem and environmental adaptation act. Providing neutral and open forum policy, dialogue and providing practical support.

CONCLUSION

Hence climate change takes a very crucial role in occurrence of forced migration recently having Middle East and Africa as a major exemplary, which is slowly spreading globally, creeping into civilization for an upcoming deplorable conclusion. Hence options are available how to deal with such horrid situations. Opting for some direct scientific steps, serious social and political initiative, globally this crisis can ought to be mitigated.

BIBLIOGRAPHY

- [1] Douglas, C, Bruce, Kearny, S, Michael, Leatherman, P, Stephen, 2001, Sea Level Rise, History and Consequence, Academic Press, Tokyo.
- [2] Hardy ,T, John, 2003, Climate Change Cause Effect and Solutions, Wiley, England
- [3] Desonie, Dana, 2008, Climate: Cause and Effects of Climate Change, Chelser Publisher, New York.
- [4] Andersen, Lykkey, Lund Lotte, and Verner, Dorte ,2010, " Migration and climate change"

Reducing Poverty, Protecting Livelihoods , and Building Assets in a Changing Climate, World Bank Publication, Chapter 7.

- [5] Klip, Silja, Apr 2017:, Climate Change and Migration, Climate Science, Oxford Research Encyclopedias.