CLIMATE CHANGE AND HUMAN MIGRATION: LAW AND POLICY PROSPECTS IN SOUTH ASIA

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ABSTRACT

Climate change poses unprecedented challenges to the nations and impacts on different nations differently depending upon the geographical location, economic development and social advancement. The individual or combined effects of the climate change have also triggered human migration both within and across national borders across the World. Various inter-governmental agencies and non-governmental organizations have clearly indicated about future waves of climate change induced human migration especially in South Asian region. South Asia facing the challenges of the climate change has been prone and vulnerable to the natural disasters and climatic hazards causing migration due to its geographical and political situation in the region. Despite such deliberations by the scientists, experts, IGIs and NGOs, South Asian region has not yet taken effective steps and measures for political and legal solutions to address climate induced migration.

Against this backdrop, this article first of all examines the impacts of climate change and its linkage with human migration in South Asia. This also traces trends and instances of human migration induced by the climatic disasters in South Asia in recent times. Further, it explores existing legal and policy instruments adopted by the countries of South Asia to address impacts of climate change referring the human migration. This proposes that political solutions though are required specifically to deal with such migrants, but legal solutions should also be explored for the rights and remedies. Hence, they should enact specific legislation or amend existing legislations and initiate or improve the plans and policies for climate induced migrants.

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A. INTRODUCTION

Climate Change though considered as an environmental problem, now impinges on every aspect of human life including internal and international peace and security. Climate change as such poses unprecedented challenges to the nations and impacts on different nations differently depending upon the geographical location, economic development and social advancement. The individual or combined effects of the climate change have also triggered human migration both within and across national borders in recent times. In 2004, the Inter-governmental Panel on Climate Change (IPCC) has also indicated that one of the greatest effects of climate change may be the human migration.\(^2\)

Various other inter-governmental agencies and non-governmental organizations have clearly warned about future waves of climate change induced human migration especially in South Asian region. South Asia facing the challenges of the climate change has been prone and vulnerable to the natural disasters and climatic hazards causing migration due to its geographical and political situations in the region.

South Asian countries though share similar geographical and cultural features, are also very diverse such as: the region has the country with the second largest population in the world (India) and lowest population small Island state (Maldives), an Island nation (Sri Lanka) as well as a country located on river delta (Bangladesh), two land locked countries (Nepal and Bhutan) and two most arid states (Pakistan and Afghanistan).\(^3\) Most of the countries in this region have experienced the impacts of climate change and natural disasters last decades. The uncontrolled population and blind industrial growth have further worsened the condition through environmental degradation and atmospheric imbalance causing human insecurity and mobility. The increased sea levels, floods, rainfalls, landslides, earthquakes, cyclones as well as desertification, draughts and ecological erosions triggered by the climate change have stimulated the human migration across the South Asian region. As Greenpeace a NGO concerned in its reports, "if current trends in global emissions of greenhouse gases continuous, it is inevitable that more than a hundred million people will be uprooted from their house in the course of this century in South Asia alone."\(^4\) It has been also said that even a moderate rise in

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temperature could cause serious changes to political and geographical environment of South Asia.

Despite the recognition by the scientists, experts, IGIs and NGOs that human migration will be the greatest single impact of climate change, the international community and organization has not yet taken effective steps and measures for political and legal solutions to address this issue. Even, South Asian region has not come forward with certain solutions where this problem is most vital and urgent. Against this backdrop, this article examines the impacts of climate change and its linkage with human migration in South Asia. This also traces the trends and instances of human migration induced by the climatic disasters in South Asia in recent times. Further, it explores the existing legal and policy instruments adopted by the countries of South Asia to address impacts of climate change referring the human migration. At last, it concludes that political solutions though are required to deal with such migrants, but legal solutions should also be explored for their rights and remedies in the adverse circumstances.

B. CLIMATE CHANGE AND ITS ADVERSE IMPACTS

Before climate change can be considered a major cause of human migration, it is essential to trace the impact of the climate change and how it is contributing to the environmental degradation and migration in recent times. From prehistoric times to present, humankind continues to drive their life and substance on the earth in changing seasons and climate. The changes in the climate usually have been supportive to the life of the pets, peoples and plants in their own ecosystem. But due course of time, there have been drastic changes in the climate cycle by increasing amount of greenhouse gases like carbon dioxide, sulfur dioxide, methane etc. in the atmosphere causing adverse impacts on the life and livelihood of the people globally. Further, increased population and human activities like industrial pollution, extensive energy use, utilization of fuel transports and erosion of biodiversity have contributed to the rise of greenhouse gases (GHGs). The rise of greenhouse gases actually traps the solar heat to raise the temperatures as well as to cause the depletion of ozone layer in the atmosphere resulting into 'Global Warming'. Further, global warming changes the pattern of the climate which causes severe climatic manifestations and disasters. The manifestations of the climate change include rising sea

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levels, increasing global warming, glacier melting, extreme weathers, and depletion of natural resources. Not only this, natural disasters and calamities have also increased in many parts of the world in terms of frequency, intensity and severity. According to International Organization for Migration (IOM) in its report on Migration, Environment and Climate Change said that “the number of recorded natural disasters including storms, floods, and draught have increased more than three fold over the past thirty years.”

The foremost evidence of the adverse climate change has been global warming which causes most of the natural and climatic disaster. The IPCC in its reports estimates a rise in the global average surface temperature from 1990 to 2100 of between 1.8°C and 4°C, which could possibly go up to 6.4°C.9 During last two decades, ninety percent of natural disasters have been caused by climate-related natural hazards, which had their roots in global warming. Secondly, the rising sea level has been potential impact of the climate change which is virtually irreversible. As per the IPCC reports, global sea levels will rise by at least eighteen centimeters, but in the worst scenario, it could be as much as fifty nine centimeters by the year 2100.9 Consequently, such sea level rise will threaten to small island states and other coastal states due to their low-lying nature and limited resources. Thirdly, there has been also frequency and magnitude of floods increased due to global warming, melting glacier, extreme weathers and deforestation as a result of global climate change across the world. It has been estimated by IPCC that up to 20% of the world population live in river basins that are likely to be affected by increased flood hazards by the 2080s.10 Fourthly, the phenomena of draught, desertification and water scarcity have been the major impacts of climate change, probably affecting about one-third of the world's current population. The reports of the IPCC also predicts increased water shortages in Africa and Asia by saying that “Fresh water availability in Central, East, South and South-East Asia, particularly in large river basins, is projected to decrease due to climate change which, along with population growth and increasing demand arising from original standard of living could adversely affect more than a billion people by the 2050s”.11 Last but not least, climate change also contributes for extreme

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8 Supra Note 1

9 Ibid.

10 Id.


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weather events such as storms, hurricanes and cyclones which have disastrous and deleterious effects on human and natural resources. Because of this, the human, animals and plants species have been extremely vulnerable to the impacts of the climate change causing extinction or migration.

C. CLIMATE CHANGE AND HUMAN MIGRATION IN SOUTH ASIA

Due to the ill-effects of the climate change, the physical environment and human population are also changing its shape globally. The adverse effects of climate change undermine the viability of ecosystem-dependent livelihoods such as agriculture, herding, hunting and fishing. In other words, the impacts of climate change have an effect on human life that has direct connection with forced migration from their current habitats. The research on the global climate change also recognizes the problem of climate change related migration of millions of people. The nature and extent of the human migration have drastically increased due to environmental degradation and climate change in South Asia also. South Asia is very diverse region ranging from the world's highest elevation in the Hind Kush Himalaya to its river's delta and low laying coastal plains and islands of the Arabian Sea, Indian Ocean and Bay of Bengal. Due to this unique geo-climatic situation, South Asia is exposed to wide array of natural hazard mostly caused by the climate change. This has potentially triggered the human movements i.e. migration, displacement and planned relocation in this regions because of sudden-onset hazards i.e. tropical cyclones, floods, tsunamis, landslides, avalanches as well as slow-onset hazards i.e. desertification, draughts, rivers banks erosion and coastal salinization. Over the years, such climate induced hazards have resulted into mass migration in South Asia, which is home of one fifth of the world population. Even, such single event of hazards can result into a large scale of human movement across the borders. For example, River floods in Pakistan displace millions of people, India and Bangladesh affected by cyclones causes large cross border migration, floods and landslides in the hills of Nepal and draught and desertification of Afghanistan have also prompted people to migrate within border and cross-border. In coastal areas of Maldives and Sri Lanka, rising sea levels coupled with saline erosion pose certain challenges that also compel people to migrate.

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13 Ibid.
domestically and internationally.\textsuperscript{14} However, the overall number of the people displaced within the national boundaries and migrated across the national borders in South Asia is debatable. But, in light of projected population growth, conditional environmental degradation and frequent climate induced disasters, it is anticipated that human migration in context of climate change in South Asia is likely to increase manifold.

If we see country wide evidences in this context, Bangladesh situated in the South Asia, has been considered highly vulnerable to effect of climate change with high risk of floods and cyclones. The recent flood occurred here in October 2010, displaced more than 500,000 people and cyclone Aila in 2009 caused millions of people to migrate to other places.\textsuperscript{15} Nepal is also prone to floods and landslides which regularly compel the people to migrate and displace to other habitats. In last decade, significant floods have occurred in the eastern and western regions of Nepal affecting or displacing 19,56,605 persons.\textsuperscript{16} In India too, frequent floods in 2009 killed 11,921 persons and displaced 15, 89,247 others followed by cyclone Aila and storms in coastal states.\textsuperscript{17} Pakistan has also experienced floods in 2010 displacing one eighth of the total population.\textsuperscript{18} Afghanistan has faced major earthquakes in this decades resulting into hundreds of death and millions of displacement. In comparison to other countries of South Asia, Sri Lanka and Maldives Islands have been the subject of less research in relation to climate induced hazards and migrations. However, the Asian Development Bank has estimated that overall Asian and pacific region alone about 31.8 million people are displaced by climate related disasters and extreme weather in 2010.\textsuperscript{19}

\textbf{D. LAWS, POLICIES AND INSTITUTIONS IN SOUTH ASIA}

The magnitude and frequency of such migration induced by the impact of the climate change is expected to rise in this South Asian region because of its ethical, social and cultural connotations across the nations. The nations of the region require legal, policy

\textsuperscript{14} Supra Note 2


\textsuperscript{16} Ibid.

\textsuperscript{17} Id.

\textsuperscript{18} Id.

\textsuperscript{19} Supra Note 2
and institutional frameworks as well as financial, technical and operational capacities to effectively address the migration resulting from the impact of climate change. Though South Asian region has old trends of human migration, but there has not been agreed terminology to describe this human mobility which is vital for the legal clarity and certainty. The human mobility has been discussed within three categories: forced displacement, voluntary migration and voluntary or forced planned relocation.\(^20\) Here, the term 'migration' refers to a broad category of population movement. International Organization for Migration (IOM), has however defined 'environmental migrants' as "persons or groups of person who for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leaves their habitual homes, or chose to do so, either temporarily or permanently and who move either within their country or abroad."\(^21\) However, there was four ways stated by the scholars to make connection with climate change and human migration such as: (i) the intensification of natural disasters, both sudden and slow onset leading to increased displacement and migration, (ii) the adverse consequence of climate change on livelihood, public health, food security and water scarcity (iii) rising sea level that makes coastal areas inhabitable; (iv) competition over scarce natural resources potentially leading to growing tension and even conflict, causing displacement.\(^22\) In other words, climate change in itself does not directly displace people but it produces environmental effects that make it difficult or impossible for people to sustain their livelihood in that area. Due to the uncertainty over the numbers of climatic disasters and causalities as well as disagreement on the definition and scope of the migration induced by the climate change, the international community and international organizations are reluctant to develop the norms and framework for the protection and management of these migrants.

At the international level, there is no direct legal instrument addressing the issue of climate change and migration. The most relevant legal frameworks are human rights law, refugee law and climate change law, but do not address directly or precisely 'climate induced migrants' or 'climate change refugee'. Though, the broad principles of international law may have some normative value and arguments for assistance and cooperation to them, but no international legal instruments have the clear mandate to protect or assist these migrants. In principle, human rights principles apply to these

\(^{20}\) Supra Note 11


\(^{22}\) Supra Note 11
migrants in odd circumstances but in limited aspects and periods. Refugee laws offer certain possibilities for addressing the problem of climate induced migration, but the narrow definition of refugees restrict its power to help them with climate change situation.\(^{23}\) Though UNFCCC applies directly to climate change, but it has also limitation to deal with climate induced migration.\(^ {24}\) To address the climate induced migration, there is clear need for a more specific and specialized legal instrument and institution to fill the gap that presently exists within international law.

At the regional level in South Asia, recent Declaration of the Eighteenth South Asian Association for Regional Cooperation (SAARC) Summit (2014), in Kathmandu, acknowledged "the existential threat posed by climate change to some SAARC member states."\(^ {25}\) SAARC member states have also emphasized the need for effective measures to prevent the trafficking and exploitation of women and children caused by the migration and agreed to collaborate and cooperate an safe, orderly and responsible management of labour migration from South Asia to ensure safety, security and well-being of their migrant workers in the destination comprises outside the region\(^ {26}\). However, States have also agreed for regional cooperation within region and to enhance regional connectivity within SAARC. Not only this, SAARC Charter of Democracy (2011) also reaffirms 'faith in fundamental human rights and in the dignity of human person as communicated in Universal Human Rights Declaration and enshrined in the respective constitutions of the SAARC member states'.\(^ {27}\) This has been also addressed in SAARC Convention on Prevention of trafficking in Women and Children (2002) and SAARC Convention on Promotion of Welfare of Children (2002).\(^ {28}\) In the context of environmental degradation and climate change, SAARC has numerous regional and climatic change plans, strategies and initiatives for this region. The SAARC Action Plan on Climate Change (2009-2011) deals with the regional climate adaptation practices but does not recognize the human migration within their climate change adaptation planning.\(^ {29}\) The Dhaka Declaration on


\(^{24}\) Ibid.


\(^{26}\) Ibid.


\(^{28}\) Ibid.


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Climate Change (2008) also requires member states to take measures for adaptation for dealing with the onslaught of climate change to protect the lives and livelihood of the people.\(^{30}\) The Thimbu Statement on Climate Change (2010) also states to strengthen and intensify regional cooperation to address the adverse effects of climate change in a focused manner.\(^{31}\) Besides, SAARC Environment Ministers also adopted 'Male Declaration' on a collective response to large scale disasters resulting into Comprehensive Framework on Disaster Management (2006-2015)\(^{32}\). In sum, no comprehensive response from the SAARC has been found to address the climate induced migration, such small references and ad-hoc initiatives are unlikely to provide long term solutions for mass migration in the region.

At the national level, the migration from climatic and natural disasters concerns have not been prominent in the norms, plans and strategies in any of the country of South Asia. Although, there has been national climate change related policies and authorities for mitigation and adaptation of the impact of climate change, but does not address specifically about the climate induced migration. Taking individually, Afghanistan has National Adaptation Programme of Action (2009) under National Environment Protection Agency for combating the impact of climate change, which discusses 'forced migration' in the context of draught and desertification.\(^{33}\) It has also acknowledged about the concerns on increased urbanization largely because of internal displacement driven by draught and disasters. Besides, Afghanistan has also Afghan Disaster Management Authority for combating disasters and climate change risks affecting the human in the nation, but do not provide the rights and remedies to the them. Pakistan has also formulated the National Climate Change Policy (2013) under the Ministry of Climate Change, which acknowledges enormous displacement from floods and lists climate change induced migration as one of the most important threats to the nation.\(^{34}\) It has been also intended to decrease rural to urban migration as a policy measures for town planning in wake of climate change. Pakistan has also passed National Disaster Risk


\(^{34}\) See, Pakistan National Climate Change Policy (2013) available at http://www.pk.undp.org/content/Pakistan/en/home/pressrelease:/php assessed on 4 October, 2015
Management Act, (2010) and constituted National Disaster Management Authority to manage and control natural and climatic disasters affecting life and livelihood in the country.\textsuperscript{35} India has also put National Action Plan on Climate Change (2008) under the Ministry of Environment, Forest and Climate change, which does not address the concerns of climate induced migrants directly.\textsuperscript{36} Even, there has not been specific enactment on combating climate change and addressing the adverse effect of climate change. Though, there is Disaster Management Act, 2008 and Standard Operating Procedure for Responding to Natural Disasters (2010) for assisting the victims of the disasters, but does not help in long terms.\textsuperscript{37} In Bangladesh also, there has been nodal agency for climate change under Ministry of Environment and Forest, which has adopted National Adaptation Programme of Action (2005).\textsuperscript{38} However, there is no significant mention about migration or movement of human in the context of climate change and disasters, but there are indirect references of climate change which could impact livelihoods leading to 'migration crime' in the country. There has been also specific department for disaster management and national plan for disaster management to respond the natural and climatic disasters, but does not extend to the permanent welfare of the human migrants.\textsuperscript{39}

Like other countries of South Asia, Bhutan has also National Environment Commission for addressing the impact of the climate change with National Adaptation Programme of Action (2006).\textsuperscript{40} This plan has also not mentioned the migration issue relating to climate change and environment, but it has noted the rural to urban migration as environmental stress to the nation. There is also Disaster Management Division under the Ministry of Home and Cultural Affairs, which has adopted National Disaster Management Framework (2006).\textsuperscript{41} The National Disasters Management Law is also in place to combat


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climatic disaster and natural hazards in the country. Similarly, Nepal has formulated National Adaptation Programme of Action (2010) under Ministry of Environment for Combating Climate Change, but has not mentioned the issue of migration in this regard. However, 'displacement and Migration' is in list as local perception of climate induced disasters. It has also National Strategy on Disaster Risk Management (2009) which is supervised by Central Industrial Disaster Relief Committee to subdue the effects of natural and industrial disasters which remotely help the climate induced migrants. Besides, Maldives has also National Adaptation Programme of Action (2007) held under Ministry of Environment, Energy and Water which is specifically made for addressing the impact of climate change. This programme has discussed the 'consolidation of population and development' as a key adaptation measures, but does not referred as such migration and displacement of human. The mobility of the people has been listed as potential sustainable development outcome in relation to adoption strategies; still the adequate measure has not been outlined. Apart from this, Maldives has also disaster management Act, 2006 to handle the outcome of climatic and environmental disasters and risks to the life and property of the human in the nation. In line with these countries, Sri Lanka has also made National Climate Change Policy under Ministry of Environment and Renewable Energy which focuses on mitigation and adaptation of the impact of climate change, but does not mention the climate induced migration as urgent challenges to the nation. Though, Sri Lanka has enacted Disaster Management Act (2005) for the preparedness and management of natural hazards affecting the people within country. To sum, all the nations of South Asia have the norms, policies, and authorities for the combating the impact of climate change, natural disasters and environmental degradation, but does not provide protection and assistance to climate induced migrants moving within or across the borders.

E. CONCLUSIONS

Climate change though not of recent origin, presents serious challenges and impacts to the nations globally. This also affects different nations differently depending upon the physical, social and economic position in the globe, which basically determine largely the capacity to cope up the impacts and consequences. South Asia, one of the most densely populated areas of the world, is home to almost one fifth of the world population, has been considered vulnerable and prone to the impact of climate change. One of important and serious consequences of the climate change is human migration from their home or habitats due to sudden onset hazards and slow-onset hazards. Due to certain similarities and connotations among the people in this South Asia region, the people tend to migrate within national boundaries and across the international borders at mass level to escape or adapt the impacts of climate change. The scope and scale of such migration is expected to increase manifold in coming years due to predicted and frequent occurrence of natural disasters and climatic hazards. Hence, nations and institutions of this region will have to employ all possible efforts to assess the problem of climate induced migration and develop law and policy frameworks to respond it. Though the prospects of such laws and policies relating to the climate induced migration for the legal protection and rights to the migrants are minimal, but soft norms and ad-hoc plans and policies are proposed on different forums and institutions for them. In South Asian region, nations have collectively and individually recognized such human migration induced by the climate change in the region. Besides, they all have climate change and disaster management plans and policies, but have not specifically addressed this migration issue till now. Climate change is expected to encourage the migration regularly in this South Asian nations and lack of law and policy well further exacerbate the situations in coming days.

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