ENVIRONMENTAL INDUCED INTERNAL DISPLACEMENT: A NEW CHALLENGE FOR HUMAN SECURITY *VIS-A-VIS* INTERNAL SECURITY-A LITERATURE BASED APPRAISAL

Mithilesh Narayan Bhatt

Faculty of Law, Raksha Shakti University, Ahmedabad- 380016, Gujarat, India.
Corresponding author: m.bhatt@rakshashaktiuniversity.edu.in

Abstract: The relationship between human security and a safe and habitable environment is fundamental and for which Sustainable development is inevitable. From last few decades Humans have been over exploiting the environment and their byproducts. For Every such greedy act, nature takes price for it and that result in Natural and Human-induced environmental disasters, Slow-onset degradation, Higher temperatures, More extreme weather, Rising sea levels, Increasing cyclonic activity, Earthquake, Floods and Draughts. Due to revenge by environment the lives and livelihoods of those reliant on the natural environment are either jeopardized or even destroyed. Environmental insecurity is forcing masses of people to flee environments that no longer sustain life. Such movement can be within or between countries.

Environmentally induced internal displacement is becoming one of the major policy as well internal security challenges of this century and India too is facing the same. All in all, large numbers of environmentally induced internal displaced people (EIDP) are supposed to threaten the human security as well as internal security of any state. Such people put stress upon resources of land where they reached and often indulge in Survival crimes. EIDP's also prone towards crimes on them. Further these create complex environmental, humanitarian, and non traditional internal security challenges.

This paper proposes to discuss relationship between environment insecurity, internal displacement and how it threatens human security as well as internal security of a country especially in India. EIDP's require special assistance, protection and development aid which are most of the time ill addressed by the governments concerned. The issue of EIDP's have legal, humanitarian and human rights dimensions, and author will try to explore protection gap between all of these issues through the lens of earlier literatures.

Keywords: Human Security, Internal Security, internal displacement, Environmentally induced internal displaced people (EIDP), Environmental insecurity.

INTRODUCTION

Let us not, however, flatter ourselves overmuch on account of our human victories over nature. For each such victory nature takes its revenge on us. Each victory, it is true, in the first place brings about the results we expected, but in the second and third places it has quite different, unforeseen effects which only too often cancel the first......So it is that the environmental question has become urgent and it has to be properly understood and squarely met by man.[i]

The relationship between human security and a safe and habitable environment is fundamental. Even a minor alteration in environment and climate puts direct impact on every single human being. In past relationship between Nature and human was need based. Humans were use nature's product as need basis but now from last few decades humans have been over exploiting the environment and their byproducts. For Every such greedy act, nature takes price for it and that result in to either Natural or Human-induced environmental disasters. Leaving such inhabitable places has been the preferred option to maintain their livelihoods in such conditions. Environmental insecurity is forcing masses of people to flee environments that no longer sustain life. Such movement can be within or between countries and either permanent or temporary. This paper focusing only on environment induced internal displacement persons (EIDPs).

The central object of this paper is to find out how environmental induced internal migration threaten the

human security and further to internal security. Beside it there are some subsidiary aims & objects are also addressed which includes as follows: kinds of migration; Number of EIDPs; the reasons of displacement; impacts of displacement and on displaced people; Human rights violations in displacement; to find out available legal protection and protection gap further to suggest for mitigation of gaps.

As title suggests this study is totally based on doctrinal approach to meet with central as well as subsidiary aims and object of the study by way of using earlier literatures including research reports, articles and news items.

This paper divided in to VIII major headings in which in which points as, types of displacement; numbers & reasons of displacement; impact of displacement; displacement threat to human security vis-à-vis internal security and human rights violation, legal protection and protection gaps in practice. In last two parts paper concluded with some suggestions.

TYPES OF DISPLACEMENT

Literature suggests five primary ways of displacement due to climate change. [ii] These are as follows: (a) Temporary Displacement- People who for generally short periods of time are temporarily displaced due to a climate event such as a hurricane, flood, storm surge or tsunami but who are able to return to their homes once the event has ceased (2) Permanent Local Displacement - People who are displaced locally, but on a permanent basis due to irreversible changes to their living environment, in particular sea-level rise, coastal inundation and the lack of clean water and increasingly frequent storm surges. This form of displacement implies that localised displacement solutions will be available to this group of forced migrants, such as higher ground in the same locality. (c) Permanent Internal Displacement - People who are displaced inside the border of their country, but far enough away from their places of original residence that return is unlikely or impossible. This would concern a family displaced from one region of a country to another region in country. (d) Permanent Regional Displacement - People for whom displacement solutions within their own countries are non-existent or inaccessible and who migrate to nearby countries willing to offer permanent protection. (e) Permanent Inter-Continental Displacement - People for whom no national or regional displacement solutions are available, and who are able to receive the protection of another State in another continent.

Further, Biermann, F. And Boas divided such displacement in temporary and permanent

displacement. Natural disasters would mostly lead to temporary displacement, while climate change effects would often permanently dislocate people. [iii]

NUMBERS AND REASONS OF DISPLACEMENT

Reasons of Displacement

Environment degradation is directly affecting climate in negative ways. In its 4th Assessment Report (FAR), the Intergovernmental Penal on Climate Change's projected that by 2099, world is expected to be on average between 1.8and 4°C hotter than it is now. Consequences of this forecast would be a global mean sea level rise of p to 88 cm over the next 80 years, which would displace millions of people round the world and could potentially inundate some countries. There are few "robust investigations of climate change impacts on small islands."[iv]

More so, Arpita Bhattacharyya and Michael Werz has observed in their study that South Asia will be among the regions hardest hit by climate change. Higher temperatures, more extreme weather, rising sea levels, increasing cyclonic activity in the Bay of Bengal and the Arabian Sea, as well as floods in the region's complex river systems will complicate existing development and poverty reduction initiatives. Coupled with high population density levels, these climate shifts have the potential to create complex environmental, humanitarian, and security challenges. [v]

Due to these changes, a variety of environmental disruptions are causing displacement. De Moor and Cliquet distinguished three categories of environmental disruptions causing displacement [vi]: (a) Environmental degradation due to climate change and biodiversity loss (b) Sudden environmental disasters, including natural and technological disasters (c) Intentional destruction of the environment.

Myers N, [vii] and other intellectuals [viii] concluded that the largest group of environmentally-displaced persons are individuals affected by the gradual environmental degradation due to climate change and the loss of biodiversity, leading among others to sea level rise and severe desertification.

International Organization for Migration has classified Environmental disasters into four categories [ix] : (a) Long-term environmental degradation, including global warming, deforestation, land erosion, salinity, siltation, water logging, and desertification, [x] (b) Sudden natural environ-mental disruptions, including earthquakes, droughts, floods, hurricanes, monsoons, tidal waves, tornadoes, and volcanic eruptions, [xi] (c) Accidents, including both industrial and chemical disasters, [xii] and (d) Armed conflicts. [xiii]

The category of 'sudden environmental disasters' can be divided into natural and technological disasters. Natural disasters are weather or geological events, such as earthquakes, floods, hurricanes and volcanic eruptions [xiv]. Intentional destruction of the environment often takes place in times of war, in order to strategically relocate the enemy population [xv]. Technological disasters include industrial and chemical accidents. [xvi]

People who have been forcibly displaced because their traditional habitat is used for purposes incompatible with their residence. [xvii] This group of environmentally-displaced persons is usually permanently dislocated

Similarly, the United Nations Inter-Agency Standing Committee (IASC)[xviii] has offered a classification of four categories of climate change impacts[xix]: (a) hydro-meteorological disasters (for example, flooding, hurricanes/typhoons/cyclones, mudslides); (b) environmental degradation and slow onset extreme hazard events (for example, reduction of water availability, desertification, recurrent flooding, salinisation of coastal zones); (c) significant permanent losses in state territory, for example as a result of sea-level rise (for instance, the case of "sinking" small island states); and (d) armed conflict over shrinking natural resources (for example, water, food) owing to climate change.

Aptekar by citing Smith distinguished between five potentially hazardous environmental events of an a) *atmospheric* (rain, hail, storm, hurricane, tornado); b) *hydrologic* (floods, drought); c) *geologic* (landslides, earthquake, volcanic eruption, rapid erosion); d) *biologic* (epidemic, forest fires); and e) *technologic* (air crash; industrial explosion, nuclear power plant failure, collapse of buildings, germ, nuclear warfare) nature. [xx]

On the basis of duration taken place by disaster table 1[xxi] classified the Rapid onset and Slow onset disasters and their changing impacts which is based on classification as used by the International Disaster Database (EM-DAT). [xxii]

Environment degradation in India is too causing mass displacement. Across India, the frequency of "hot days" has been increasing gradually while the frequency of "cold days" shows a significant drop during the pre-monsoon season over the 1970–2005 periods. [xxiii] As climate change is expected to worsen over the coming decades, the average temperature of "hot days" will increase and annual mean surface air temperatures will rise to between 3.1°F (1.7°C) and 3.6°F (2°C) by the 2030s. Hotter and more humid conditions in the Northeast will allow for the proliferation of malaria-carrying mosquitoes. [xxiv]

Region wise environment and climate changes and its future impact on ecology as well as on humans are figure out in table 2 by the Ministry of Environment & Forests, government of India in its report. [xxv]

Cutting trees for development projects too causing serious harm on environment and result in to sudden disasters. Flood in Uttarakhand was burning example of it. Though nearly four months after the Uttarakhand floods, Environment and Forests ministry has formed an expert committee to study whether the environmental degradation caused by hydro-electric projects on Alaknanda and Bhagirathi rivers led to the disaster. The committee will make a detailed study and evaluate as to how far the projects have contributed to the aggravation of damage caused by downstream floods. [xxvi]

Numbers of Displaced Person

Every year 30 million people worldwide are forced to move because of serious degradation of environmental conditions, natural disasters and depletion of natural resources. [xxvii]

According to global estimates of The Internal Displacement Monitoring Centre (IDMC), Norwegian Refugee Council, in 2012, an estimated 32.4 million people in 82 countries were newly displaced by disasters associated with natural hazard events. Over five years from 2008 to 2012, around 144 million people were forced from their homes in 125 countries. Around three-quarters of these countries were affected by multiple disaster-induced displacement events over the period.[xxviii] The vast majority of this displacement (98 per cent in 2012; 83 per cent over five years) was triggered by climate- and weather-related hazards such as floods, storms and wildfires. 2012 had the lowest level of displacement due to geophysical disasters for five years; around 680,000 people were displaced by earthquake and volcanic eruption disasters.[xxix]

Various researchers suggested different numbers of displaced person on the basis of their studies, like el-Hinnawi [xxx] estimates there are already some 30 million environmental refugees, while Director of UNEP Klaus Toepfer predicts there will be 50 million by the end of 2010 and the IPCC predicts 150 million environmental refugees by 2050 – equivalent to 1.5% of 2050's predicted global population of 10 billion.[xxxi] Christian Aid have postulated that a billion people could be permanently displaced by 2050 – 250 million by climate change-related phenomena such as droughts, floods and hurricanes and 645 million by dams and other development projects.[xxxii] According to the Stern Review, commissioned by the UK Treasury, agrees it is likely there could be 200 million displaced by 2050.[xxxiii]

The most generally quoted figure is that of 200 million persons displaced by the year 2050.[xxxiv]

Emphasizing on Asia, in 2012, 22.2 million people in 22 countries were displaced by disasters. This included the five countries worldwide where the most people were displaced during the year and 14 out of the top 20 largest displacement events. India had the most new displacement worldwide in 2012 (9.1 million) and the second highest number of displaced over 2008-2012 (23.8 million). [xxxv]

Further not taking into account displacement due to armed and ethnic conflict, India is estimated to have the highest number of people displaced annually as a result of ostensible 'development' projects. Independent experts estimate the number of those displaced by such projects since India's independence (1947), at between 60 and 65 million.[xxxvi] This amounts to around one million displaced every year since independence. Of these displaced, over 40% are tribals and another 40% consist of Dalits and other rural poor.[xxxvii] The vast majority of the displaced have not received adequate resettlement. The National Human Rights Commission's (NHRC) stakeholders' report for India's second Universal Periodic Review (UPR) states that "NHRC's monitoring finds that usually those displaced are given neither adequate relief nor the means of rehabilitation".[xxxviii]

In absence of a specific central government agency charged with monitoring the number of EIDPs, official statistics on the exact number of EIDPs in India are missing. Civil society estimates of internally displaced persons are region specific, and therefore cannot be helpful in establishing a precise overall number of IDPs living in India. Conservative estimates by IDMC place the number of IDPs displaced by armed conflict and violence in India at around 506,000 as of December 2011.[xxxix] This number includes IDPs living in camps alone, while, it is believed that majority of IDPs in India live outside camps.[xl]

IMPACT OF DISPLACEMENT

Climate change will significantly affect migration in three distinct ways. First, the effects of warming and drying in some regions will reduce agricultural potential and undermine 'ecosystem services' such as clean water and fertile soil. Second, the increase in extreme weather events – in particular, heavy precipitation and resulting flash or river floods in tropical regions – will affect ever more people and generate mass displacement. Finally, sea level rise will permanently destroy extensive and highly productive low-lying coastal areas that are home to millions of people who will have to relocate permanently. [xli]

For many people forced to relocate due to changes in environmental conditions, returning home is not an option [xlii] and resettlement may only be possible outside of their home nation. a large number of people "can no longer gain a secure livelihood in their homelands".[xliii]

The degradation of ecosystems, and/or demand for resources in excess of available supply, can lead to chronic poverty and hunger, high levels of communicable diseases, conflict and adaptation, or to coping strategies that include temporary or permanent migration. While natural hazards such as hurricanes and floods can affect entire nations or regions, the most dramatic impacts typically fall disproportionately on the most vulnerable (in terms of location and socio-economic status). In addition, when natural hazards abruptly destroy livelihoods, return, recovery and reintegration are not always possible. [xliv]

Population growth too puts stress upon environmental and threatens human lives mainly in two ways. First, an increase in population means demand for more food production, more land, more energy, more water and more forest products. As a result, the per capita availability of a resource gets reduced. It also eats away any increase in development and productivity. Second, population growth contributes to environmental damage. Extremely high population density strains the existing natural resources due to their overuse. As population grows, so do economic activities in order to keep pace with demands. This, in turn, leads to decline in the quality/productivity of those resources. [xlv]

High population density in these areas, combined with lack of knowledge and capital to protect local resources, causes severe environmental damage and chronic poverty. Economic and spatial marginalisation caused by everyday environmental change typically increases the vulnerability of the poor to episodic change, breaking down previous defence mechanisms against ecological stress.[xlvi]

L. Hens[xlvii] has characterised the problem as: Environmental degradation is a driving factor in causing refugees, both within and between countries; Environmental degradation in relation to migration is often the consequence of multiple factors; Seldom does the environment act alone. Environmental causes precede, amplify or underlie other causes of refugees: political and/or religious oppression, economic collapse, military and/or civil terror and/or war; Environmental security threatens not only human existence but also the peace and stability of regions around the world, especially (but not only) in poor countries.

Table 1: Classification as used by the International Disaster Database (EM-DAT) [xlviii]

		Weather or climate-related		
	Geophysical	Meteorological	Hydrological	Climatological
Rapid onset	Earthquakes and tsunamis, volcanic eruptions, dry mass movements (rock falls, landslides, avalanches, sudden subsidence)	Storms: tropical, winter, tornados, snow and sand	Floods: flash, coastal, riverine, snow melt, damreleases; wet mass movements: landslides,avalanches, sudden subsidence	Extreme winter conditions, heat waves, wild fires
Slow onset	Long-lasting subsidence Volcanic mud flow		Sea-level rise	Drought (with associated food insecurity)

Challenges related to migration and the environment include rapid urbanisation and sprawl, deforestation, soil erosion, agro-chemical pollution, water shortages, abandonment of rural areas, declining health and physical resilience, unsustainable agricultural and production systems, difficulties in building effective governance systems and the effects of migrants on source and destination communities and ecosystems.[xlix]

Being a most vulnerable group such as women, children, the elderly, persons with disabilities and indigenous peoples in the poorest countries are exposed to cumulative vulnerabilities and require special consideration.[l]

More so to cope with environmental degradation every country is to required more to spend. A new report released by the World Bank estimates that environmental degradation is costing India around 5.7% of its GDP every year. The annual cost of environmental degradation in India amounts to about Rs 3.75 trillion ($80 billion) equivalent to 5.7% of GDP," stated the report. Among the highest to blame was pollution, mainly outdoor pollution arising from particulate matter that was largely due to the burning of fossil fuels along with the losses due to the lack of access to clean water supply, sanitation and hygiene, stated the report.[li]

On upcoming impacts, the Centre for Global Development study projects that nearly 40 million people in India – more than in any other country – are at risk of dying from rising sea levels by 2050. Another estimate stated that because of rising temperatures, India's agricultural productivity could fall by 30 to 40 percent by 2080. [lii]

Impact upon EIDPS

Whenever any population displaced internally due to any of the events of environment degradation they faces grave hardship and their hardship addressed by the Office of the High Commissioner Human Rights

in 2005 [liii] as follows: (a) International assistance is denied access to victims of disasters or is subject to restrictions, while authorities are unable or unwilling to provide adequate assistance to their population (b) IDPs face discrimination in the distribution of humanitarian and reintegration assistance, in particular in areas with pre-existing patterns of discrimination or ethnic conflict (c) IDPs are forcefully directed into, and confined in, temporary shelters or camps, to facilitate the delivery of humanitarian assistance and ensure their security (d) IDPs are evicted from the shelters or settlements that they seek out on their own, without adequate provision of alternative accommodation (e) IDPs in camps find themselves living in crowded, unsanitary conditions where food and other necessities may be scarce, and with risks of violence, theft and other crimes against and among the camp residents (f) The military involvement in the initial rescue and humanitarian response increases risks of sexual exploitation and abuse, as well as children's military recruitment, among displaced communities (g) Displaced women and children face heightened vulnerability to sexual and gender-based violence, or trafficking (h) Children are separated from their family (i) Displaced children lack access to school, as a result of destruction and damage to schools, difficult transport conditions, lack of school uniforms and lack of teachers (j) IDPs have lost their personal documentation, leading to the denial of access to social services (k) IDPs, in particular women, find themselves excluded from the planning about the location and layout of camps and settlements, the planning of aid distribution, etc. (l)IDPs are prevented from returning home to areas declared "security zones" or exclusion zones", where reconstruction is forbidden; or IDPs are pressed to return by the authorities to demonstrate normalisation (m) IDPs have lost their properties and face obstacles to reclaiming them, for example in areas where landmarks for demarcation have been wiped out, or when property records have been destroyed.

Table 2: Potential climate change impacts on regions in India (projecting out to 2030)

	Climate changes	Ecological impacts	Human impacts
Himalayan	• Increase in temperature	• Increase in forest fires • Increase in glacier melt	• Loss in wood and other forest fuel used for heating in the cold season leading to deaths due to extreme cold • Flash floods leading to largescale landslides and therefore loss of agriculture area, threatening food security • Increase in incidence of malaria due to new transmission windows at higher latitudes
Northeastern region	• Increase in temperature • Decrease in winter precipitation • Increase in intensity of summer precipitation • Increase in night-time temperature	• Increase in cereal production but decrease in rice production • Tea plantations affected by soil erosion • Increase runoff and landslides during summer rain • Decrease in yields in winter	• Unemployment due to smaller crop yields • Increase in malaria due to temperature and humidity increases
Western Ghats	• Increase in temperature • Increased rain in the northern region • Decreased	• Negative effects on cash crops such as tea and coffee due to unpredictable rain • Flooding and soil erosion caused by increased rainfall	• Loss in lives and livelihoods due to unprecedented flooding • Unemployment due to impact on cash crops in the region
Coastal zone	• Temperature rise • Increase in sea surface temperature • Increase in rain fall intensity • Rising sea levels • Increase in intensity of cyclones and storm surges, especially in the East Coast.	• Decrease in coconut production • Salt intrusion affecting habitats, agriculture, and availability of fresh drinking water • Submergence of key habitats and ecosystems, including mangroves	• Increase in water borne diseases associated with cholera epidemics and due to salinization of water. • Impact on employment due to changes in agriculture, tourism, and fishing sectors • Forced migration due to loss of housing and drowning due to sea-level rise

DISPLACEMENT THREAT TO HUMAN SECURITY & INTERNAL SECURITY

Now the world has started to realise that conflicts either internal or cross boarder may arise not only because of political and military threats; they may derive also from environmental degradation. The concept of security has expanded during the last decade and that issues such as human security or collective well-being have become more and more crucial.

Mass population flows, caused by scarcity of resources coupled with state mismanagement and poor governance can lead to instability and provoke conflict situations. Such conflicts could result in population displacement and, more generally, could reduce global political stability and human security.[liv]

According to Biermann, F. and Boas, I. resource mismanagement by environmental migrants in areas of destination can increase the likelihood of conflicts. Contention can arise over diminishing resources available, including fishing waters, freshwater supplies and fertile land, and increase disputes over rights of property use. Frustration, despair and hostility can easily explode into violence in countries comprised of a patchwork of different ethnic, linguistic, religious and ideological groups. Since most environmental migrants are likely to remain in their home countries, such conflicts are more likely to be internal than international.[lv] Climate change poses risk to human security, principally through its potentially negative effects on people's livelihoods.

It is useful to think of climate change as a threat multiplier, namely as a factor that can work through several channels to exacerbate existing sources of conflict and insecurity. UN Secretariat, based on submissions of Member States and relevant organizations figure out in Figure1.

Figure 1 has systematically drawing out major threat multiplier and also concluded with threat minimisers.

Further, Homer-Dixon [lvi] while establishing the linkages between environment, scarcity, and violence draws five future types of likely violent conflicts that third world countries will be less able to prevent: 1) Disputes arising from local environmental degradation; 2) Ethnic clashes arising from population migration and deepened social cleavages due to environmental scarcity; 3) Civil strife caused by environmental scarcity that affects economic productivity and people's livelihoods. 4) Scarcity-induced interstate war, e.g. over water. 5) North-South conflicts (i.e., conflicts between the developed and developing worlds) over mitigation of, adaptation to, and compensation for global environmental

problems like global warming, ozone depletion, and threats to biodiversity.

He further concluded stated that scarcity of renewable resources … can contribute to civil violence, including insurgencies and ethnic clashes" and he predicted that in the future "such violence will probably increase as scarcities of cropland, freshwater, and forests worsen in many parts of the developing world", where the role of scarcity will be "often obscure and indirect", interacting with political, economic and many other factors. [lvii]

From Indian perspective R.K. Pachauri [lviii] stated that, 'Environmental stress' – an important factor in this equation – is caused both by environmental resource scarcity (deforestation) and also by environmental resource degradation (polluted water). Economic vulnerability and resource dependency play key roles in the link between environmental change and the potential for violence and insecurity in the developing world. Developing countries also usually lack the infrastructure and institutions to respond to crises, thereby increasing the chance of violence.

He further pointed out five linkages between poverty and natural resource stress: First, the continuing struggle to provide food and basic needs is increasing land degradation in the developing world. … Second, worsening pollution increasingly impacts air quality, with vehicular traffic and industrial expansion the key contributors. Acid rain resulting from such pollution has become a critical issue in the South Asia region. Third, world climate change that has led to a rise in both temperature and sea level holds dire consequences for South Asia coastal regions. In Bangladesh, for example, hundreds of people are killed every year by a monsoon and flood cycle, which has become more severe due to changes in sea-level and climate changes. Fourth, both water quality and quantity are at risk due to land-use changes, deforestation, and polluted waters both locally and across national borders. [lix]

Climate change is increasingly been called a 'security' problem, and there has been speculation that climate change may increase the risk of violent conflict. IPCC through their various researches demonstrated that climate change is and will increasingly have dramatic **impacts** on ecological and social systems. [lx] Many kinds of environmental changes such as coastal erosion, declining precipitation and soil moisture, increased storm intensity, and species migration, climate change poses risks to human security. [lxi]

Human security therefore concerns human well-being, and the opportunity and capacity to ensure human life and the dignity associated with that life.

Specifically, the UNDP specifies two main aspects of human security: one, safety from chronic threats like hunger, disease and repression, and two, protection from sudden and harmful disruptions in daily life patterns. It further includes Economic security, Food security, Environmental security, Health security, Personal security, Community security, Political security, Cultural security. [lxii] When person displaced all above types of security converted in to insecure one.

Many case studies, for example from Northern Pakistan [lxiii], South Asia [lxiv], the Niger Delta [lxv], the Pacific Islands [lxvi] and Ethiopia [lxvii] show that marginalised people are vulnerable to environmental change, and it all helps substantiate the argument that climate change poses significant risks to human security in many parts of the world. Environmental change can be a significant factor that undermines human security.

Human Security framework demands focus on the most vulnerable to climate change because they will experience the "first and worst" of climate effects. [lxviii] Cernea's impoverishment risk and reconstruction model proposes that 'the onset of impoverishment can be represented through a model of eight interlinked potential risks intrinsic to displacement'. These are: Landlessness; Joblessness; Homelessness; Marginalization; Food Insecurity; Increased Morbidity and Mortality; Loss of Access to Common Property; Social Disintegration; Loss of Access to Community Services; Violation of Human Rights. [lxix]

Economists Sheetal Sekhri and Adam Storeygard while analysing nationwide rainfall, crime and dowry data, found that domestic violence and dowry deaths in India rose in periods of lower-than-normal rainfall. For instance, a one-metre rainfall deficit led to a 37% spike in dowry deaths. "Dowry deaths are used to increase income in time of economic distress, as these killings give households access to a large dowry payment". [lxx]

David Blakeslee and Ram Mukul Fishman examined data from three decades (1970- 2000) and found only property crimes increased in times of abundant rainfall. Rainfall shocks increased the incidence of most crimes, including burglary, banditry, rape, riots and murder. [lxxi]

Researchers from Princeton University and the University of California-Berkeley report [lxxii] that even slight spikes in temperature and precipitation have greatly increased the risk of personal violence and social upheaval throughout human history. Projected onto an Earth that is expected to warm by 2 degrees Celsius by 2050, the authors suggest that more human conflict is a likely outcome of climate change. They found that while climate is not the sole or primary cause of violence, it undeniably exacerbates existing social and interpersonal tension in all societies, regardless of wealth or stability. Most of India and the subcontinent faces the prospect of three- to four-deviation shifts in climate by 2050, which implies a 42% to 56% rise in the risk of civil war, riots or ethnic conflict.[lxxiii]

Understanding of evolution of any environmental induced conflict is necessary to proper address of problem and their mitigation. Diehl and Gleditsch [lxxiv] point out eight main steps which enable to understand how a society passes to reach the level of eco conflict and same will be worth to discuss here:

Stage I (Overpopulation Pressure): Population pressures increase due to dense human settlements, and stem from high birth rates, increasing urbanization, and the continuing influx of foreign migrants.

Stage II (Growing Demands): As population increases, human activities, per capita resource consumption, standard of living, and human wastes escalate. Additionally, the average individual's level of consumption or affluence is raised further by resource consumption and pollution-generating technology development.

Homer-Dixon [lxxv] (1991 and 1994) claim resource scarcity as a main cause that can lead to three types of conflict: simple scarcity conflict (where at least two states or groups engage in violent conflict or warfare), group identity conflict (where groups are displaced from a resource scarce region to another region, resulting in tension and conflict), or relative deprivation conflict (where one group feels deprived of a resource relative to other groups).

Stage III (Environmental Stress): Increasing population and their growing demands increase resource shortages and environmental damage through a vicious cycle – when the resource supply becomes scarce or less accessible, then it requires excessively high costs and greater environmental damage in order to provide resources for additional people.

Stage IV (Competition and Tension): Environmental stress, including scarcities and degradation, instigate competition among the affected population (local people and migrants) within a society, generating political and social tension. During times of competition over ecological resources, the affected country's people usually become more self-conscious and self-assertive of their group identity.

Stage V (Distribution Disorder): Growing competition over scarce resources places regimes under heavy stress concerning the 'orderly'

distribution of insufficient resource supplies among an increasing population. The greater the scarcity, the more likely is a breakdown of the distribution order. This is because advantaged groups, often including government elite members, wield their power to monopolize the valued at the expense of other groups.

Stage VI (Environmental Destruction): Without appropriate measures to prevent overuse and pollution of renewable resources, ecological stress passes a threshold of irreversibility. Even if the environmental condition is partially reversible, it will be a prohibitively long and costly process.

Stage VII (Economic Decline): Environmental destruction such as depletion of fish stocks, decreases agricultural and industrial production and causes a lowering of average living standards and further impoverishment and malnutrition within developing societies.

Stage VII (Social Disintegration): Normally, environmental destruction and economic woes have the following social effects before producing violent conflict: disruption of authoritative political, financial, and legal institutions and accepted social relations; the spread of relative deprivation and frustration due to unequal distribution of both ecological resources and economic goods; and population displacement including mass migration of rural workers into cities or across the national borders.

Stage IX (Eco Conflict): Environmental destruction and its disruptive effects not only create conflicts but also protract ongoing internal disorders. Since conflict is a 'process' and not a one-time event, environmental issues can add a new dimension to enduring social or ethnopolitical disputes.

Latest cyclonic activities of Phailin and Typhoon in Philippines are ready examples of it which have already taken so many lives and displaced thousands of people. Survivors of the typhoon which has decimated the Philippines have been looting and foraging "like zombies" in their desperate search for food and supplies. Just 20 out of 390 police officers reported for duty after the typhoon hit, and many locals have descended into a state of lawlessness in the absence of aid. [lxxvi] Some of districts in Odisha too faces the same

Barnett and Adger summarise the growing consensus as follows: "Climate change will effect some major environmental changes which, when superimposed on existing environment and development problems, may result in security problems for some individuals, social groups, and countries. It may undermine human security by reducing access to, and the quality of, natural resources that are important to sustain livelihoods….It may be one among numerous coexisting factors that contributes to violence"[lxxvii]

RIGHTS, PROTECTION & THE PROTECTION GAPS

Each and every EIDP's whether internal or international are entitled to all human rights. Human Rights such as the right to life, the right to water, the right to freedom of expression, the right to health, the right to food, the right to an adequate standard of living, the right to political participation, the right to information, the right to be free from discrimination, the right to equal treatment, the right to security of the person are utmost necessary for any EIDPs.

The general instruments in this context are the 1948 Universal Declaration of Human Rights, the 1966 International Covenant on Civil and Political Rights, the 1966 International Covenant on Economic, Social and Cultural Rights, the 1981 Convention on the Elimination of All Forms of Discrimination against Women and the 1989 Convention on the Rights of the Child.

In particular, Article 3 of the Universal Declaration of Human Rights proclaims that "everyone has the right to life, liberty and the security of person". [lxxviii]

Whereas Article 25 of the Universal Declaration of Human Rights provides that, "everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness . . . or other lack of livelihood in circumstances beyond his control. [lxxix]

The right of access to information is also an indispensible tool to enable EIDPs to assert their rights to protection and assistance. This right enshrined in Article 9 of Universal Declaration of Human Rights [lxxx] and in ICCPR [lxxxi] as well.

Three international human rights instruments are specifically and significantly relevant: the United Nations Guiding Principles on Internal Displacement [lxxxii]; the Great Lakes Pact including its Protocol on Protection and Assistance to Internally Displaced Persons, and the African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa ("the Kampala Convention").

The 1998 Guiding Principles on Internal Displacement is widely recognised not least because, as we have noted, the majority of people who are, and are likely to be, displaced by changing environmental conditions will move within their own countries. The Guiding Principles therefore offer a valuable set of legal norms which could afford rights protection to such environmentally displaced people.

Bhatt / OIDA International Journal of Sustainable Development 06: 10 (2013)
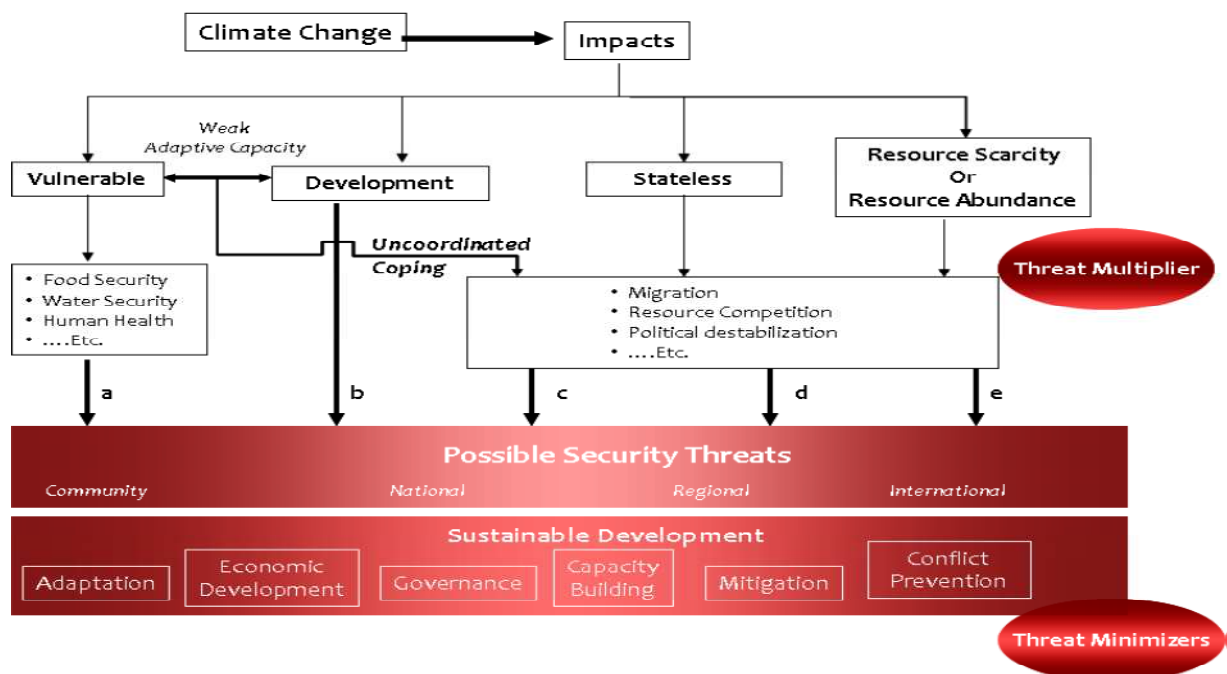
Figure 1: Major threat multiplier and threat minimisers

Although not legally binding, in September 2005 heads of state and governments assembled at the World Summit in New York recognised the Guiding Principles as "an important international framework for the protection of internally displaced persons." [lxxxiii]

The Brookings-Bern Project [lxxxiv] on Internal Displacement posit that the Guiding Principles include the right to: dignity and security; participation in decision making in relation to displacement, return or relocation; move, remain together as a family/household or to be reunited if separated; other basic rights including the right to life, food and housing and non-discrimination against IDPs in distributing assistance.

IDPs are recognised in paragraph 2 of the introduction to the Guiding Principles as: Persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border.

The African Union Convention on the Protection of and Assistance to internally displaced persons (also known as the Kampala Convention) [lxxxv] has important implications for the protection of those uprooted from their homes and livelihoods as a result of environmental factors. The Convention seeks to prevent and mitigate displacement; provides for the protection and assistance of persons displaced as a result of natural disasters and climate change; and calls on states to create condition for sustainable and lasting solution to the problem of internal displacement. It provides for the establishment of national and regional mechanisms for early warning, disaster risk reduction and for coordination of humanitarian assistance.

These instruments each recognise that to maximise the effectiveness of protection and assistance for IDPs, the state must: collect information about the needs of IDPs; seek the participation from IDPs in all policy and decision-making affecting them, and disseminate information to IDPs about their rights and allow access to publicly held information.

Furthermore Environmental security and displacement have been addressed in several other international documents like the Brundtland report [lxxxvi] and the UN Conference on Environment and Development in Rio de Janeiro, 1992, [lxxxvii] pointed to environmental degradation as an important underlying cause for mass migration. Agenda 21

[lxxxviii] calls for increased research to identify "the major migration flows that may be expected with increasing climatic events and the cumulative environmental change that may destroy people's local livelihoods." Environmental degradation is identified as one cause for the movement of people by the Programme of Action of the UN International Conference on Population and Development in Cairo, 1994. [lxxxix]

Earlier in 1972 the Stockholm Declaration provides for the "fundamental right to ... an environment of a quality that permits a life of dignity and wellbeing". [xc] The United Nations Environment Programme (UNEP) has reported that environmental damage has been a major cause of political unrest and conflict. While there is work to be done to more accurately determine the nature and extent of the link between environmental degradation, poverty and political and social conflict, the logic of some form of connection appears to be undeniable. [xci]

A range of other treaties, together with a vast array of equally important instruments and interpretive standards such as the UN Committee on Economic, Social and Cultural Rights General Comment No. 4 on the Right to Adequate Housing (1991), General Comment No. 7 on Forced Evictions (1997), the UN Guiding Principles on the Rights of Internally Displaced Persons (1998), the UN 'Pinheiro' Principles on Housing and Property Restitution for Refugees and Displaced Persons (2005) and many others, reveals a very considerable body of international human rights laws and standards which can and should be used by Governments to build the legal, policy and institutional frameworks required to provide rights based durable solutions to the displacement caused by climate change. [xcii]

There are also various "subsidiary" norms and instruments which afford different forms of human rights protection for migrant groups either directly or indirectly, for example the 1990 International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, the 1989 Convention on the Rights of the Child, the 1981 Convention on the Elimination of All Forms of Discrimination against Women and the 1991 ILO Convention concerning Indigenous and Tribal Peoples in Independent Countries. [xciii]

The OHCHR report [xciv] was also addressed the problem and noted that the following rights may be effected by climate change: the right to life, the right to adequate food, the right to water, the right to health, the right to adequate housing, and the right to self-determination, and rightfully emphasises further that "persons affected by displacement within national borders are entitled to the full range of human rights guarantees by a given state, including protection against arbitrary or forced displacement and rights related to housing and property restitution for displaced persons".

At regional level too Recommendation 1631(2003) [xcv] on internal displacement in Europe, the Assembly expresses its continued support to the humanitarian action and normative frameworks developed over the last decade to protect the internally displaced persons through the Guiding Principles on Internal Displacement. Small nation like Kenya has drafted a National Policy on the Prevention of Internal Displacement and the Protection and Assistance to Internally Displaced Persons in Kenya, 2009. Significantly, the document acknowledges environment and climate as paramount causes of displacement, although it focuses especially on displacement induced by natural disasters rather than slow-onset displacement drivers. [xcvi]

After the 1972 UN Conference on Environment and Human Development at Stockholm, the Indian government incorporated Articles 48A(It states that 'The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country'.), Article 51A (g) (This article imposes a responsibility on every citizen 'to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures'.), and 253(It read with entry 13 of the Union list) provides power to the Centre to make laws implementing India's international obligations and also any decision made at international conference.), to the Indian Constitution. On the basis of these Articles, the Indian Parliament enacted the Prevention and Control of Pollution Act, 1981 (Air Act), and the Environmental Protection Act of 1986. The Indian Constitution provides that the Centre may enact laws on State list, after receiving consent from the respective states (For example, The Water (Prevention and Control of Pollution) Act, 1974 was enacted by the Parliament after consent resolutions were passed by 12 State Legislatures. But the biggest question is: are these instruments efficient and sufficient to protect the interest and rights of EIDPs in India?

The Protection Gaps

Climate change, environmental degradation and migration are among the key topics that dominate the international and national political arena today. The complex interdependence between these phenomena and the potential consequences of the failure to tackle them in time are beginning to attract increasing public and scientific attention. Yet manifested political commitments to the pursuit of sustainable development, environmental protection and the respect, protection and fulfilment of human rights –

and even more so to their inter-linkages – are often limited by narrow geopolitical interests when action becomes necessary. [xcvii]

Even having so many International protection and operational frameworks still at ground level they are deficient, leaving several categories of people forced to flee or seek safer existence without effective national or international protection.

No one should have any doubt about the fact that EIDPs constitute a specific category of people in need of special assistance, protection and development aid which is not always recognised by the governments concerned. Their legal status is not always clear, their specific rights are often poorly defined, their fundamental freedoms are sometimes violated and their humanitarian situation is mostly precarious. The issue of internally displaced persons has both humanitarian and human rights dimensions and often not recognised properly and made available.

Birkeland claims that environmental factors are seldom given due attention and that in many situations of displacement there are immense differences between those whom the displaced themselves perceive as displaced and whom the external factors will include in their mandates. Hence, she concludes, it is important to secure an inclusive understanding of the IDP category rather than trying to fit displaced into separate categories such as environmental or climate refugees in order to secure rights and assistance. [xcviii]

Responsibility to protect the people is also a major policy concern. The first Special Representative of the Secretary-General on IDPs, Francis Deng, developed a concept of sovereignty as responsibility to protect (R2P). There is still not one mandated agency for the protection of and assistance to IDPs, but UNHCR now has a special role and accountability as cluster lead. According to the Internal Displacement Monitoring Committee's (IDMC) Global Overview, a significant number of IDPs still suffer from a protection and assistance deficit. [xcix]

Since most forced migration will probably be internal and regional, resettlement and financial obligations are other important aspects of burden-sharing. A new international environmental migration fund could provide the financial basis for measures to deal with the forced migration. [c]

In India, there is no national policy, legislation or other mechanism to respond to the needs of people displaced by armed conflict or generalised violence. The central government has generally devolved responsibility for their protection to state governments and district authorities, which are doing

precious little to respond to the rights of IDPs. What makes matters worse is that no Ministry or agency at the central level is mandated to ensure the protection of IDPs and monitor their return or local integration. [ci]

In words of Kofi Annan, "As we look ahead, we can see real risks that resource depletion, especially fresh water scarcities, as well as severe forms of environmental degradation, may increase social and political tensions in unpredictable but potentially dangerous ways. These new security challenges require us to think creatively and to adapt our traditional approaches to better meet the needs of our new era." [cii]

There are so many policies and implementing gaps specially concerning India; can be summarised as: (a) failure to address environmental induced internal displacement; (b) poor institutional collaboration and coordination of ministries, agencies; (c) lack of government institutional capacity and resources – qualified staff, finance, logistics and equipment; (d) lack of decentralization of strategy and policy making; (e) lack of technical expertise especially in the area of environmental law; (f) lack of adequate data of EIDPs; (g) Less emphasis on research related to EIDPs. (h) Major focus on rapid-onset disasters displacement and lesser on slow-onset environmental displacement; (i) Agencies responsible for the protection of internal security are not adequately knowledge about environmental security. (j) A protection gap is most marked in what governments do (or fail to do), in terms of specifying and protecting rights before displacement (i.e. rights related to mitigation, adaptation and resilience strategies) and after displacement (i.e. rights related to return and, more especially, related to resettlement).

CONCLUSIONS

Many causes like creation of dams, artificial reservoirs, hydropower plants and irrigation projects, development of communication networks, urbanization and urban transformation, deforestation, Wildfire and earthquake generated tsunamis, mining, oil exploitation, natural disasters, man-made industrial accidents and pollutions *etc.* are main responsible factors which affects environment as well as lead to displacements of millions of people. Environmental induced displacement undermines human security and internal security

Literature reflects Environmental degradation and stress due to heavy population inflows either sudden or slowly, on a particular place become an important factor for scarcity of resource which imbalance the demand-supply chain and aggravates the confrontation. Further result in to survival crimes.

Environmentally induced internal displaced people (EIDP) people are become vulnerable as they insecure in many ways. Varieties of insecurity to human wellbeing pose risk to internal insecurity. This is the major reason why climate change is of great concern to many people. Extensive empirical research is required on this issue so that effective mechanism can be evolved to fight with Environment degradations and protection of EIDPs.

Environmentally induced internal displacement is becoming one of the major policy as well internal security challenges of this century and India too is facing the same. Often National protection and operational frameworks are deficient.

All in all, large numbers of environmentally induced internal displaced people (EIDP) are supposed to threaten the human security as well as internal security of any state. Such people put stress upon resources of land where they reached and often indulge in Survival crimes. EIDP's also prone towards crimes on them. Further these create complex environmental, humanitarian, and non traditional internal security challenges.

In author's humble opinion this paper may help to frame a policy in protection of the EIDP's rights of EIDPs, strengthening in agencies that are responsible to protect internal security by way of protecting Environments.

SUGGESTIONS

In this respect more specific recommendations are as follows: (a) Develop a comprehensive national strategy on EIDPs which addresses all problems of them and also mitigation, assistance and aid. (b) Mechanism to develop accurate, efficient and disaggregated data of EIDPs. Data related vulnerable group like women, handicap, aged people and sick should be collected separately. (c) International and regional organizations should pool their resources and draw on the most sophisticated surveillance technology to establish a reliable early wanting system for environmental risks. (d) Recognise environmental insecurity with respect to threat for internal security. (e) Countries should sign up the Guiding Principles for Internal Displacement. (f) Adequate funding required for relief, recovery and development programmes in situations of mass environmentally induced internal displacement (g) Required greater support to national disaster preparedness and response agencies (h) Required Environmental Security training programme for agencies responsible for the protection of Internal security (i) Greater cooperation between agencies responsible for environmental protection to stop environment crimes. (j) At regional level existing law and protection possibilities should be further

investigated to identify and address protection gaps in environmentally induced internal displacement. (k) Separate wings like environment policing to deal with Environment crimes using Environment forensic and other latest technology can be another best option, if existing cannot be turn in to.

REFERENCES

[i] In Sachidananda Pandey Vs. State of West Bengal (1987 (2) S.C.C. 295, The Supreme Court of India rightly quoted a German Philosopher while dealing with the importance of environment.
[ii] Displacement solutions, (2009) Climate Change Displaced Persons And Housing, Land And Property Rights Preliminary Strategies For Rights-Based Planning And Programming To Resolve Climate-Induced Displacement, Retrieved from www.displacementsolutions.org
[iii] Biermann, F. And Boas, I. (2007), 'Preparing for a Warmer World. Towards a Global Governance System to Protect Climate Refugees' Global Governance Working Paper No 33 – November 2007, Retrieved from http://www.sarpn.org.za/documents/d0002952/Climate_refugees_global_governance_Nov2007.pdf
[iv] Fisher P Brian (2009), Global Climate Change in a Social Justice context, (Chapter 1 of the dissertation," Reframing Global Climate Change: A Duty to Adapt for Vulnerable Communities, University of California, Irvine.
[v] Arpita Bhattacharyya and Michael Werz (December 2012) Climate Change, Migration, and Conflict in South Asia Rising Tensions and Policy Options across the Subcontinent, The Center for American Progress, Retrieved from www.americanprogress.org
[vi] De Moor, N. And Cliquet, A. (2009) 'Environmental Displacement: a New Security Risk for Europe?' Paper written for the Conference 'Security Insecurity and Migration in Europe' at the University of Leicester, 18-19 September 2009.
[vii] Myers, N. (1997) 'Environmental Refugees' 19 Population and Environment 167. Myers, N. (2004) 'Environmental Refugees: a Growing Phenomenon of the 21st Century', Conference Paper 2004, Retrieved

from:http://www.envirosecurity.org/conference/working/EnvironmentalRefugees.pdf.

[viii]Bates, DC (2002) 'Environmental Refugees? Classifying Human Migrations Caused by Environmental

Change' 23 Population and Environment 465. Williams, A. (2008) 'Turning the Tide: Recognizing Climate Change Refugees in International Law', 30 (4) Law & Policy 502. Conisbee, M. And Simms, A. (2003) 'Environmental Refugees: the Case for Recognition' New Economics Foundation, Retrieved from:

http://www.neweconomics.org/gen/uploads/lpce0g55xjx5eq55mfjxbb5523102003180040.pdf.

[ix] Steve Lonergan, Environmental Degradation in Population Displacement, Envtl. Change & Security Project Rep. 5, 9 (Spring 1998), Retrieved from http://

www.wilsoncenter.org/topics/pubs/ACF26C.pdf;

Jessica Cooper, Note, (1998) Environmental Refugees: Meeting the Requirements of the Refugee Definition, 6 N.Y.U. Envtl. L.J. 480, 503; Suzette Brooks Masters, (2000), Environmentally Induced Migration: Beyond a Culture of Reaction, 14 Geo. Immigr. L.J. 855, 863

[x] Gregory S. McCue, (1993), Environmental Refugees: Applying International Environmental Law to Involuntary Migra-tion, 6 Geo. Int'l Envtl. L. Rev. 151, 152

[xi] Gregory S. McCue, (1993), Supra note 10

[xii] Gregory S. McCue, (1993), Supra note 10

[xiii] Jay E. Austin & Carl E. Bruch (2000), The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives; see also Jeremy Leggett, The Environmental Impact of War: a Scientific Analysis and Greenpeace's Reaction, in Environmental Protection and the Law of War: A "Fifth Geneva" Convention on the Protection of the Environment in Time of Armed Conflict 68, 68-77 (Glen Plant ed., 1992) (discussing international law relevant to environmental protection in time of war and armed conflict); Tara Weinstein, (2005) Prosecuting Attacks that Destroy the Environment: Environmental Crimes or Humanitarian Atroci-ties?, 17 Geo. Int'l Envtl. L. Rev. 697, 698

[xiv] Bates, Dc (2002) 'Environmental Refugees? Classifying Human Migrations Caused by Environmental Change' 23 Population and Environment 465. Mccue, GS (1993) 'Environmental Refugees: Applying International Environmental Law to Involuntary Migration' 6 Geo.Int'l Envtl. L. Rev. 151.. Havard, B. (2007) 'Seeking Protection: Recognition of Environmentally Displaced Persons Under International Human Rights Law' 18 Villanova Envtl. L.J. 65. Keane, D. (2004) 'The Environmental Causes and Consequences of Migration: A Search for the Meaning of

"Environmental Refugees'" Georgetown International Environmental Law Review 209.

[xv] Bates, DC (2002) supra note 14. Hong, J. (2001) 'Refugees of the 21st Century: Environmental Injustice' 10 Cornell J.L. & Pub. Pol'y 323. Keane, D. (2004) 'The Environmental Causes and Consequences of Migration: A Search for the Meaning of "Environmental Refugees'" Georgetown International Environmental Law Review 209.

[xvi] Cooper, JB (1998) 'Environmental Refugees: meeting the Requirements of the Refugee Definition' 6

N.Y.U. Envtl. L.J. 480. LOPEZ, A. (2007) 'The Protection of Environmentally Displaced Persons in International Law' 37 Environmental L. 365. CONISBEE, M. AND SIMMS, A. (2003) 'Environmental Refugees: the Case for Recognition' New Economics Foundation, Retrieved from: http://www.neweconomics.org/gen/uploads/lpce0g55xjx5eq55mfjxbb5523102003180040.pdf.)

[xvii] Bates, DC (2002) supra note 14.

[xviii] The Inter-Agency Standing Committee (IASC) is a unique inter-agency forum for co-ordination, policy development and decision making involving the key UN and non-UN humanitarian actors. Retrieved from www.humanitarianinfo.org/iasc

[xix] IASC , "Climate change, migration and displacement: Who will be affected?", Working paper submitted by the Informal Group on Migration/Displacement and C limate C hange to the IASC Working Group, pp. 2-3.

[xx] Aptekar, Lewis, 1994: Environmental Disasters in Global Perspective (New York: G.K. Hall).

[xxi] Michelle Yonetani, Global estimates (2012), People displaced by disasters, May 2013, The Internal Displacement Monitoring Centre (IDMC), pg. 9, Retrieved from www.internal-displacement.org

[xxii] Maintained by the Centre for Research on the Epidemiology of Disasters (CRED), Brussels, Retrieved from www.emdat.be.

[xxiii] United Nations, (2010) Department of Economic and Social Affairs-Population Division, Population Estimates and Projections Section, "World Population Prospects, the 2010 Revision".

[xxiv] Arpita Bhattacharyya and Michael Werz (December 2012) Climate Change, Migration, and Conflict in South Asia Rising Tensions and Policy Options across the Subcontinent, The Center for American Progress, , Retrieved from www.americanprogress.org

[xxv] Government of India, Ministry of Environment & Forests, (2010), "Climate Change and India: A 4x4 Assesment" Retrieved from http://moef.nic.in/downloads/public-information/fin-rpt-incca.pdf.

[xxvi] Panel to study whether hydel projects caused Uttarakhand floods, (Oct 19, 2013,), Press Trust of India, Retrieved from http://ibnlive.in.com/news/panel-to-study-whether-hydel-projects-caused-uttarakhand-floods/429256-3-243.html

[xxvii] Mrs Tina AC KETOFT, (Doc. 11785 23 December 2008 Environmentally induced migration and displacement: a 21st-century challenge Report Committee on Migration, Refugees and Population Rapporteur:, Sweden, Alliance of Liberals and Democrats for Europe

[xxviii] Global estimates (2012) People displaced by disasters May 2013, Michelle Yonetani, The Internal Displacement Monitoring Centre (IDMC), Norwegian Refugee Council, Retrieved from www.internal-displacement.org

[xxix] Global estimates (2012) People displaced by disasters May 2013, Michelle Yonetani, The Internal Displacement Monitoring Centre (IDMC), Norwegian Refugee Council, Retrieved from www.internal-displacement.org

[xxx] El-Hinnawi, E. (1985) Environmental Refugees, Nairobi: UNEP.

[xxxi] Retrieved from www.alternet.org/environment/19179

[xxxii]Christian Aid (2007) Human Tide: the Real Migration Crisis, Retrieved from www.christianaid.org.uk/Images/human_tide3__tcm15-23335.pdf.

[xxxiii] Stern, N. (2006) Stern Review on the Economics of Climate Change, Retrieved from www.hmtreasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm.

[xxxiv] Myers, N. (2004) 'Environmental Refugees: a Growing Phenomenon of the 21st Century', Conference Paper 2004, Retrieved from: http://www.envirosecurity.org/conference/working/EnvironmentalRefugees.pdf./ Castles, S. (2002) 'Environmental Change and Forced Migration: Making Sense of the Debate' New Issues in Refugee Research, UNHCR Working Paper No. 70, October 2002, Retrieved from: http://www.unhcr.org/research/RESEARCH/3de344fd9.pdf . Mcadam, J. (2007) 'Climate change 'refugees' and international law', NSW Bar Association, 24 October 2007, Retrieved from: http://www.nswbar.asn.au/circulars/climatechange1.pdf.

[xxxv] Michelle Yonetani, (May 2013) Global estimates 2012 People displaced by disasters, Internal Displacement Monitoring Centre pg. 27.

[xxxvi] Planning Commission, Government of India, (August 2011.), The Draft Approach Paper for the Twelfth Five-Year Plan

[xxxvii] Walter Fernandes, (24 November 2011) Development-induced Displacement and Human Rights, Seven Sister's Post, , Retrieved from: http://www.sevensisterspost.com/epaper/24.11.11.pdf

[xxxviii] NHRC, India Submission to the UN Human Rights Council for India's Second Universal Periodic Review, Retrieved from: http://nhrc.nic.in/Reports/UPR-Final%20Report.pdf.

[xxxix] Internal Displacement Monitoring Centre, (9 February 2012) India: IDP Population Figures, , Retrieved from:http://www.internaldisplacement.org/idmc/website/countries.nsf/(httpEnvelopes)/90E174CA3D9CF14CC1257790002402F2?OpenDocument#22.2.1

[xl] Internal Displacement Monitoring Centre, Global Overview-2011, (2011) Internal Displacement in South and South-East Asia- India, page 86, Retrieved from:http://www.internaldisplacement.org/8025708F004BE3B1/(httpInfoFiles)/0E27234251BE6E48C12579E400369AA9/$file/global-overview-asia-2011.pdf

[xli] Andrew Morton, Philippe Boncour and Frank Laczko, Human security policy challenges, Climate Change And Displacement FMR31, Retrieved from http://www.fmreview.org/FMRpdfs/FMR31/05-07.pdf

[xlii] David Keane, (2004), The Environmental Causes and Consequences of Migration: A Search for the Meaning of "Environmental Refugees," 16 GEO. INT'L ENVTL. L. REV. 209, 211

[xliii] Norman Myers, (2005), 13th Economic Forum, Environmental Refugees: An Emergent Security Issue, Retrieved from http://www.osce.org/documents/eea/2005/05/14488_en.pdf.

[xliv] Andrew Morton, Philippe Boncour and Frank Laczko, Human security policy challenges, Climate Change And Displacement FMR31, Retrieved from http://www.fmreview.org/FMRpdfs/FMR31/05-07.pdf

[xlv] Sarfaraz Alam, (Jul-Sep 2003) Environmentally Induced Migration from Bangladesh to India, Strategic Analysis/, Institute for Defence Studies and Analyses

[xlvi] B. Shenton and M. Watts (1979) quoted in Bryant, Raymond L., no.7, p. 26.

[xlvii] L. Hens, Environmentally Displaced People, Regional Sustainable Development Review: Africa, Encyclopedia of Life Support Systems (EOLSS)):

[xlviii] Maintained by the Centre for Research on the Epidemiology of Disasters (CRED), Brussels, Retrieved from www.emdat.be.

[xlix] Dr Camillo Boano, (1, November 2008), Professor Roger Zetter, Dr Tim Morris, Environmentally displaced people Understanding the linkages between environmental change, livelihoods and forced migration, Forced Migration Policy Briefing, Refugee Studies Centre, Oxford

Department of International Development, University of Oxford

[l] Mrs Tina AC KETOFT, (23 December 2008) Environmentally induced migration and displacement: a 21st-century challenge Report Committee on Migration, Refugees and Population Rapporteur:, Doc. 11785, Sweden, Alliance of Liberals and Democrats for Europe

[li] Madhavi Rajadhyaksha (Jul 17, 2013) Environmental degradation costing India 5.7% of its GDP: World Bank, TNN, Retrieved from http://articles.timesofindia.indiatimes.com/2013-07-17/pollution/40634553_1_degradation-india-world-bank

[lii] Michael Kugelman, (November 23, 2012) India's Environmental Security Challenge: Water, Coal, Natural Gas, and Climate Change Fuel Friction, Friday, , Retrieved from http://www.newsecuritybeat.org/2012/11/indias-environmental-security-challenge/

[liii] UN High Commissioner for Human Rights, (2005), Protection risks in situations of displacement caused by natural Disasters (Adapted from Protection of Internally Displaced Persons in Situations of Natural Disasters, Office of the UN High Commissioner for Human Rights, 2005

[liv] Mrs Tina AC KETOFT (23 December 2008) Environmentally induced migration and displacement: a 21st-century challenge Report Committee on Migration, Refugees and Population Rapporteur:, Doc. 11785, Sweden, Alliance of Liberals and Democrats for Europe

[lv] Biermann, F. and Boas, I. (November 2007), "Preparing for a warmer world: Towards a global governance system to protect climate refugees", Global Governance Working Paper No. 33, , p. 21 Retrieved from http://www.glogov.org/images/doc/WP33.pdf

[lvi] Homer-Dixon, Thomas, (1999), Environment, Scarcity and Violence, Princeton: Princeton University Press

[lvii] Homer-Dixon (1999: 177)

[lviii] R.K. Pachauri, (17 October 2000) "Environmental Security: A Developing Country Perspective", meeting report of the Wilson Center, Environmental Change and Security Project, Current Events, , Retrieved from: http://ecsp.si.edu/archive/rk-pauchari.htm

[lix] R.K. Pachauri, (17 October 2000) "Environmental Security: A Developing Country Perspective", meeting report of the Wilson Center, Environmental Change and Security Project, Current Events, Retrieved from: http://ecsp.si.edu/archive/rk-pauchari.htm

[lx] IPCC (Intergovernmental Panel on Climate Change). (2001). Climate Change 2001: Synthesis report. A Contribution of Working Groups I, II, and III of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press. IPCC (Intergovernmental Panel on Climate Change). (2007). Climate Change 2007: Synthesis report. Contribution of Working Groups I, II, and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press.

[lxi] McCarthy, J., Canziani, O., Leary, N., Dokken, D., & White, K. (2001). Climate change 2001: Impacts, adaptation and vulnerability. Cambridge: Cambridge University Press.

[lxii] Human Security, Climate Change and Environmentally Induced Migration published in 2008 by the United Nations University (UNU-EHS). Jon Barnett and W. Neil Adger, (2007) "Climate change, human security and violent conflict", published in Political Geography, Vol. 26.

[lxiii] Matthew, R. (2001). Environmental stress and human security in Northern Pakistan. Environmental Change and Security Project Report, 7, 21e35.

[lxiv] Najam, A. (2003). The human dimensions of environmental insecurity: some insights from South Asia. Environmental Change and Security Project Report, 9, 59e74.

[lxv] Mochizuki, K. (2004). Conflict and people's insecurity: an insight from the experiences of Nigeria. In H. Shinoda, & H. Jeong (Eds.), Conflict and human security: A search for new approaches of peace-building (pp. 207e228). Hiroshima: Institute for Peace Science: Hiroshima University.

[lxvi] Cocklin, C., & Keen, M. (2000). Urbanization in the Pacific: environmental change, vulnerability and human security. Environmental Conservation, 27, 392e403.

[lxvii] Haile, S. (2004). Population, development, and environment in Ethiopia. Environmental Change and Security Project Report, 10, 43e51.

[lxviii]Fisher P Brian (2009), Global Climate Change in a Social Justice context, (Chapter 1 of the dissertation,"Reframing Global Climate Change: A Duty to Adapt for Vulnerable Communities, University of California, Irvine

[lxix] Michael M. Cernea, Impoverishment Risks, Risk Management, and Reconstruction: A Model for Population Displacement and Resettlement, , This paper is presented to the UN Symposium on Hydropower and Sustainable Development in support of, and as background to, the Keynote Paper presented by the same author in the set of sessions of the Symposium devoted to the Social Aspects of Hydropower Development. (Beijing , October 27-290, Retrieved from http://www.un.org/esa/sustdev/sdissues/energy/op/hydro_cernea_population_resettlement_backgroundpaper.pdf

[lxx] Sheetal Sekhri, Adam Storeygard, (22 March 2011) The Impact of Climate Variability on Crimes Against Women: Dowry Deaths in India, Retrieved from

http://people.virginia.edu/~ss5mj/crimesdraft_april20 11.pdf)
[lxxi] David Blakeslee, Ram Mukul Fishman, (January 29, 2013), Rainfall Shocks and Property Crimes in Agrarian Societies: Evidence from India, , Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2 208292
[lxxii] Retrieved from http://www.sciencemag.org/content/early /2013/07/31/science.1235367 > Science
[lxxiii] Morgan Kelly, (August 1, 2013), Cool heads likely won't prevail in a hotter, wetter world, Retrieved from www.princeton.edu/main/news/archive/S37/53/02C5 1/index.xml?section=topstories
[lxxiv] Diehl, Paul F. and Nils Petter Gleditsch, eds., (2001), Environmental Conflict, Boulder, Colorado: Westview Press. Shin-Wha Lee, (Number 1, 2001), Emerging Threats to International Security: Environment, Refugees, and Conflict Journal Of International And Area Studies 73 Volume 8, , pp. 73-90).
[lxxv] Homer-Dixon, Thomas F., (1991), "On the Threshold: Environmental Change as Causes of Acute Conflict," International Security 16(2). Homer-Dixon, Thomas F., (1994), "Environmental Scarcities and Violent Conflict: Evidence from Cases," International Security 19(1).) and the members of his Project on Environment, Population, and Security at the University of Toronto (one of the most prominent and controversial in this subject area
[lxxvi] Mark Piggott, Typhoon 'Yolanda' Haiyan, (November 10, 2013), Eye-witnesses Describe Survivors 'Foraging Like Zombies', , Retrieved from http://www.ibtimes.co.uk/articles/520992/20131110/ philippines-tacloban-leyte-island-tornado-storm-haiyan.htm
[lxxvii] Barnett, J. and Adger, W.N. (2007) "Climate change, human security and violent conflict", Political Geography (2007), pp. 1-17. doi:10.1016/j.polgeo.2007.03.003.).
[lxxviii] Universal Declaration of Human Rights, G.A. Res. 217A, art. 3, U.N. GAOR, 3d Sess., 1st plen. mtg., U.N. Doc. A/810 (Dec. 12, 1948); Michelle Leighton Schwartz, (1993), International Legal Protection for Victims of Environmental Abuse, 18 Yale J. Int'l L. 355, 361-64.
[lxxix] Universal Declaration of Human Rights, supra, art. 25.
[lxxx] Article 19 of the Universal Declaration of Human Rights ("the UDHR" UN General Assembly

Resolution 217A (III), adopted 10 December 1948.) 5 recognises access to information as integral to the right to freedom of expression: Everyone has the right to freedom of opinion and expression; this right includes the right to hold opinions without interference and to seek, receive, and impart information and ideas through any media and regardless of frontiers.
[lxxxi] Ensure the right to freedom of expression and information as contained in Article 19 of the ICCPR: 1. Everyone shall have the right to freedom of opinion; 2. Everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art or through any other media of his choice.
[lxxxii] Guiding Principles on Internal Displacement (1998), Retrieved from http://www.unhcr.org/43ce1cff2.html
[lxxxiii] UN General Assembly Resolution 60/L.1, ¶132, U.N. Doc. A/60/L.1
[lxxxiv] Brookings Institution-Bern University Project on Internal Displacement (2008) 'Protecting Internally Displaced Persons: A Manual for Law and Policy Makers', Brookings Institution-Bern University Project on Internal Displacement, http://www.brookings.edu/papers/2008/1016_internal _displacement.aspx; Kälin, W., Williams, R. C., Koser, K., and Solomon, A. (eds.) (2008) 'Protecting Internally Displaced Persons A Manual for Law and Policy Makers,' Brookings Institution-Bern University Project on Internal Displacement, Retrieved from http://www.brookings.edu/papers/2008/1016_internal _displacement.aspx / Kälin, W., Williams, R.C., Koser, K., and Solomon, A. (eds.) (2010) 'Incorporating the Guiding Principles on Internal Displacement into Domestic Law: Issues and Challenges', Studies in Transnational Legal Policy No. 41,Washington, Brookings-Bern and the American Society of International Law.
[lxxxv] African Union convention on the Protection of and Assistance to Internally Displaced Persons, 22 October 2009, Retrieved from: http://www.unhcr.org/refworld/docid/4ae825fb2.html
[lxxxvi] Retrieved from http://conspect.nl/pdf/Our_Common_Future-Brundtland_Report_1987.pdf
[lxxxvii] Report Of The United Nations Conference On Environment And Development (Rio de Janeiro, 3-14 June 1992A/CONF.151/26 (Vol. I) Retrieved from http://www.un.org/documents/ga/conf151/aconf1512 6-1annex1.htm)
[lxxxviii] Retrieved from http://sustainabledevelopment.un.org/content/docume nts/Agenda21.pdf

[lxxxix] The UN International Conference on Population and Development in Cairo, 1994 Retrieved from http://www.un.org/popin/icpd2.htm

[xc] Principle 1 of the 1972 Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration). UN Doc A/CONF/48/14/REV.1.

[xci] Silja Halle, (February 2009) From Conflict to Peace building, The Role of Natural Resources and the Environment, by the United Nations Environment Programme, Retrieved from http://www.unep.org/pdf/pcdmb_policy_01.pdf)

[xcii] Implementing the Principles on Housing and Property Restitution: A Practitioners Handbook, OCHA, UNHCR, OHCHR, FAO and NRC (July 2006) and Housing Rights Legislation, UN Habitat Programme and the Office of the UN High Commissioner for Human Rights (2002).

[xciii] Zetter, R., (October 2008), "Legal and normative frameworks", Forced Migration Review, Issue 31, , p. 63.

[xciv] Report of the High Commissioner for Human Rights on the relationship between climate change and human rights (A/HRC/10/61, 15 January 2009).

[xcv] Recommendation 1631 (2003) Internal displacement in Europe, Text adopted by the Standing Committee, acting on behalf of the Assembly, on 25 November 2003 (see Doc. 9989, report of the Committee on Migration, Refugees and Population, rapporteur: Ms Stoisits, Retrieved from http://assembly.coe.int/Main.asp?link=/Documents/AdoptedText/ta03/EREC1631.htm)

[xcvi] Roger Zetter, February (2011), Protecting environmentally displaced people Developing the capacity of legal and normative frameworks, Research report, Refugee Studies Centre, Oxford Department of International Development, University of Oxford, Retrieved from http://www.rsc.ox.ac.uk/pdfs/workshop-conference-research-reports/Zetter-%20EnvDispRep%2015022011.pdf

[xcvii] Mrs Tina AC Ketoft, (23 December 2008), Environmentally induced migration and displacement: a 21st-century challenge Report Committee on Migration, Refugees and Population Rapporteur:, Doc. 11785Sweden, Alliance of Liberals and Democrats for Europe

[xcviii] Birkeland, N (2003), "Last time I fled because of war, this time because of hunger" – Environmental Change and Internal Displacement in the Huambo Province, Angola", In the Maze of Displacement, Kristiansand (Norway), Høyskoleforlaget.

[xcix] Future floods of refugees (April 2008) A comment on climate change, conflict and forced migration, , Norwegian Refugee Council, Retrieved from www.nrc.no

[c] Climate Change as a Security Risk, (London, 2007), German Advisory Council on Global Change (WBGU),

[ci] Internal Displacement Monitoring Centre, Global Overview-2011, (2011): Internal Displacement in South and South-East Asia- India, page 86, Retrieved from: http://www.internaldisplacement.org/8025708F004BE3B1/(httpInfoFiles)/0E27234251BE6E48C12579E400369AA9/$file/global-overview-asia-2011.pdf

[cii] Kofi A. Annan, (2000), Millenium Report, Retrieved from http://www.unmillenniumproject.org/documents/wethepeople.pdf

ABOUT THE AUTHORS

Author is working as Assistant Professor of Law at Raksha Shakti University, (The Raksha Shakti University-a State University, established by Government of Gujarat, is a unique and first of its kind in India for conducting certificate, diploma and degree courses in the field of police science and internal security.) Ahmadabad. He has done his post doctoral research with fellowship from Indian Council of Social Science Research, (*under Ministry of HRD*) New Delhi (ICSSR). He has awarded his Ph.D. in Law by Jai Narain Vyas University, Jodhpur, Rajasthan. During Ph.D., he was awarded by University Scholarship (2006-07) and Doctoral Fellowship (2007-09) by Indian Council of Social Science Research, (*under Ministry of HRD*) New Delhi (ICSSR). Dr. Bhatt has publications in form of book **(1)** International refereed Journal **(4)**, National Refereed Journal **(6)**, Chapters in edited books **(8)**, articles in case reporter of National repute **(3)** and many other publications **(9).**

Mailing address: Raksha Shakti University, New Mental Corner Circle, Meghani Nagar Road, Ahmadabad-16, Gujarat, India

E-mail-mnbhatt.law@gmail.com