

Original Paper

Climate Change and Revisiting Security from Traditional State-Centric to Human Security and Beyond

Prof Narottam Gaan, Ph. D, D. Litt^{1*}, Dr Sudhansubala Das² & Dr Banita Mahanandia³

¹ Former Head, Indira Gandhi National Tribal University, (Central University), Amarkantak Madhya Pradesh, India

² Associate Professor and Principal, P.P. Dev Mahavidyalaya, Tigiria, Cuttack, Odisha, India

³ Dr Banita Mahanandia, Asst Professor in Political Science, G. M University, Sambalpur, Odisha, India

* Prof Narottam Gaan, Ph. D, D. Litt, Former Head, Department of Political Science, Indira Gandhi National Tribal University (Central University), Amarkantak Madhya Pradesh, India

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Abstract

Traditional security premised on state and its military apparatus has got itself emasculated in the face of continuing emergence of new kind of threats from the non-traditional and nonstate centric sources. Climate change and deepening environmental crisis along with other crises like demographic change, incidence of poverty, and rise of fatal and dangerous diseases have already thrown down the gauntlet to the realist paradigm of security built on state. Out of all these what stands out as the greatest threat to entire humankind is the climate change with all its devastating consequences like global warming, sea level rise, floods, cyclones and storms not only killing and uprooting poor people from their homeland etc. but also dragging people into an unsafe, insecure and sepulchral uncertainty of life. The answer to the fundamental question of survival and security and of providing a dignified way of life to the individuals was tried to be found out in various world summits on climate change from Kyoto to Paris summit but it was not sufficient to keep the temperature of the earth down at 1.5 degree Celsius at the pre industrial level by reducing emission of carbon dioxide to the atmosphere as agreed to by the world leaders. Climate change inextricably connected with security and development based on fossil fuels necessitates a rethinking that urges upon all to view the earth, both animate and inanimate not mechanically as mere instruments to redound to human wellbeing, security and primrose way of life but they are co-constitutive of each other's life tied in the web of togetherness or being together as propounded by the proponents of worldly security.

Keywords

Climate change, human security, climate change as threat to human security, climate change, security and conflict

The conceptualized understanding and defining of security exclusively in military terms and narrowed down to achieving victory over the other in a particular geopolitical context since long reached its culmination in realist school of thought both in theory and practice when a political entity was anthropomorphized into a sovereign territorial state system. Central to this thinking security has been built around state and its military establishment. It is the search for security that has brought human subjects into the domain of state. In other words, security constitutes the *raison d'être* of the very creation of state. State has been the principal agency or subject of security and the individuals living within the territorial bound over which it has exclusive jurisdiction are the objects of security. In an anarchic international system as conceived by realism and neo-realism characterized by absence of any centralized authority to regulate the conduct of states, the states are the sole actors to define security and take appropriate military measures to prevent external threats from the other states. In this understanding security has been solely state centric and similarly, the threats are also state centric. In this analysis security threats were not conceived of beyond state and its military apparatus. This narrow traditional designing of security continues to shape the framework of security paradigm in the foreign policies of the states till today. When the territorial integrity and sovereignty of a state is threatened and the survival and life of its people are threatened by another state, it is held as a security threat. Similar or more dangerous threats coming not from state but from other non-traditional sources were either ignored, underestimated or tried to fit into the narrow security straitjacket. Its adequacy and relevance to meet successfully the myriad of threats emanating from the non-traditional sources was contested by the emergence of climate change, environmental catastrophe, malnutrition, incidence of rising poverty, environmental induced migration and spread of fatal and infectious diseases like Covid-19 and missing women. The threats from these non-state sources happen to be more devastating than the nuclear wars. In 1980s there was an intellectual fermentation questioning the relevance of traditional state centric security in the changing scenarios and sternly argued for a change or rethinking of security. The debate over the direct connection between climate change and security harks back to the day security threats were understood as emanating from non-military and non-traditional elements. There are skeptics who maintain that climate factors will only marginally influence tomorrow's security environment, if at all. They point to significant natural fluctuations in climate patterns and short-term cyclical phenomena like El Nino and the recently identified Pacific Decadal Oscillation, the causes of which are not fully understood and deciphered. In their opinion, even if global warming does take place, many of its effects may be localized, benign or favorable. While reductions in rainfall may lead to desertification or water shortages in some regions, others will derive dividends from increased rainfall and higher crop yields. Even where the fabric of the state is torn by environmentally induced conflicts, in all likelihood they

will be localized and have negligible effects on existing world order. Sepulchral visions of starving millions from the South on their heels to edge their ways into the North in search of food are farfetched.

1. Human Security

The study on environment and security has evolved over the years: from an early primacy on incorporating environmental and its concomitant upshots into the “definition of security” to putting a new premium on how environmental degradation can be a cause or magnifier of violent conflict both intrastate and interstate. An emerging trend within this evolution of non-military security threats has been a move toward greater emphasis on the concept of human security. Human security is not in opposition to the earlier trends of redefining security or accounting for the environmental roots of violent conflict. It is an offshoot of these two trends. In a broader sense, human security concerned with security of the people in non-military terms is nothing but an extension of environmental security. The very verbiage used to define the term security in these non- traditional and broader senses is today found not dissimilar to that used to understand and define human security.

While the concept of “human security” has earlier roots, its recent prominence emanates from the 1994 Human Development Report (UNDP, 1994). Its importance was further advanced by the report of the Commission on Global Governance (CGG, 1995). Both reports tried to shift the direction of the security discussion by focusing on issues of human life and human dignity rather than on weapons and territory.

Lorraine Elliott points out two dimensions of the human security paradigm:

The first is that the concept of “human security” provides an antidote to the more conventional focus on states, borders and territorial integrity. The answer to the question “security for whom” is not the state but the individual and communities, which suggests that even when a state is secure from external threats or internal instabilities, security for its people is not guaranteed. Protecting individuals and communities from the consequences of environmental decline is therefore a security issue. The second dimension is that human insecurity (which includes equity, gender, human rights, and identity concerns) is a central factor in social tensions and political instabilities and conflicts that can... become a feature of state insecurity.... If peoples and communities are insecure economically, socially, politically, environmentally, state security can be fragile or uncertain. Environmental security becomes a distributive equity problem rather than one simply of market failure, externalities or zero-sum calculations about access to resources and environmental services (Elliott L. 2001, p. 449).

2. Climate Change and Human Security

The question how changing climate patterns affects both inter-state relations and international and national security in a narrow, geo-strategic sense as well as the well-being and survival of human beings and humankind and thus human, water, health and livelihood security, comes to the fore with the findings of scientists about the imminence and impending danger of climate change looming large on

the entire humanity. On 6 April, 2007, the Intergovernmental Panel on Climate Change (IPCC) released the second part of its Fourth Assessment Report demonstrating that the poor of this planet are most likely to suffer the worst effects of climate change. Human security takes on a broader meaning when one considers basic needs for food, water, health—in short, livelihood and a place to live—the issues addressed in the Millennium Development Goals.

Poor communities can be especially vulnerable, in particular, those concentrated in high-risk areas. They tend to have more limited adaptive capacities, and are more dependent on climate-sensitive resources such as local water and food supplies (IPCC, 2007).

Furthermore, within the larger category of “the poor” lies the frequently invisible (including within that IPCC summary document) group: women. Worldwide, seventy percent of those living below the poverty line are women for whom climate change represents very specific threats to security. When the impacts of climate change are brought home, then women, in their roles as the primary managers of family, food, water and health, must deal very directly with the impacts.

While natural climate variations have existed for millennia, anthropogenic climate change has gradually emerged since the industrial revolution and especially after World War II due to western pattern of development based on the availability of cheap fossil fuels (coal, oil, natural gas) and the dramatic increase in its consumption first primarily in the industrialized countries but now increasingly also in the rapidly growing economies of the BRIC states (Brazil, Russia, India, China), especially of China and India.

2.1 Climate Change, Security and Conflicts

Ben Wisner and others have established the linkages between climate change and conflict having implications on national and international security (Rohr U. 2006, pp. 3-7). On 9 January 2004, David King, the UK Government’s chief scientific adviser claimed that climate change is a far greater threat to the world than international terrorism. In February 2004, John Reid MP, then British Secretary of State for Defence and now Home Secretary, argued that climate change may spark conflict between nations. He forecast that violence and political conflict would become more likely in the next 20 to 30 years as climate change turned land into desert, melted ice fields and poisoned water supplies. He listed climate change alongside the major threats in future decades, including terrorism, demographic changes, and global energy demand. “As we look beyond the next decade, we see uncertainty growing; uncertainty about the geopolitical and human consequences of climate change. ...Impacts such as flooding, melting permafrost and desertification could lead to loss of agricultural land, poisoning of water supplies and destruction of economic infrastructure. ...More than 300 million people in Africa currently lack access to safe water; climate change will worsen this dire situation” (Wisner Ben et al., n.d.). John Ashton, the UK Foreign Secretary’s Special Representative for Climate Change, said at a conference on “Climate Change: The Global Security Impact”, at the Royal United Services Institute on 24 January 2007: “There is every reason to believe that as the 21st century unfolds, the security story will be bound together with climate change” (Russell Ben et al., 2006). “Climate change is a security issue because if we don’t deal with it,

people will die and states will fail,” Ashton concluded. Further he pointed out that defense and security planners must face a paradox when assessing their responses to the problem. Most security threats in today’s world are amenable to some extent to a “hard power” or conventional reaction, he said, and demand will rise for such responses to climate change-related security problems. “But there is no hard power solution to climate change—you cannot force your neighbour to change its carbon emissions at the barrel of a gun” (quoted in Vogel Ben, 2007). Sir Crispin Tickell, the former UK Permanent Representative to the UN, highlighted the environmental factors behind societal collapse. Professor John Mitchell, the chief scientist at the UK Met Office, forecast that the coming decades will see a 30 per cent increase in severe drought. He added that Africa will experience increased desertification, water stress and disease (Littlecott Chris, 2007).

Besides the UK, other nations have begun to assess the security implication of climate change. In 2002, the German Ministry for the Environment, Nature Conservation and Nuclear Safety published a commissioned report on climate change and conflicts raised the question whether climate change impacts can increase conflict potentials (Tickell Crispin Sir, 2003). In spring 2004 an internal report by Randall and Schwartz for the U.S. Department of Defense on the impact of Abrupt Climate Change on U.S. national security was leaked to the press (Brauch, 2002).

The British initiative during its Security Council Security Council presidency to put climate change on its agenda for 17 April 2007 has been the most recent attempt to “securitize” climate change in the context of geo-politics (Brauch, 2004).

2.2 Climate Change as a Threat and Challenge to International, National and Human Security

Climate change poses many new threats and challenges to national security and international stability as well as to human security at other scales. The concept of human security was introduced first by UNDP in 1994 (President Security Council, 2007) and then developed further in a report by the Human Security Commission, co-chaired by Sadako Ogata and Amartya Sen, in its report *Human Security Now* (2003) (UNDP, 1994). The environmental dimension of human security has been addressed by an international team working on Global Environmental Change and Human Security (GECHS) and in several studies by the United Nations University Institute for Environment and Human Security (UNU-EHS) (Brauch, 2005).

In February 1999, during its presidency of the United Nations Security Council, Canada, a founding member of the Human Security Network, put human security on the agenda by addressing the impact of armed conflicts on human beings (Bogardi & Brauch, 2005). In March 2005, then UN Secretary General, Kofi Annan, in his report *In Larger Freedom* (Dedring, 2007), wrote of human security in a broad sense, the issue was placed on the agenda of the UN General Assembly in the fall of 2005.

UNDP will take up the relationship between human development and climate change in its *Human Development Report 2007* (HDR), to be launched in November. Over 17 years, UNDP has incrementally developed a sensitive measure of human development (the human development index—HDI). Earlier studies have shown that the HDI correlates well with measures of disaster risk

such as UNDP's Disaster Risk Index (DRI), especially for less developed countries (Annan Kofi, 2005). Preliminary analysis for this year's HDR suggests that climate change poses major obstacles to progress in meeting MDGs and maintaining progress raising the HDI: "There is a clear and present danger that climate change will roll back human development for a large section of humanity, undermining international cooperation aimed at achieving the Millennium Development Goals (MDGs) in the process" (UNDP, 2004).

Concerning the MDGs individually, UNDP states (UNDP, 2007):...[C]limate change may pose a threat to food security through erratic rainfall patterns and decreasing crop yields, contributing to increased hunger. Furthermore, adverse climate change impacts on natural systems and resources, infrastructure, and labor productivity may lead to reduced economic growth, exacerbating poverty. These effects threaten the achievement of MDG 1. Loss of livelihood assets, displacement and migration may lead to reduced access to education opportunities, thus hampering the realization of MDG 2. Depletion of natural resources and decreasing agricultural productivity may place additional burdens on women's health and reduce time for decision-making processes and income-generating activities, worsening gender equality and women's empowerment (MDG 3). Increased incidence of vector-borne diseases, increases in heat-related mortality, and declining quantity and quality of drinking water will lead to adverse health effects threatening the achievement of MDGs 4, 5, 6 and 7. In general terms, the realization of MDG 7 may be jeopardized through climate change negatively impacting quality and productivity of natural resources and ecosystems, possibly irreversibly, threatening environmental sustainability. Climate change, a global phenomenon, calls for a collective response in the form of global partnerships (MDG 8)

Linkages between Climate Change and Security

Some effects of climate change are already evident and will become very clear in the human and climatic short run (2007-2020). They will increase and others will manifest themselves in the medium term (2021-2050); whilst in the long run (2051-2100), they will all be active and interacting strongly with other major trends: the end of the petroleum economy for many producing and consuming nations, possible financial and economic crisis, a larger population of humans, and a much more urbanized humanity—far in excess of the 50% now living in small to very large cities. All these processes will be accompanied by redistribution of population nationally and internationally (UNDP, 2007). Such redistributions typically have significant gender dimensions; for example, extreme event impacts can lead to male out migration in search of work, culminating in an increase in women-headed households—a group often considered particularly vulnerable (Simon David, 2007).

The linkages between climate change and security are complex in many ways. To begin with, climate change involves the interactions of many systems such as the atmosphere, hydrosphere, cry sphere, and biosphere that are immensely complex in their own right. Thus, a recurrent theme in IPCC reports is the significance of thresholds and non-linearities. When human systems are added to the mix, complexity escalates (Delaney & Shrader, 2000). Livelihood security and other aspects of human security interact

with geo-strategic (or “hard”) security issues because of the national and regional upheavals that climate stress may put on livelihood systems already vulnerable and incapable of adapting (Millennium Ecosystem Assessment, 2006). Worldwide the rural and urban poor are already under stress, and for some groups such as women headed households in Africa, adaptation to climate-induced stress will be very difficult indeed. As Simon points out, climate change has both intermittent but increasingly frequent, extreme impacts (such as large storms and heat waves) and slow on-set, pervasive, cumulative effects (such as extinction of life forms and sea level rise (Wisner Ben et al., 2004). Both kinds of effects may have a role in displacing human populations and disrupting their livelihoods. Some major climate changes may actually occur rapidly.

Some efforts by state actors to mitigate and adapt to climate change may also further stress weak and marginal sections of the population such as indigenous groups and ethnic minorities, increasing discontent and alienation. In particular, large scale water management and forestry projects in the past have displaced such groups (Simon David, 2007) and without safeguards are likely to do so as states expand mega-projects as part of their national climate adaptation programs. One example is the new dams being built in Guatemala. Such intra-state tension and possible conflict over the distribution of winners and losers in climate adaptation may spillover into regional conflicts, on the basis of recent experience in Darfur. State actor adaptations may also weaken treaties such as regional water basin management and lead eventually to inter-state conflict. For example, Sudan’s decision to build a new dam on the Nile, could have that result.

3. Conclusion

Premised on Newtonian and Cartesian epistemology, the western political and economic thinking employed science to the ends of human beings—a commodious and luxurious life. Not only that, it borrowed the insights of science to view nature as the lifeless other to be exploited for the attainment of these ends. This resulted in defining development based on fossil fuel technology and industrialization, which destroyed the nature with ramifying consequences upon the entire mankind. The result of following the western pattern of development since the beginning of industrialization has been the accumulation of greenhouse gases in the atmosphere with the devastating consequences as noted above. The more a country is industrialized and considered developed, the more greenhouse gases it has emitted to the atmosphere. On this account, the industrialized North through its centuries of progress on this development trajectory has usurped the resources of the atmosphere at the cost of the developing and underdeveloped countries, and polluted the atmosphere. As the rich industrialized countries have unilaterally and inequitably messed up the atmosphere, they have squarely the historic responsibility of disabusing it of the debris. This is the argument put forth in the climate change debate by developing countries in response to American attempt at bringing the former into the task. Today, the debate remains hanging on a crucial contradiction between the principle of inequity the North have been practicing since industrial revolution as to the uncontested access to the atmosphere denying the same

to the South and at the cost of nature and future generations, and the preachment of equity principle and meaningful participation to the South on the question of cleansing the atmosphere.

The governments of rich countries have set the wrong targets to tackle climate change using outdated science. A paper published in 2006 by climatologist Malte Meinshausen suggests that if greenhouse gases reach a concentration of 550 parts per million (ppm) carbon dioxide equivalent, there is a 63-99 per cent chance that global warming will exceed two degrees. At 475 parts per million the average likelihood is 64 per cent. Only if concentrations are stabilized at 400 parts per million or below is there a low chance that temperatures will rise by more than two degrees. The IPCC draft report contains similar figures. A concentration of 510 ppm gives a 33 per cent chance of preventing more than two degrees of warming. A concentration of 590 ppm gives a ten per cent chance. The current level of greenhouse gases in the atmosphere is 459 ppm. To give a high chance to humanity of preventing dangerous climate change, what is needed a programme so drastic that greenhouse gases in the atmosphere end up below the current concentrations. But no government has set itself this task. The EU and Swedish government have established the world's most stringent target, which is 550ppm. It is of carbon dioxide alone. But this target gives the human beings a near certainty of an extra 2 degrees C. When other greenhouse gases are included, this translates into 666ppm, carbon dioxide equivalent. According to last autumn's Stern report on the economics of climate change, at 650 ppm, there is a 60-95 per cent chance of 3 degrees C of warming.

In his book *Heat*, George Monbiot estimated that to avoid two degrees of warming a global emission cut of 60 per cent per capita between now and 2030 is highly required. This translates into an 87 per cent cut in the U.K. A recent paper in the journal of *Climate Change* emphasizes that the sensitivity of global temperatures to greenhouse gas concentrations remains uncertain. But using the average figure, to obtain a 50 per cent chance of preventing more than 2 degrees C of warming requires a global cut of 80 per cent by 2050. This is a cut in total emissions, not in emissions per head. If the population were to rise from 6 billion to 9 billion between now and then, an 87 per cent cut in global emissions per person. If carbon emissions are to be distributed equally, the greater cut must be made by the biggest polluters: rich nations like US and other western countries. The U.K's emissions per capita would need to fall by 91 per cent. But the rich countries appear to quietly have abandoned their aim of preventing dangerous climate change, condemning millions to death. What the IPCC report shows is that the time is to stop treating climate change as an urgent issue. The nations of the world have to start treating it as an international emergency. Since the United States contributes about 25% of the world's CO₂ emissions, its own policy could make a large difference.

Global climate change is different from other environmental problems. First, emissions of CO₂ and other trace gases are almost irreversible; more precisely, their residence time in the atmosphere is measured in centuries. Most environmental problems are mitigated promptly or unfairly short order when the source is cleaned up, as with water pollution, acid rain or sulfur dioxide emissions. Here, reducing emissions today is very valuable to humanity in the distant future. Second, the scale of the

externality is truly global; greenhouse gases travel around the world in a few days. This means that the nation-state and its subsidiaries, the typical loci for internalization of externalities, are limited in their remedial ability. The poor countries appear to be most vulnerable to the dangerous climate change, mostly a doing of the rich.

Coming to the very root of the crisis, Science provided the ontological foundation to Political Science to look at the nature and the poor who do not have the wherewithal to have a commodious living as “the other” to be exploited or harnessed for one’s end. The entire Earth was looked down upon as a compendium of lifeless raw materials to cater to the materialistic ends of those humans who are propertied or rational in the words of English philosopher Locke, because they have property. To attainment of these goals-wealth production and commodious living by the wealthy few believing in exorbitant consumption and inordinate life style as quintessential of development, the entire Earth has been subjugated and robbed of its bounties at the cost of nature, other humans, non-human living and future generations. That everybody is a self-sufficing and aggrandizing part disjointed from the whole has resulted in a mechanical view of the universe. The concept of development based on this paradigm has been the development of one against the other. Woven into this paradigm was the concept of security, which was the security of one or one group, or one state against the other. But today, the devastating consequences of climate change and its pervasiveness impacting the very survival of entire humanity have spurred the traditional security planners into thinking anew what so far they have defined as development and established frame of mind about security in terms of disjointed parts and others as mere objectivities not as inter subjectivities. A profound affirmation of this is found in Eastern insight epitomized in the Indian Upanishads: “The entire universe is like a family” [Basudheiba kutumbakam]. No man is like an island. Everybody is the inseparable whole. In more mundane terms, as the rich countries and wealthy people have enjoyed, usurped, and destroyed the atmosphere at the cost of the other (humans, nature, living and non-living, and the future generations), they must not only come forward to cut down its consumption, rethink its life style and pattern of development, and follow exemplarily new environmental ethics but also help, support and promote the rest of the world in adapting to the changing planetary system. Martin parry, a climate scientist with the United Kingdom’s Met Office, said destructive changes in temperature, rainfall and agriculture were now forecast to occur several decades earlier than thought. Vulnerable people, such as the old and poor, would be worst affected, and, world leaders had not yet accepted that their countries would have to adapt to the likely consequences. Co-chairman of the IPCC working group, Professor Parry said: “We are all used to talking about these impacts coming in the lifetimes of our children and grandchildren. Now we know that it is us.” He added that politicians had wasted a decade by focusing only on ways to cut emissions, and had only recently woken up to the need to adapt. “Mitigation has got all the attention, but we cannot mitigate out of this problem. We now have a choice between a future with a damaged world or a severely damaged world” (Hansen Art and Anthony Oliver Smith, 1982).

All these security concepts in traction from the traditional realist school to the human security hover

round human beings. Even though in environmental or human security references have been made to protection of nature, but this has been so keeping in mind the security of human beings. The anthropocentric domination in security thinking continues. The protection of nature has been instrumentally essential for the survival and protection of human civilization. The theme of human security has been weaved very intelligibly into the concept of sustainable development. All negotiations and summits on climate change have been running on the same dominant theme of security humanity. Nature has been viewed as an instrument not a subject of security itself like human beings in the frame work of security studies. The situations have changed and risen to see security beyond human security (Mitchell Audra, 2014, pp. 5-21).

The petrified consequences of climate change have already been experienced by the people across the globe. Since the earth summit in 1992, the policy makers, world leaders, scientists and the common people have been waked up to the imperatives for reducing emission of carbon dioxide in order to survive. The result has been the signing of Kyoto protocol, Copenhagen and the Paris summit urging upon the states to nationally determine the reduction of CO₂ so as to reduce emission to 1.5 degree Celsius at the pre-industrial level as earmarked by IPCC and switch over to renewable sources of energy. The fossil fuel-based development and industrialization continues in all countries of the world unabated. The inordinate life style and exorbitant consumption of the West being imitated by the developing countries of the South continues making a costly toll on the nature. The call for sustainable development has not yet strong roots in the thinking of the people and policy makers. The vested interests of corporates, coal and mining industries dominate the policy making of the highly developed industrialized countries. Nature has remained still central to development. Nature is being sacrificed for the comfort and fulfillment of the wants of the people. In this anthropocentric- instrumentalist conceptualization of development nature has been exploited to the ruin of climate. The basic foundation of sustainable development is first to get rid of the Newtonian and Cartesian view of the nature as lifeless matter, a compendium of resources for utilization and exploitation. Both living and non-living constitute and define what is life on this earth. Both are co-constitutive of and interconnected with each other. It is the feeling of “togetherness” or “being together” (Nancy J., 1997, p. 8) on the part of human beings that they live together with all living and non-living beings that will be the base of sustainable development. In the absence of not internalizing this value into the decision making the climate change will remain an ever-looming threat to humanity. Science and technological devices in the form of reengineering to manipulate the atmosphere and earth in order to reduce emission to the desired level have stood as another monstrous design more devastating and dangerous for the people without stressing on winding up the fossil fuel industries and capping on the wasteful style of the people. So long as earth remains an anthropocentric instrument central to development, respite from climate change seems a faraway cry in wilderness. Transforming the heterogeneity to the fulfillment of the ever increasing and unsatisfied wants of the human beings is destructive of the world. In new security thinking or worldly approach life is to be conceived or defined in a condition of “living together” or

“being together” or “an assemblage” where in all living and non-living coexist and coordinate and interconnected with each other and weaved together like warp and woofs into a beautiful tapestry of life.

References

- Annan, K. (2005). *In Larger Freedom: Towards Development, Security and Human Rights for All*. United Nations: New York. Retrieved from <http://www.un.org/largerfreedom/>
- Ben. W. et al. (n.d.). “*Climate Change and Human Security*” Simultaneously uploaded to **Radix - Radical Interpretations of Disaster**. Retrieved from <http://www.radixonline.org/cchs.html> & <http://www.radixonline.org/cchs.doc>
- Disaster, Diplomacy. (n.d.). <http://www.disasterdiplomacy.org>; Peace Research and European Security Studies (AFES-PRESS): Retrieved from <http://www.afes-press.de/html/topical.html>.
- Ben, R., & Nigel, M. (2006). *Armed forces are put on standby to tackle threat of wars over water. Independent*. Retrieved from <http://news.independent.co.uk/environment/article348196.ece>
- Quoted by Chris Littlecott. (2007). *Climate Change: The Global Security Impact*. Retrieved from <http://www.e3g.org/index.php/programmes/climate-articles/climate-change-the-global-security-impact/>
- See: Brauch Hans Gunter. (2002). “Climate Change, Environmental Stress and Conflict,” *In Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, ed. Climate Change and Conflict* (pp. 9-112). Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. Retrieved from http://www.afes-press.de/pdf/Brauch_ClimateChange_BMU.pdf.
- Brauch Hans Gunter. (2004). *Abrupt Climate Change and Conflicts: Security Implications from a European Perspective - Hobbesian vs. Grotian Analyses*, Friedrich Ebert Foundation and Carnegie Endowment for International Peace, Washington, DC, 29 March. Retrieved from http://www.afes-press.de/pdf/Brauch_ClimateChange.pdf
- See: “Press Conference by Security Council President, 4 April. (2007). Retrieved from http://www.un.org/News/briefings/docs//2007/070404_Parry.doc.htm
- On the narrow and broad definitions of “security”, see: Brauch Hans Gunter: *Environment and Human Security*, Inter SecTions, 2/2005 (Bonn: UNU-EHS). Retrieved from <http://www.ehs.unu.edu/file.php?id=64>; and Brauch Hans Günter: Threats, Challenges, Vulnerabilities and Risks in Environmental and Human Security. Source 1/2005 (Bonn: UNU-EHS) <http://www.ehs.unu.edu/file.php?id=63> and Commission on Human Security (2003) *Human Security Now*. Commission on Human Security: New York. Retrieved from <http://www.humansecurity-chs.org/>.
- For GECHS see <http://www.gechs.org/>; Janos Bogardi and Hans Guenter Brauch (2005) “Global Environmental Change: A Challenge for Human Security Retrieved from Defining and conceptualising the environmental dimension of human security”, In: Andreas Rechkemmer, ed.

- UNEO?—Towards an International Environment*, pp. 85-109. Nomos: Baden-Baden. GECHS will also be holding a conference on the mainstreaming of human security, “The International Conference on Human Security in Asia: Theory, Practice and Impacts will be held in Bangkok, October 4-5 2007. Retrieved from <http://www.ids.polsci.chula.ac.th/humansecurity.htm> .
- Dedring, J. (2007). Human Security and the UN Security Council”, In: Hans Günter Brauch, John Grin, Czeslaw Mesjasz, Pal Dunay, Pal Chadha, Navnita Pal, B áchir Chourou, Ursula Oswald Spring, Ursula, P.H. Liotta, Patricia **Kameri-Mbote**, eds. (2007) *Globalisation and Environmental Challenges: Reconceptualising Security in the 21st Century*. Chapter 48. Hexagon Series on Human and Environmental Security and Peace, vol. 3. Springer: Berlin (in press).
- David, S. (2007). Cities and Global Environmental Change: Exploring the Links. *The Geographical Journal* 173, 1 (March): 75-79 & see chapters 3 & 4 of Sir Nicholas Stern et al. (2007) *Stern Review on the Economics of Climate Change*. London: UK, Department of the Treasury. Retrieved from http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm
- Delaney & Shrader. (2000). Report the percentage of women-headed households more than doubled in both Honduras and Nicaragua following Hurricane Mitch in 1998. See: Patricia L. Delaney and Elizabeth Shrader (2000) “Gender and Post-Disaster Reconstruction: The Case of Hurricane Mitch in Honduras and Nicaragua”, LCSPG/LAC Gender Team, The World Bank, Decision Review Draft, page 24. Retrieved from <http://www.gdnonline.org/resources/reviewdraft.doc>
- Hansen Art and Anthony Oliver-Smith. (1982). *Involuntary Migration and Resettlement: The Problems and Responses of Dislocated Peoples* Westview Press: Boulder, Co; World Commission on Dams (2000) “People and Large Dams: Social Performance,” In: *Dams and Development*. Retrieved from <http://www.dams.org/docs/report/wcdch4.pdf>
- Chris de Wet, compiler. (2002). *Improving Outcomes in Development-Induced Displacement and Resettlement (DIDR) Projects*. Oxford University, Refugee Studies Centre <http://www.rsc.ox.ac.uk/PDFs/rrimprovingoutcomes02.pdf>; W. Courtland Robinson (2004) “Minimizing Development-Induced Displacement,” *Migration Information Source* <http://www.migrationinformation.org/feature/display.cfm?ID=194> .
- Elliott, L. (2001). “Regional environmental security: Pursuing a non-traditional approach” In Andrew T.H. Tan and J.D. Kenneth Boutin (Eds), *Non-Traditional security issues in Southeast Asia* (Singapore: Select Publishing, 2001), p.449.
- IPCC rely on “Working Group II Contribution to the Intergovernmental Panel on Climate Change, Fourth Assessment Report Climate Change 2007: Climate Change Impacts, Quotations Adaptation and Vulnerability, Summary for Policymakers, 6 April 2007 <http://www.ipcc.ch/SPM6avr07.pdf> .
- Millennium Ecosystem Assessment (2006) *Our Human Planet: Summary for Decision Makers*, p. 6,

- Box 1.2, “Millennium Ecosystem Assessment Conceptual Framework”
<http://ma.caudillweb.com/en/Products.Global.Summary.aspx> .
- Mitchell, Audra “Only Human? A worldly approach to security”, *Security Dialogue*, Vol.45(1). 2014.Pp. 5-21.
- Nancy J (1997) *The Sense of the World*. Minneapolis, MN: University of Minnesota Press. P.8
- Tickell Sir Crispin, (2003) “Risks of conflict: Population and Resource Pressure”, In: Hans Günter Baruch, P.H Liotta, Antonio Marquina, Rogers, Paul; Selim, Mohammed El-Sayed, eds. *Security and Environment in the Mediterranean. Conceptualising Security and Environmental Conflict*, pp. 13-18. Hexagon Series on Human and Environmental Security and Peace, vol. Springer: Berlin-Heidelberg.
- Ulrike Rohr (2006) “Gender and climate change,” *Tiempo* 59 (April): 3-7
<http://www.tiempocyberclimate.org/portal/archive/pdf/tiempo59high.pdf>
- UNDP (1994) *Human Development Report: New Dimensions of Human Security*. UNDP: New York.
- UNDP (2004) *Reducing Disaster Risk: A Challenge for Development*. Geneva: UNDP, Bureau for Crisis Prevention and Recovery
<http://www.un.org/special-rep/ohrrls/ldc/Global-Reports/UNDP%20Reducing%20Disaster%20Risk.pdf> .
- UNDP (2007) *Human Development Reports* <http://hdr.undp.org/> ; see also UNDP, UNEP, World Bank, ADB, AfDB, GTZ, DFID, OECD, and EC (2003) *Poverty and Climate Change: Reducing the Vulnerability of the Poor through Adaptation*. World Bank: Washington
<http://www.undp.org/climatechange/adap01.htm> .
- UNDP (2007) “Poverty Eradication, MDGs and Climate Change”
<http://www.undp.org/climatechange/adap01.htm> .
- Quoted in Vogel Ben (2007) “Climate change creates security challenge ‘more complex than Cold War’,” *Janes.com*
http://www.janes.com/security/international_security/news/misc/janes070130_1_n.shtml
- See Wisner Ben, Piers Blaikie, Terry Cannon, and Ian Davis (2004) *At Risk: Natural Hazards, People’s Vulnerability and Disaster*. 2nd Edition. Routledge: London. On the definition of “vulnerability” at the scale of household livelihoods and its linkage with macro-scale processes.