ENVIRONMENTAL SECURITY IN NATIONAL SECURITY: THE CASE OF THE HORN OF AFRICA //

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DECLARATION

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DEDICATION

I dedicate this work to God and in memory of my late brother Abednego Oriama. My family: Dad, Mum, Phoebe, Elizabeth, Ruthie, Meshack, Shadrack, and Bridgetta and my friends Caroline Lumosi, Grace Mwaura, Tolu Olumuyiwa, Edna Ratemo , Natasha Menon, Pamela Omengo, Alice Stickney, Lennah Mghoi Karen Wu, Stephen Sanders and the Kenya Youth Climate Network.

Thank you all for the support and encouragement.

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ABSTRACT

With the complex dynamics of security in the Horn of Africa, there comes the challenge of addressing security issues in the region by both governments and non-governmental organizations. Environmental security is a highly debated concept within the dynamic of security in the Horn of Africa. The main objective is to highlight the link between the environment and national security in the Horn of Africa. This paper seeks to examine the practices of environmental security and the role they play in the attainment of national security and vice versa. The paper examines the issues that contribute to environmental insecurity in the Horn of Africa and their link to national security. Environmental degradation, climate change and global warming, environmental diplomacy and sustainable development are the main issues raised. These issues broadly create an atmosphere for security in the region which is both positive and negative. The attainment of national security in the region is dependent on environmental security seeing as natural resources form a great percentage of economies of countries in the Horn of Africa. The paper concludes that the question of sustainable security in the countries of the Horn of Africa can be tackled by addressing issues of environmental security. This is due to the fact that they comprise a large percentage of threats to the overall security in the Horn of Africa. The paper proposes a reexamination of national security policies in the context of the Horn of Africa and its surroundings.

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CHAPTER ONE

Introduction to the Study

1.1 Introduction

The attempts to link the environment to security are often founded on the premises of the implications of environmental change. However, discussions on environmental implications to security issues, have turned the debate into one of a political nature. For this reason, the environmental security debate has intensified globally, especially within certain concepts and realities like climate change, sustainable development, human security, food security, effects of global warming, as well as environmental diplomacy and the politicization of environmental issues.

These environmental issues have transformed with time from being purely subjects of debate but to an instrument crucial to transforming state structures and policy making. Allenby argues "that from the environmental perspective, the critical pressure to evolve environmental security as a policy system derives from the fundamental recognition that environmental issues can no longer be thought of as ancillary, rather than integral components of industrial, social and economic systems."[1] Economic exploitation of natural resources contributes massively to the economy of countries which impacts on the national security of states in the Horn of Africa. Economic exploitation without proper distribution of the profits however, causes grievances between different groups of people.

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[1] Allenby, B.R, *Industrial Ecology: Policy Framework and Implementation*, (New Jersey, Prentice-Hall, 1999).

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Richard Jolly et al notes "that with phenomena like the economic exploitation of natural resources to the advancement of desert-like situations in the Horn of Africa, environmental security issues have had to be emphasized as important aspects of national security. The most profound enemies of progress on global climate change are not scientific skeptics or well-funded industry opponents, but general misunderstanding and apathy regarding issues and policies at stake."[2] These desert-like situations exacerbate competition for scarce resources, thus exacerbating conflict between groups, thus impacting national security. Therefore, there is a need to emphasize the redefinition and implementation of national security policies and strategies. This is to accommodate and address the concern of issues of environmental security and their implications to security issues in the world today.

1.2 Background of the research problem.

Traditionally, security has been defined in terms of power, which reduces the concept to an almost synonym to power. According to Buzan, "Security is taken to be about the pursuit of freedom from threat and the ability of states and societies to maintain their independent identity and their functional integrity against forces of change, which they see as hostile. The bottom line of security is survival, but it also reasonably includes a substantial range of concerns about the conditions of existence. Quite where this range of concerns ceases to merit the urgency of the "security" label (which identifies threats as significant enough to warrant emergency action and

[2] Carpenter, C. Businesses, Green Groups and the Media: The Role of Non-Governmental Organizations, *the Climate Change Debate in International Affairs*, Vol. 77, No. 2. (2001),

exceptional measures including the use of force) and becomes part of everyday uncertainties of life is one of the difficulties of the concept".[3]

The state centric definition of security declined in popularity after the Second World War when it was evident that human security was a major issue incorporating individuals, environment and the state into the concept of security. The new thinking and ideology challenge the notion of national security as fronted by the United Nations Development Program by the global 1994 Human Development Report. The Report "shifted the focus of security from the protection of the state and its borders by military means to the protection of individuals from a wider range of threats to their wellbeing and security and by a wider range of measures and policies, from the local and community levels to the national and international arenas".[4] Environmental security and threats to it have been the area of focus in the protection of individuals from threats to their wellbeing and security.

It is from similar changes in the redefinition of security that the concept of environmental security stems. When the world was grappling with the issue of nuclear proliferation, environmental security emerged as a critical concept in addressing ecological degradation and natural resource scarcity. It is a common security issue due to the fact that the environment provides life support system. The main source of threat to the environment is from modern industrialization and the mismanagement of natural resources for a lengthened period. With increasing industrialization, there has been a tradeoff between environmental protection and development.

[3] Buzan B., New Patterns of Global Security in the Twenty-first Century, *International Affairs, Vol* 67, No. 3 (1991), pp. 432-433.

[4] Richard J et al, *The Human Security Framework and national Human Development reports: A Review of experiences and current debates* by, Occassional Paper 5, May 2006.

Currently, with the concept of sustainable development, the protection of the local and global environment is crucial to the development process in an increasingly interdependent world. Environmental degradation in the form of climate change has taken centre stage in the world today leading to the United Nations Framework Convention on Climate Change in 1992 at the Earth Summit-United Nations Conference on Environment and Development (UNCED). The main focus of the convention is "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system".[5]

Climate change acts as threat multipliers making existing concerns such as water scarcity and food insecurity more rampant. This aggravates the already precarious living conditions especially in low lying countries and has also led to escalation of diseases. The impact of climate change escalates conflicts and entanglement over non-renewable resources such as oil, gas, and water in particular. It can also affect other issues that can diminish human security in the 21st century, such as climate change, rising sea levels and crop failures, cross-border migration, internal population displacement and many others,

According to the 4th United Nations Environmental Program Global Training Program speech on Environmental law and Policy by Andree Kirchner; "The relationship between environment and security has been under consideration since the 1980s mainly by two groups: the environmental policy community, addressing the security implications of environmental

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[5] *First Steps to a safer future: Introducing the United Nations Framework Convention on Climate Change* http://unfccc.int/key_steps/the_convention/items/6036. php accessed 22nd May,2013.

change and security and the security community looking at new definitions of national security, particularly in the post-Cold War era".[6]

The rise in natural resource based conflicts in the Horn of Africa is evidence of the implications of environmental degradation. The rise in cross-border conflicts and interethnic conflicts due to limited resources strains already scarce resources thus increasing competition between different groups for the same resource. Conflict over pastoral land is a common phenomenon in the Horn of Africa. This is posing a security threat with the influx of refugees in countries which in turn threatens national security.

In the recent past, the influx of refugees from neighboring Somalia has been enormous and a security threat to Kenya. This is because the country is not in a position to provide for the needs of the refugees who have been constantly increasing in number trickling into an already resource exhausted land. This problem within Kenya can not only be solved militarily but by the involvement of various arms of national security and especially environmental security. In The Assault on Reason, Former U.S Vice President Al Gore notes that:

"We have an opportunity to forge and follow a new agenda for national and world security. First and foremost, our security is threatened by the global environmental crisis, which could render all our other progress meaningless, unless we deal with it successfully...As a world community, we must prove that we are wise enough to control; that we have been smart enough

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[6] 4th UNEP Global Training Programme on Environmental Law and Policy by Andree Kirchner.

to create. We must understand that the old conception of global security-with a focus almost solely on armies, ideologies, and geopolitics-has enlarged".[7]

Apart from the changing trend in the interstate conflict, more comprehensive notions of security are developing, thus increasing the need towards recognizing the importance of human security and environmental security issues as pillars of national security. Traditional notions of security have leaned on the protection of the state from external interference and the defense of the state from interference by military means. This purported that national security is equal to security in general due to the practice of military defense of the state. "Security was traditionally seen as a synonym for national security with two main objectives: to preserve the territorial integrity of the state and to maintain the preferred form of government by political and military means".[8]

Based on the broad definition of security that recognizes the importance of political, economic, social and environmental factors, more comprehensive notions of security are developing. This has led to increasing trends towards recognizing the importance of human security and environmental security issues. Therefore, the security dimension of climate change is compelling the emergence of environmental security as a critical concept in both global security and national security.

The environment is a global common hence issues of environmental security are transnational issues. Therefore, these issues play a crucial security dimension in peace and

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[7] The Video *The Assault of Reason-Al Gore*, *http://www.youtube.com/watch?v=jdPcwwK5DII accessed 25th August, 2013*

[8] Andree Kirchner, Report on the4th UNEP Global Training Program on Environmental Law and Policy. *Opcit*

justice, national security and human rights. Clear policies on land use and equitable sharing of natural resources by government and the common citizenry are issues of national security that contribute to peace and justice, national security and human rights. According to the Institute of Environmental Security, "Environmental security is central to national security, comprising the dynamics and interconnections among the natural resource base, the social fabric of the state, and the economic engine for local and regional stability."[9]

Besides this, the debate of environmental security has also redefined other fields in international relations as well as national development. The redefinition of diplomacy from not only featuring issues of peace, war, foreign policy among others to the inclusion of environmental diplomacy also suggests the magnitude of environmental security issues in redefining the relations in the international system today.

In the politics of environmental diplomacy, matters of state and national security are put to play on the negotiating tables. This would explain why China and the US have not ratified the KYOTO protocol. It is because the KYOTO protocol as a product of environmental diplomacy, put in place mechanism that would require for reduction for carbon production from industrial activities. For China and the US, industries plays a key role in the economy.

There is the need to look critically into the subject of global carbon emission as to "Global climate change has been one of the most contentious issues in international negotiations since the 1980s. At the 1992 United Nations Conference on Environment and Development

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[9] *What is Environmental Security* from www.envirosecurity.org/espa/PDF/ESA_HOA.pdf accessed 08/16/2013

(UNCED) in Rio de Janeiro-popularly known as the earth summit, most countries of the world adopted the United Nations Framework Convention on Climate Change (UNFCCC). This obligates them to work together to achieve the aim of stabilizing the atmospheric concentration of greenhouse gases (GHG) regardless of their level of development"[10] though the role of environment in situations of peace and conflict may differ depending on the situations at hand, its role in other security variables is key.

This paper demonstrates the role of issues in the environmental security debate in the attainment of national security in the Horn of Africa. The state of insecurity in the Horn of Africa is diverse, dynamic and complicated due to the various aspects interacting together to create the current state of security in the region. There are various issues in the environmental security debate that are a threat to security in the Horn of Africa. Environmental degradation and over-exploitation of natural resources is creating scarcity hence conflicts over the scarce resources. The implications of climate change and global warming in the region with minimal capacity to mitigate and adapt to the changes is causing forced migrations and food insecurity hence a lot of pressure on the governments in the region with minimal resources to assist the affected.

As Oli et al argue "that the scientific basis for climate change is increasingly well established, and there is continuous growth in the amount of research being done on the biophysical impacts of climate change in terms of raised sea levels, altered precipitation patterns, and more frequent and fierce storms, and the likely consequences of all these effects for human wellbeing. However, there is comparatively little empirical evidence on the links between

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[10] Nishioka S. et al, *The Kyoto protocol: Its Development, Implications and Future*, Japan; National institute for environmental studies *(NIES,* 2004), pp.1.

climate change, state security and conflict."[11] Though the evidence may not be conspicuous, governments are forced to reallocate budgets to tackle issues of drought and famine, influx of refugees in the countries is also enormous causing a strain to the economies of these countries.

This paper will focus on the threats of issues in the environmental security debate to the attainment of national security in countries in the Horn of Africa.

Should the environmental security debate redefine national security policies in the Horn of Africa?

1.4 Objectives of the research.

To highlight the link between environmental security and national security.

i. To evaluate the role of environmental security in the attaining of national security in the Horn of Africa.

ii. To evaluate how issues in the environmental security debate are redefining the dynamics of security policy in the Horn of Africa.

iii. To highlight the importance of reexamining environmental issues in national security policies in the Horn of Africa.

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[11] Oli et al, *Climate change as the 'new' security threat: implications for Africa; the securitization of climate change*, http://www.iisd.org/pdf/2007/climate_security_threat_africa.pdf accessed 29th August, 2003

1.5 Hypotheses

i. Environmental security plays a key role in the attaining of national security in the Horn of Africa.

ii. Issues in the environmental security debate are redefining the dynamics of security in the Horn of Africa.

iii. It is important to reexamine environmental security issues in national security strategies in the Horn of Africa.

1.7 Literature Review.

Security has traditionally been defined within the auspices of the state and its state-centeredness. Based on the broad definition of security that recognizes the importance of political, economic, social and now environmental factors, more comprehensive notions of security are developing increasing the trend towards recognizing the weight of human and environmental security issues. The security dimension of climate change is therefore compelling the emergence of environmental security as a critical concept in global security in addressing ecological degradation and natural resource scarcity. A critical review of the literature related to environmental security clearly shows that there is a link between security issues and the environment.

Though the concepts are explained and exposed in different perspectives, it is evident that environmental security is a concept that transcends national borders. The end of the Cold War and the increasing knowledge of the negative effects of environmental degradation have intensified the search for a more comprehensive security concept in the scientific, political and military community. Increasingly, security is being defined as the security of individuals as

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human beings as such and not as citizens of a particular state. "In principle, four or more distinct securities may be at issue simultaneously; the security of the individual citizen, the security of the nation, the security of the regime, and the security of the state. For a society composed of communal groups, with distinctive ethnic or religious identifications, their perceived securities may also be at stake, making the interplay and competition among the various players even more complex and irresolvable."[12]

1.7.2 Environmental Security

Environmental security is no doubt linked to development and it is inevitable to access environmental security in relation to environmental degradation and its link to poverty and development. "Environmental security deals with the containment of a range of 'threats', or contradictions emanating from the interaction between human beings and nature."[13]

In Kenya for example, while one part of the country is drowning in flooding waters, another part is dying of hunger due to drought and lack of water. There have been calls for the government to construct water storage facilities for use in dry season but this has been minimally achieved. This scenario is replicated across the Horn of Africa. Policies tend to favor economic development at the expense of sustainable development.

"The notion of redefining security therefore comes under scrutiny because of the link that the environment holds with security. In this case, environmental security, a relatively new and still somewhat contentious concept, may be defined as the intersection of environmental and

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[12] Job L., The Insecurity Dilemma; National , Regime and State Securities in the Third World in Brian L. Job (ed), *The Insecurity Dilemma: National Security of Third World States*, (Boulder & London, Lynne Rinner, 1992), pp. 15

[13] Obi C. Global Images of Environmental Security, *Africa Review of African Political Economy*, Vol. 27, No. 83 (March 2000), pp 47-62 :p. 48

national security considerations at a national policy level".[14] It is therefore to assume and leave the debate to the hands of international environmental negotiations. Policy makers in the different sectors and institutions need to align environmental policies to fit not only in the international system but national security policies as well. Despite environmental security shifting its debate from apolitical to political, the subjects further needs to be incorporated within debates on national security and its implementation.

As is noted by Obi, the imperatives of addressing the specificities of Africa's environmental security are obscured by the emphasis on the national security of the United States masked as 'global security'."[15] This has in a lot of literature aligned the environmental security debate to issues of national interests and national security of western countries. The implications of environmental security in the Horn of Africa have been studied and analyzed with respect to the effects it has on western economies and international security.

Obi further notes that "The Image of Africa as a source of environmental degradation, overpopulation and conflict has much wider implications, when we consider the trends in global environmental change, development and security studies."[16] This has in one way or another obscured the pursuance of national security solely to the use of military, diplomacy and the economy. As the situation is in the Horn of Africa, there is a dire need to the securing human life with basics as a premise to attaining national security for states in the Horn of Africa. According to Matthews, "Security analysts and academics have warned for some time now that climate

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[14] B.R. Allenby Environmental Security: Concept and Implementation, *International Political Science Review,* Vol. 21, No. 1, (Jan 2000), pp. 5-21

[15] Obi C., Global Images of Environmental Security, *Opcit.*

[16] Ibid

change threatens water and food security, the allocation of resources and coastal populations, threats which in turn could increase forced migration, raise tensions and trigger conflict".[17]

For example, a 2007 United Nations Environmental Program (UNEP) suggested that the conflict in Darfur has in part been driven by climate change and environmental degradation.[18] This may not only be evident in the Darfur region but is a reality in the most part of the horn of Africa. The image of drought stricken environment with pastoralists still searching for pastures is cause for alarm as they protect their wealth. Where there are slight misunderstandings among different clan's men, climate change and environmental degradation acts as the fuel for conflicts in the region. "While the precise roles of the environment in peace, conflict and as such are still being in relation to other security and conflict variables, there are growing indications that it is increasingly an underlying cause of instability, conflict and unrest".[19]

These roles have been in contention because of the classification of the environment in relation to state affairs as an issue of low politics. The environment in this argument is considered a social-cultural issue with minimal political inferences. This however is not the reality in the Horn of Africa where direct inference and connections in conflict are tied to environmental changes that have distorted the livelihoods of people living in the Horn of Africa. This reality then prompts for the classification of environmental security especially in the Horn of Africa as a matter of high politics, with indications such as inter-clan clashes over pasture,

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[17] Matthews J.,J.T , Redefining Security, *Foreign Affairs* Vol 68, No.2, (1989), pp.77-162

[18] United Nations Environmental Programme, Sudan; *Post-conflict Environmental Assessment (Nairobi:UNEP,2007)*

[19] *What is Environmental Security* from www.envirosecurity.org/espa/PDF/ESA_HOA.pdf accessed 08/16/2013, *Opcit*

land, and water. Inter-tribe clashes in Kenya over who controls the Mau forest and land clashes over generations.

This scenario is exacerbated by the rapid population growth in the region; hence competition for these resources is heightened. According to the environmental policy of Kenya 1.3, "the survival and socio-economic well-being of Kenyan's is ultimately twined with the environment. Most Kenyan citizens depend directly or indirectly on environmental goods and services. In addition, Kenya's environmental resources contribute directly and indirectly to the local and national economy through revenue generation and wealth creation in such productive sectors as agriculture, fishing, livestock, water, energy, forestry, trade and industry".[20] This makes it consequential to separate the environmental security debate from other traditional state priorities such as military capability and economic supremacy.

"However, adding an environmental security dimension to security also draws attention to the impacts that war and other military activities have on the ecological health of the planet".[21] Referring to environmental change as a security threat may bestow the problematique with a greater sense of urgency that elevates it to high politics and a place near the top of national and international agendas along with military priorities, which have here fore had a virtual monopoly on the use of the concept.

The traditional notion of state insecurity as resulting from was between states has slowly faded in practicality. More and more conflicts are internally based over resources that are scarce over an ever rapidly growing population especially in the Horn of Africa. Natural resources are

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[20] *Kenya National Environmental Policy*, June 2012

[21] Sorros, M., Global Environmental Security, and the Prisoner's Dilemma, *Journal of Peace Research*, Vol. 31, No.3 (Aug., 1994), pp.317-332

the contributory factors in insecurity in the Horn of Africa. Oil in Abyei, pasture in the North Eastern part of Kenya, Pasture, land and water in the Tana Delta of Kenya, Pasture and fishing waters in Somalia to name a few. Ultimately as McCormick notes, "humanity has been awakened to the basic truth that nature is finite and that misuse of the biosphere ultimately threatens human existence"[22]

1.7.3 National Security

According to Brams, "by national security we refer to those circumstances or events that directly affect the safety or integrity of a state in its relations with other states."[23] This however is contentious and debatable because the state consists of individuals within the state whose interests must also be guarded and safety guaranteed within the state.

Job reiterates that "the notion of an insecurity dilemma is defined by the need for these states to address internal rather than external threats, and by the fact that, given the weakness of their states, their citizens are also preoccupied by the need to protect themselves from their states and institutions."[24] Job further emphasizes on the concept of insecurity dilemma in the context of whose security is to be preserved in national security. This identifies a shift in the tenets in the definition of security and the importance of considering the other non-traditional tenets and variables to security.

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[22] McCormick, J. (1989). *Reclaiming Paradise :The Global Environmental Movement.* Bloomington and Indianapolis: Indiana University Press.

[23] Brams J., et al, National Security Games in Synthese, *Formal Analysis in International Relations*, Vol. 76, No. 2 (1988), pp. 185-200

[24] Job L., The Insecurity Dilemma; National, Regime and State Securities, *Opcit.*

According to this security is beyond the pursuance of state survival through the three legged framework of military, economy and diplomacy on political issues but also the involvement of other apolitical issues in security, for example, environment, refugee crises and availability and access to basic needs and services. The need to secure the survival of the state and state security is international; however, the task to implement the strategies for national security is assigned to specific institutions. The concept of the state as a unitary actor is useful in explaining how states behave in the international system. This concept is also useful the pursuance of national interests that are key to the attaining of national security. These interests are on a national level however there is also control from the elite individuals and multinational corporations on what policies to adopt for the country especially considering that one of the legs of national security is the economy.

Despite this, when it comes to issues of state survival in times of war this does not hold water. Brams notes that "domestic political games among elites are ubiquitous. But they almost always pale to insignificance when issues of war and peace come to the force and a nation-state, its national security imperiled, must act. Its leaders do act, and usually together, making the unitary-actor assumption a sensible theoretical simplification in matters involving national security."[25] Although there have been arguments on the redefinition of the traditional notion of security, states still subscribe and prefer to secure their survival in the traditional security premises. This is because state survival in the Horn of Africa is more vulnerable to internal wrangles than external factors.

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[25] Brams J., et al, National Security Games in Synthese, *Opcit.*

This then means that there is need to consider internal insecurities. Mwagiru faults the three legged African stool model of national security. "Despite its conceptual reach, the three legged stool model has shortcomings. One major weakness of the model is that it is based on very traditional thinking about national security and strategy. Its understanding of national security is very military in orientation, where threats to national security are largely physical."[26] This is not the case in the Horn of Africa where state survival is threatened by an increasing refugee crisis, droughts and famine, inter-ethnic clashes fueled by the scarcity of natural resources like water, pasture and land. This therefore is a challenge placed on the traditional values of national security to include internal state security and environmental security.

Another argument that is against the traditional notion of national security would be the budgetary allocation towards tackling threats on environmental security compared to other areas of national security. The argument has been that issues of environmental security are of a particularly extrapolated rate in the Horn of Africa and hence for states within this region to ensure state survival they need to deal with these issues from within the state. In the Horn of Africa, the environment is of a major concern due to its linkage to conflicts and development in the region. The national security strategy of the region should therefore pay more attention to addressing these issues. "Strategies for achieving security may be oriented either toward reducing threats or toward reducing vulnerabilities to threatening events or developments should they occur".[27]

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[26] Mwagiru M., Coordination of National Security Strategy: Perspectives on Grand Strategy Formulation in Kenya, *Opcit.*

[27] Buzan, B. Environment as a security Issue, in Paul Painchaud, ed., *Geopolitical Perspectives on Environmental security,*(Quebec, The Studies and Research center on environmental policies, Universite Laval,1992), pp. 1-28

According to Buzan, "the pursuit of security involves reducing if not eliminating insecurities. Insecurity arises when there is a combination of a threat and vulnerability"[28]. National security is the core of state survival and hence it is important to have strategies that are effective enough to ensure the implementation of these strategies. Environmental security on the other hand is the core of human survival and hence strategies that allow state survival should incorporate environmental security issues to ensure both state survival and the survival of the human population there in. Hence, national security and environmental security should complement each other in ensuring state survival.

1.8 Justification of the study.

Just as before Buzan and his school of thought and even currently, there still is a gap in the securitization of issues that are not the conventional threat to security. There is still an academic gap with regards to the Horn of Africa and how security is still highly dependent on the basis of the premises of the traditional western notions of security. There is a gap in the manner in which traditional notions of security relate to the security realities in the Horn of Africa. In defining the use of the three-legged (African) stool model as a framework for analyzing national security strategy, Mwagiru notes that "One major weakness of the model is that it is based on very traditional thinking about national security and strategy. Its understanding of national security is very military in orientation, where threats to national security are largely physical. It does not take into account emerging paradigms about the security concerns of third

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[28] Buzan, B., *People, States and Fear: The National Security Problem in International Relations.* (Chapel Hill, NC: University of North Carolina Press, 1983)

world countries. It fails to appreciate that the security architecture of the third world is quite different from that of the west."[29]

The concept of environmental security has massively redefined the traditional concept of security. Although some experts and academicians in the area agree to the redefinition of security, there is still a lot to be done both in research and practice in the field of security to ensure that ultimate security is achieved. Security is all encompassing as is evident in the Horn of Africa. The trend in natural resource based conflicts on issues of pastoral land, water, pasture and minerals is on the rise among communities in the region. Issues of human security involving food security, human rights, disease and access to basic needs are exacerbating the already fragile security status in the region. This paper seeks to bridge the gap that exists in academics and practice of national security policies in relation to security realities in the Horn of Africa. Oli et al argue that "the scientific basis for climate change is increasingly well established, and there is continuous growth in the amount of research being done on the biophysical impacts of climate change in terms of raised sea levels, altered precipitation patterns, and more frequent and fierce storms, and the likely consequences of all these effects for human wellbeing. However, there is comparatively little empirical evidence on the links between climate change, state security and conflict."[30]

Most people in the region equate security to the absence of violence yet on the contrary more people are losing lives out of hunger, droughts, flooding and other climate related disasters

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[29] Mwagiru M., Coordination of National Security Strategy: Perspectives on Grand Strategy Formulation in Kenya, *NDC Occasional Papers on Security* No .1 (Nrb: Institute of Diplomacy and International Studies ,2008)

[30] Oli et al, *Climate change as the 'new' security threat: implications for Africa; the securitization of climate change*, http://www.iisd.org/pdf/2007/climate_security_threat_africa.pdf accessed 29th August, 2003, Opcit

and predicaments. This paper seeks to bridge the gap that exists in academics and practice of national security policies in relation to security realities in the Horn of Africa. Oli et al argue that "the scientific basis for climate change is increasingly well established, and there is continuous growth in the amount of research being done on the biophysical impacts of climate change in terms of raised sea levels, altered precipitation patterns, and more frequent and fierce storms, and the likely consequences of all these effects for human wellbeing. However, there is comparatively little empirical evidence on the links between climate change, state security and conflict."[31]

There is a lot of effort from both government and non-governmental organizations in the Horn of Africa to improve the security of the region. This study will contribute to enhance these efforts and improve on efficiency in delivering results in these processes of attaining security and ensuring a sustainable environment in the Horn of Africa.

1.9 Conceptual Framework.

The environmental security debate has for a long time now been the center of debate in the international system and international relations. It has since the 1970's become a critical and important issue because of the increasing risk of violent conflict arising from environmental change and natural resource scarcity. As Lodgaard notes, "the concept of environmental security challenges established frames of mind and political conduct. It conveys the message that environmental problems have a legitimate claim for status at the level of 'high politics', just as much as military problems have".[32]

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[31] ibid

[32] Lodgaard, *Environmental Conflict Resolution*, 17

The concept is still under debate with different schools of thought fronting different assumptions. This however is not practical to tackling issues of environmental security as while the conceptual debate is on-going, there needs to be practical solutions to the global problem. All stakeholders in international affairs also need to be engaged with the conceptualization of environmental security since this will allow for objective resolutions to issues related to it. Ullmann notes that "This concept is based on the assumption that there are increasingly nonmilitary threats to territorial integrity of the state, its right to self-determination, and its economic well-being and that environmental degradation is seen as one such threat."[33]

The traditional notion of security has been defined by threats that are nonmilitary in nature and require more than the securing of borders to keep them in check. The concept has been refined in meaning to include a lot more than issues of physical security to human security. This is a more holistic way of examining the security situation in the world today and address issues as they are deemed necessary. "Cooperation and reciprocity are key elements in this concept. By stressing ecological interdependence, the concept also underlines the necessity of thinking in global terms and of abandoning the idea that security –with whatever connotation-can be attained at a national level."[34]

The concept suggests a reorientation of security policy to incorporate the impacts of environmental threats and especially the depletion of global commons. With this in mind, the traditional notion of security is seen as mainly a strategy to maintain a security status quo in developed countries with the consequences of environmental security being mostly felt in the

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[33] Ullman R, Redefining Security, *International Security*, Vol.8, No.1(1983), pp.129-153

[34] Lothar Brock in Security through Defending the Environment: An Illusion? Elise B (eds), (1992) *New Agendas for peace research: conflict and security reexamined*, London, Lynne Rienner Publishers, pp.95

developing world. With a lack of resources to reverse these effects, this situation then exasperates the already precarious conditions in developing countries hence jeopardize security in the region.

National security is traditional guarded based on the premise of traditional security notions. Traditionally, national security is protected by a country's military forces and active foreign policy."[35]This notion however has been redefined by the state of security affairs in the world today as the number of threats to the security of the state continue to increase. The incorporation of human security as an aspect of national security is important and needs to be given more priority as a major source of insecurity in the Horn of Africa. This includes issues that are not necessarily military in nature but are a major source of insecurity for example, terrorism, violations of human rights, food supplies, violations against women, natural disasters and more importantly for this study environmental disasters.

The active and conscious incorporation of these issues into the implementation of national security policies is important to the stabilization of the state of security in the Horn of Africa. Akerlund proposes that "Human security and that of states mutually reinforce each other and an extension of the security concept is intimately linked with an extension of the stakeholders involved in the field of security."[36] This then implies that there is need for the different stakeholders to be involved in the making and implementation of national security policies in the Horn of Africa. Pursuance of national interests in national security policies in the

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[35] Akerlund A., *Transforming Conflicts and building peace: Experience and ideas of Swedish Civil Society Organizations,*(SIDA studies No. 13, SIDA 2001), pp.35

[36] ibid

Horn of Africa needs to have human security in the forefront and concurrently implemented with other aspects of national security policies.

1.10 Methodology of the research.

1.10.1 Research design.

The purpose of this research is to provide an accurate description of the current trends and situation of environmental security in the Horn of Africa. The research will also add to the academic research already done that relates to the Horn of Africa.

The research design will therefore be an analytical survey. This will attempt to describe and explain the security situation in the Horn of Africa. It will also attempt to explain the relationship in the formulation and implementation of policies on environmental security and national security in the Horn of Africa. This method will examine the two main variables: environmental security and national security to test the research hypotheses. The results will allow for the examination of the interrelationships between the variables and draw explanatory inferences from them.

1.10.2 Sampling technique.

This study will utilize the purposive and random sampling techniques. These will assist in getting information from designated personnel in the relevant government ministries, organizations and institutions that formulate and implement policies within the area of study. This sampling technique will incur low costs, great accuracy in the results, greater speed of data collection and the availability of the sampling population is relatively flexible. The success of this sampling technique will depend entirely on two considerations while designing the data

collection method: accuracy and precision. Hence, the main aim will be to ensure high accuracy and precision in the execution of the sampling technique.

This is easy to administer especially when the right population sample is identified. The population sample in this study will include academicians such as lectures in the field of environment and national security, think-tanks such as Institute of Security Studies, government ministries such as Ministry of Lands in Kenya and non-governmental organizations such as Norwegian Church Aid. The questionnaire will partly collect background information on the research variables from the respondents. This will ensure that the analysis of the data is subjective to the understanding of the various entities on the issues at hand and objectively based on the analysis of the data itself and general.

1.10.3 Data collection method.

This study will utilize a data collection method that is both qualitative and quantitative. The research relies on both primary and secondary data. The data collection tool will be a questionnaire. The questionnaire will be structured in such a way not to deviate from the main objective which is to highlight the link between the environment and national security. In order to ensure that the research both adds value and gives new ideas on issues of environmental security within national security strategies as well as collect representative material, secondary data will also be used in this research. The secondary data used will be from written materials and documents from the archives and libraries. The research instruments will be used to ensure reliability and validity of data collection from various respondents who will be selected period of two months. The use of various methods and techniques would justify that the study will be conducted in qualitative and quantitative research methods.

1.11 Chapter Outline.

Chapter one of the research outlines the objectives and the expected outcomes from the research. It also gives a brief of issues in environmental security that need to be emphasized in order to ensure the security of the Horn of Africa. Chapter two focuses on the issues in environmental security and their link to national security. Chapter three looks at the current status of environmental security and national security focusing on the Horn of Africa. Chapter four focuses on the findings in the data collection results in the research and lastly, chapter five gives recommendations and a conclusion of the findings in the research study.

CHAPTER TWO

Issues in Environmental Security and the Link to National Security

2.1 Introduction

The environment is considered a global common to the world which contains resources with the capability of ensuring the survival of the state. The misuse and degradation of environmental resources contributes in insecurity in the Horn of Africa by creating a scarcity and hence conflicts to access these scarce resources for the survival of both the state and its population. "The traditional notion of security was seen as closely related to the threat or use of violence, and as such military means was regarded as central to the provision of security."[37] It is about the survival of the state which in this context is statehood and state sovereignty. Commonly it does not include protecting the survival of the population therein, unless where their survival translates to the sovereignty of the state in general. In the Westphalian state system, this notion is still prevalent having as the origin of state centrism lies within the Westphalian system. Power in this system is with the state and the state is the unitary actor in international relations which includes in relations that are non-military in nature that includes the environment.

The concept of linking environmental change to security was first expressed as soon as it was realized that human activity was modifying natural environment. "When one broadens the concept of security to encompass non-military forms of threat and vulnerability, which have a

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[37] Parson, A., et al., *The Science and Politics of Global Climate Change: A Guide to the Debate*, Cambridge: Cambridge University Press

significant impact on the extent to which people are free from danger, fear, want and deprivation, the significance of the 'state' as the unit of analysis diminishes in some contexts."[38]

The effects of degradation of vital commodities, such as water and oil, to national security are also part of the tenets to the concept of environmental security and its link to national security. The Brundtland report is the core official acceptance to the link between the environment and security. Another reason for the current securitization of climate change is much more political: it is part of a clear process to invest the international debate with a greater sense of urgency.[39] Issues and discussions on the potential security threat caused by environmental change began long before the report was released in the 1960's. Environmental security further gained prominence after the Cold War with the possible implications of human generated environmental change in the form of environmental degradation, deforestation, global warming, and loss of biodiversity, water pollution, air pollution and deforestation.

"Security means freedom from danger, fear, want and deprivation. Security thinking and policy have focused on the dangers posed by military aggression especially determined by the experience of the two world wars."[40] When a very high population of a state have no access to food and depend on humanitarian aid then the security of that state is at risk with the purportedly the population that is being governed by the state. "Few threats to peace and survival of the

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[38] Richard A et al ,*Global Environmental Change and Human Security: Conceptual and Theoretical Issues* Global Environmental Change and Human Security Program Office: University of California Irvine (2002)

[39] Ibid

[40] Richard A et al ,*Global Environmental Change and Human Security: Conceptual and Theoretical*, Opcit

human community are greater than those posed by the prospects of cumulative and irreversible degradation of the biosphere on which human life depends.

True security cannot be achieved by mounting buildup of weapons (defense in a narrow sense), but only by providing basic conditions for solving non-military problems which threaten them. Our survival depends not only on military balance, but on global cooperation to ensure a sustainable environment."[41] The institutionalization of the United Nations Framework Convention on Climate Change was the first clear roadmap to the recognition of environmental degradation as a threat to security in the world.

Obi notes that "the Image of Africa as a source of environmental degradation, overpopulation and conflict has much wider implications, when we consider the trends in global environmental change, development and security studies."[42] The Horn of Africa has in the recent past few years come face to face with the unprecedented challenge of climate change impacts and the corresponding socio-economic losses to our communities. It is the region that has a high dependence on climate sensitive natural resources for our livelihoods and economic sustenance will inherently increase our vulnerability to this phenomenon.

2.2 Climate Change and Global Warming

The issue of climate change has been mired in strident political conflict since the mid-1980s. Fraser and Matthew argue that the leading causes of human generate d environmental

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[41] Brundtland Commission Report, 1987

[42] Obi C, Global Images of Environmental Security ,*Africa Review of African Political Economy*, Vol. 27, No. 83 (March 2000), pp 47-62

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degradation are inefficient production processes, high levels of consumption, poor waste management, population growth and movement, economic development and urbanization."[43]

Conflict takes the form of public debate over whether or not and to what extent human emissions of greenhouse gases (most notably carbon dioxide) may lead to changes in future climatic conditions. The debate takes place in the language of science, but is really about political positions for and against regulations of greenhouse gases, under the Kyoto protocol on climate change.[44]The political from the developed world has offered negligible response towards the ratification and the implementation of the provisions in the Kyoto protocol and preceding recommendations; which then puts to scrutiny the concept of natural resource based conflicts in Africa. The Horn of Africa is one of the, least contributors of GHG's yet it suffers the most on the effects of climate change. There needs to be a framework that caters for the adaptation and mitigation of climate change effects in the Horn of Africa. Climate Change financing under the UNFCCC needs to actualized and given serious attention.

Global security in the recent past has been debated on the line of human security, where the new thinking and ideology is challenging the notion of national security by arguing that the proper referent of security should be in relation to the individual rather than the state. The thought held is that global security is a large perspective of human security, where human security is best described on a holistic perspective as fronted by United Nations Development Program (UNDP) as including economic, social, health, environmental, personal, community and political security. When the world is grappling with containing nuclear proliferation,

[43] Richard A et al ,*Global Environmental Change and Human Security: Conceptual and Theoretical*, Opcit

[44] Pielke R, Bringing Society Back into the Climate Debate, *Population and Environment*, Vol 26, No 3, (2005) pp. 255-268

environmental security has emerged as a critical concept in addressing ecological degradation and natural resource scarcity. Environmental degradation is currently considered a new concept in global security. It is a common security issue due to the fact that the environment provides life support system. However, the main source of threat to the environment is from modern industrialization.

With increasing industrialization, there has been a tradeoff between environmental protection and development. Currently, with the concept of sustainable development, the protection of the local and global environment is crucial to the development process in an increasingly interdependent world. "With the emerging trends in globalization, the magnitude and nature of threats and challenges of climate change are redefining the understanding and definition of global security. Traditional security was based on the use of force if necessary to preserve vital interests, as based on realism or power politics."[45] Apart from the changing trend in the interstate conflict, more comprehensive notions of security are developing increasing trend towards recognizing the importance of and environmental security issues. "Tackling climate change requires dramatic changes in how nations produce energy, the essential foundation for economies to thrive since eighty percent of world energy supplies come from fossil fuels that are the main cause of climate change."[46]

Climate change acts as threat multipliers making existing concerns such as water scarcity and food insecurity more rampant. This aggravates the already precarious living conditions especially in low lying countries i.e. healthcare. This puts the people in question in desperate

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[45]Renner M, State of the World 2005: Redefining Security, in; Mwagiru, M., and Oculli O., *Rethinking Global Security: an African Perspective*, Nairobi, (2006) pp 1-11.

[46]Parson, A., et al., *The Science and Politics of Global Climate Change: A Guide to the Debate*, Opcit

situations where the probability of conflicts as it becomes a battle for survival. The impact of climate change escalates conflicts and entanglement over non-renewable resources such as oil and gas and especially water.

It can also affect other issues that can diminish human security in the 21st century such as rising sea levels and migration, internal population displacement, crop failure and many others. These human security issues pose a great threat to the national security of individual countries if they are compromised. Climate change represents the latest in a series of environmental drivers of human conflict that have been identified in recent decades, following others including drought, desertification, land degradation, failing water supplies, deforestation, fisheries depletion, and the ozone depletion."[47]

It is said that climate change is the mother of all security problems and that it is an issue that cannot be eliminated by use of military force. Whether it is the daily practical changes experienced with the environment or the research and documentaries studied, it is inevitable that this issue be addressed to allow for the growth and development of especially the vulnerable geographical regions of the world. Matthew argues that "security analysts and academics have warned for some time now that climate change threatens water and food security, the allocation of resources, and coastal populations, threats which in turn could increase forced migration, raise tensions and trigger conflict."[48]

Refugee crises, conflict between humans and wildlife as well as conflict between humans themselves competing for survival are inevitable in a world where the care versus what is required from the environment that caters for them are not in tandem. In the Horn of Africa most

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[47] T. Homer-Dixon, On the Threshold: Environmental changes as causes of acute conflict, *International Security* Vol 16, No 2 (1991), pp. 76-116

[48] Matthews J, Redefining security, *Foreign Affairs* Vol 68, No 2, (1989), pp. 162-77

of the densely populated areas are of concern since most of them house refugees out of the different conflicts and some due to resource based conflicts. A vast area of land in the Horn of Africa that is classified as facing either crisis or emergency food shortages is seen in the map below.

Most of the areas that house refugees are in these areas which again exert more pressure on the already scarce resources. This is a condition ripe for conflicts and disputes which if not addressed at the earlier stages transform into violent conflicts in the past. "Climate change will act as a threat multiplier that makes existing concerns, such as water scarcity and food insecurity, more complex and intractable and presents a tangible threat to American national security interests."[49] Food security is of more concern in the Horn of Africa because of the repercussions it has had to the population in the region. The state of humanitarian crisis out of the food crisis in the region is not only creating a humanitarian crisis but refugee crisis as well. This puts a lot of pressure on the already scarce resources including the access to food and other basic necessities.

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[49] National Public Radio, *Climate change worries Military advisors*, 2007,
http://www.npr.org/templates/story/story.php?storyId=9580815

Figure 1: Climatic Pattern in the Horn of Africa

Source: UNOCHA shows the status of famine, drought and the causes of it in the changing climatic patterns in the Horn of Africa.
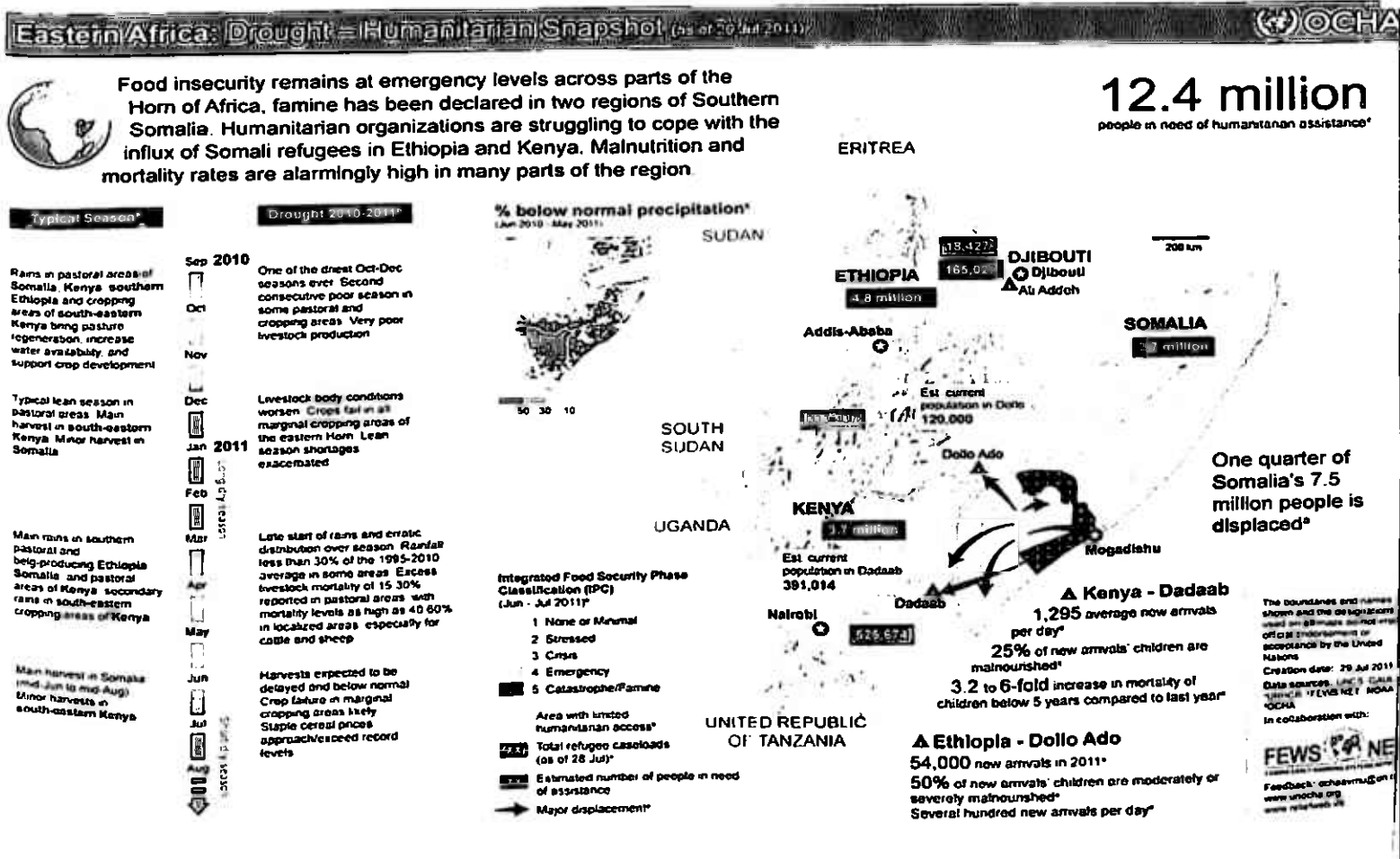
Source: UNOCHA

Meena Singh further argues that "environmental security is inextricably linked to development, since poverty and environmental destruction go hand in hand. The causes of environmental displacement will be explored by viewing environmental degradation in relation

to poverty and development. Unequal access to resources often implies that scarce resources are in great demand."[50] When there is scarcity of basic community resource that is used dependently by that community, there is a tendency to guard that resource. Any interference by any other dependent is considered a threat. The conditions of drought that have escalated in the Horn of Africa has been the source of conflicts between communities in the region.

2.3 Environmental Degradation

There are several linkages of environmental degradation to insecurity. These are directly linked to the destabilization of Africa as a continent and to the Horn of Africa as a whole. War and conflict over natural resources may be seen as a causal link of the environment to national security in the countries in the region. The environment in this context refers to the natural resources that serve the economy and survival of human beings in this region. Drought conditions in the Horn of Africa have played and still play a key role in the displacement of populations to greener pastures. This does not only create a humanitarian crisis but caused instability to neighboring countries who have to take in refugees at the expense of already constrained resources in their own countries.

When there is an overflow of refugees across state borders in states whose internal security is already facing challenges, then there is bound to be a security issue created. According to Myers, "it has been possible to identify resource scarcities as important contributing factors in violent conflicts…that resource scarcities do not necessarily in themselves lead to social unrest, they exacerbate poverty by widening the gap between the majority poor and

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[50] Meena Singh, Environmental Security and Displaced people in southern Africa, *Social Justice*, Vol.23, No. 4, (1996), pp.125-133

the elite in a society, and the unrest that ensues raises national security alarms."[51] These resources are most often community shared resources of basic commodities in the environment. They are resources that are of important to the survival of human population. When there is a resource scarcity these resources are easily available to the elite in the society who in the Horn of Africa are mostly political leaders. This then widens the gap between the rich and the poor under the background of scarce resources.

Acts of land degradation and deforestation of the Mau forest which is a major water catchment area in East and Central Africa is not only creating an environmental disaster but "In contrast to the threats to regional security during the Cold War period, the security of neighboring states is not now threatened by powerful armies and military occupations. The threat is more often from unarmed, hungry, unemployed, and frequently ethically divided people. The solution therefore cannot be a military one. This new scenario demands a different approach to security, which can only be effective if there is accurate data and a thorough understanding of the causes that generate such conflict."[52]

As populations depend on scarce and diminishing resources grow, competition for resources may generate conflict. Food scarcity leads to price increases, thereby widening cleavages in society. The main concern with environmental degradation to national security is the link between environmental degradation and conflicts hence giving rise to natural resource based conflicts both intra state and interstate. The main concern then for states would be how to protect their statehood in the international system from environmental threats. It is said that "wherever man appears with his tools, deformity follows his steps. His spade and his plough, his

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[51] Myers, N. Environment and security, *Foreign Policy*, Vol 74 pp. 23-41

[52] Meena Singh, Environmental Security and Displaced people in southern Africa, *Social Justice*, Opcit

hedge and his furrow, making shocking encroachments on the simplicity and elegance of landscape"[53]

According to the Brundtland report sustainable development is defined as ensuring that development meets the needs of the present without compromising the ability of future generations to meet their needs.[54] The United Nations Conference on Environment and Development (UNCED) that was held in Rio de Janeiro in also known as the Earth Summit, 1992 provided the framework needed to achieve a sustainable future especially where issues of climate change are concerned. With this later came the United Nations Framework Convention on Climate Change which gave a more detailed framework as to how issues on climate change on a global scale will be tackled in the future as well as registering a political will from states towards helping with the process.

AMCEN notes that climate change poses a big threat to Africa's economic growth (due to changes in natural systems and resources), long-term prosperity, as well as the survival of the already vulnerable populations. Climate change, variability and associated increased disaster risks are an additional burden to sustainable development in Africa, as well as a threat and impediment to achieving the Millennium Development Goals."[55] Africa is a vast land with an enormous amount of natural resources. It is the source of raw materials for a larger part of the world and especially the West. "These natural resources include energy, water, food and biodiversity. The management of these resources should be in such a way that they enhance the

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[53] William G, (1973) *Observations on the Highlands of Scotland*, Richmond Surrey: Richmond

[54] Brundtland Report, Our Common Future, (1987).

[55] AMCEN, *Addressing Climate Change Challenges in Africa; A Practical Guide towards Sustainable Development*, (2011)

well-being of humanity rather than in a way that controls them to ensure equity."[56] Such an approach then approaches sustainable development. As mentioned before climate change and global warming is an environmental issue that is a global common and hence matters arising from these should be dealt with in the same manner i.e., globally.

2.4 Sustainable development

The concept of sustainable development is to a larger extent a matter of consideration to the survival of the state. Although most realists may not agree with this, it is about having a level playing field on a global scale while at the same time securing the survival of future generations. Traditionally, state survival is attained in terms of economic power, military power and diplomacy. While environmental degradation may seem like an idealist or liberalist idea it is evident especially in Africa that it a major source of conflicts and instability. It is a matter that can no longer be practically ignored because it is a threat that cannot be secured by military means. Sustainable development is therefore a matter of national security if looked at from a survival perspective. Sustainable development can be conceptually broken down into three main areas of assessment: economic, society and environment. The success of the process of sustainable is dependent on the growth of these three areas, which are closely intertwined and interdependent.

The focus is on political boundaries inadequacy to reflect biological boundaries, where economic activities produce pollution which spreads environmental problems beyond the nation's boundary. This boundary transcending the geographical allocation and covering both land, sea and air. This definition therefore assumes that societies and nations are interconnected

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[56] Goldstein S, (2004), *International Relations*, New York, pp. 71

through globalization. "With this interconnectivity, impacts are felt across national boundaries when the economies are interacting where the impacts may be either intentional or unintentional both with pros and cons, where in this perspective the focus is in the impact on the environment."[57]

According to the realist's view of a nation, its sovereignty is highly tied in the survival of the state, and the state would go to whatever extent just to secure its own survival and that of its citizen. Traditionally, state security has always been tied to three arms of the state: the military, the economy and diplomacy. It is from this angle that climate talks and negotiations have been politicized on the international stage. States would not want to reduce on their carbon emissions because that would mean that they cut on their industrial production and hence interfere with their economic growth.

2.5 Environmental Diplomacy

Environmental diplomacy marks the politicization of environmental debates and negotiations in the international society. "Global climate change has been one of the most contentious issues in international negotiations since the 1980s. At the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro-popularly known as the earth summit-most countries of the world adopted the United Nations Framework Convention on Climate Change(UNFCCC), which obligates them to work together to achieve the aim of stabilizing the atmospheric concentration of Green House Gases (GHG) regardless of their level of development"[58].

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[57] Anthony M et. al, (2002) *Globalization/Anti-Globalization*, Malden: Blackwell Publishers Inc.

[58] Stephanie Meakin ,a *Report on the Rio Earth Summit*, the Science and Technology Division.

In the recent past states and non-state actors have been struggling to find policies that can satisfy the demands of their electoral politics while at the same time meet the needs for responsible stewardship of the globe. With the many challenges of power politics and different national interests at stake, these have been forced to reckon. The initial response of nations to the threat of global warming was the Framework Convention on Climate Change (UNFCCC), which was issued from the Rio Summit of 1992. "Tackling climate change requires dramatic changes in how nations produce energy, the essential foundation for economies to thrive since eighty percent of world energy supplies come from fossil fuels that are the main cause of climate change."[59]

The North-South debate is still evident in international environmental negotiations even today, and it has turned out to cripple the processes that are meant for the common good of the whole world. This is evident in The Kyoto Protocol of 1997, The Copenhagen Accord of 2009 and The Cancun Agreement of 2010, all of which are towards attaining a global environmental regime.

Post Kyoto negotiations have been characterized by a lack of political will with many states prioritizing their state interests without considering global responsibility. The major emitters we are dealing with are competitors on the global scheme. China, U.S, Russia, India and other major players compete both politically and economically hence there has been a need in neutrality in the negotiations if the world is to attain its goals in terms of coming up with an environmental regime. This was mainly characteristic of the Copenhagen accord in 2009.

It was designed to outline a new international treaty to replace the Kyoto protocol. This was not realized due to power politics in the negotiations and hence, the result was a minimalist

[59]Parson, A., et al., *The Science and Politics of Global Climate Change: A Guide to the Debate*, Opcit

deal which is the Copenhagen accord. Initiatives to counter climate change have to be ecologically sustainable and economically viable. On the other hand, India, China and other emerging economies have not taken any obligations concerning the reduction of carbon emission. They consider that climate change should be tackled by modern technologies and not cuts in carbon emissions stipulated by the Kyoto protocol.

The Copenhagen conference confirmed what many analysts of international affairs had long identified, namely a slow but persistent shift in the global balance of power –economic, military and political – away from the West and towards the emerging economies of the developing world. The foundations of this shift lie in the dramatic economic growth experienced by China, India and Brazil, which together with Russia make up the so-called BRIC countries. Notwithstanding, "climate protection poses the problem of providing a global public good. In the absence of any supranational authority, countries behave non-cooperatively-each country decides on its GHG abatement according to a comparison of its own benefits from abatement and its own costs of abatement."[60]

The Cancun or COP 16 negotiations may be viewed as an agenda setting forum for the COP 17 negotiations later on in December 2011, in South Africa. The fact that the COP 17 was held in Africa therefore put a lot more effort to African states in terms of solidly declaring their stand in the outcome in the negotiations. The Negotiations held in Cancun Mexico focused mainly on the concrete text of a final post Kyoto agreement. Cancun focused in sealing the loopholes that are there in the Kyoto protocol.

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[60] Bohringer C et al, Economic and Environmental Impacts of the Kyoto Protocol, *the Canadian Journal of Economics*, Vol.36, No.2, (2003) Blackwell publishing, pp.475-494,

Essentially the rise in the international regime creating concern to govern climate change is contributing to a fundamental redefinition of global security in the 21st century, away from territorial and narrowly defined national security based on military action. The importance of recognizing climate change as a global security threat has led to norm building on climate change characterized by creation of a basic international legal regime since the 1992 UNFCCC.[61]

"In principle, four or more distinct securities may be at issue simultaneously: the security of the individual citizen, the security of the nation, the security of the regime and the security of the state. For a society composed of communal groups, with distinctive ethnic or religious identifications, their perceived securities may also be at stake, making the interplay and competition among the various players even more complex and irresolvable".[62] It should however be noted that all these issues of environmental security meet at one point which is environmental security. In terms of state survival, environmental security is the means by which states negotiate binding agreements that are meant to govern the environment on the international level and locally. In environmental security however, there is the active participation of both state and non-state actors because environmental security is both a matter of national security and human security.

On the other hand the practice of sustainable development allows for both the attainment of national security in the Horn of Africa and the survival of populations. This is so because it is through the practice of the concept of sustainable development that climate change and global warming is moderated adapted to and mitigated. The practice of sustainable development allows

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[61] UNFCCC- United Nations Framework Convention on Climate Change, 1992
http://unfccc.int/resource/docs/convkp/kpeng.pdf

[62] ibid

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for the protection and conservation of natural resources for the sake of future generations. This section will deeper examine the concept of sustainable development within the contexts of global warming, climate change, environmental diplomacy and how all these provide a direct link to national security in the Horn of Africa.

Although the countries in the Horn of Africa have different national interests to secure and pursue within their national security strategies, there is no doubt a similarity in the insecurities and their causes in the region. This suggests that there needs to be a particular shift or emphasis needed to be addressed within their national security strategies that will allow for the tackling of issues in environmental security. The description of sustainable development as stated came about when growing concern on the accelerated deterioration of human environment and natural resources and the consequences of the deterioration to economic and social advancement of the society. Mwagiru argues that "contemporary security studies examine the specific security realities of the third world, which exist in a different security environment from the traditional, western one."[63]

These problems were perceived to be global in nature, thus the incorporation of sustainable development and environmental diplomacy as a resolve to the pollution of the environment and regulation of use and exploration of natural resources. Sustainability, the holding process of making sure that the current modes of interaction with the environment are pursued with the idea of keeping the environment as 'clean' as naturally possible. This aims at preventing the contrary situation, where the natural capital which is the sum total of nature's

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[63] Mwagiru M., Coordination of National Security Strategy: Perspectives on Grand Strategy Formulation in Kenya, *Opcit.*

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resources is used up faster than it can be replenished , the long term result of environmental degradation being the inability of the environment to sustain human life.

Environmental diplomacy in this case then refers to the use of international relations in advocating for conservation and preservation of the environment, this being played out at varied levels, be it from one state to another or among states and no-state actors who serve as the primary agents in entrenching practices on sustainable development to the masses albeit with state/government support at both local and international levels.

Sustainable development could be seen to have been present before modernization and civilization through narrations of communities protecting their boundaries and resource reservoirs against wanton use by other communities, this later extending to larger communities, societies and eventually nations. Today many countries have ministries and national councils and institutions formulated to deal with sustainable development issues, bringing together experts from the region and the international community. "Besides climate change creating a number of situations in Africa, it is also having an impact on security-contributing to the creation or broadening of conflict, at least in some specific countries and regions. The case of the Sudan and the spillover of tensions into Chad is an often cited example. Other potential threats include the consequences of mass migrations of people fleeing from rising seas and encroaching deserts."[64]

In the Horn of Africa, the intensity of movement of pastoralists in the Horn of Africa has increased by a tremendous margin. Barnett and Adger argue that "climate change will affect some major environmental changes which, when superimposed on existing environment and development problems, may result in security problems for some individuals, social groups, and

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[64] *What is Environmental Security?* www.envirosecurity.org/espa/PDF/ESA_HOA.pdf accessed 08/16/2013

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countries. It may undermine human security by reducing access to, and quality of natural resources that are important to sustain livelihoods...it may be one among numerous factors that contributes to violence."[65] In the history of conflict in the Horn of Africa, migration for environmental reasons is very common.

In the Horn of Africa, poverty, population growth, rural-urban migration, environmental degradation and pollution are cited as key challenges in environmental diplomacy. Non-state actors (non-governmental organizations and individuals) have played a key role especially in the region in pushing for reforms in environmental policy making and national planning to have the inclusion of management processes and guidelines for environmentally sustainable development. This, as implemented through community mobilization and capacity building initiatives has proven that sustainable development has indeed redefined the view of environmental diplomacy, where there has been a shift of focus from identifying environmental degradation agents to identification and curbing of environmental degradation to mitigate consequences that may impact negatively on future generations.

The loss of biodiversity as the origin of the notion of sustainable development could be said to be the genesis of the environmental diplomacy practices from a sustainable development perspective. Destabilization caused in the exploitation of resources has caused a shift in the equilibrium of the ecosystem hence phenomena like human wildlife conflicts over scarce resources, Human- human conflict over the same scarce resources as well as state and non-state actors over the same scarce resources.

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[65] Barnett J et al, (2007) *Climate Change, Human Security and Violent Conflict*, University of Melborn, pp. 1-17

These issues can be argued to be the web that is the nature and status of environmental security in The Horn of Africa. The nexus between the environment and security in the Horn of Africa cannot be ignored especially considering that natural resources play a crucial role in ensuring the survival of state in the Horn of Africa in the precepts of military, diplomatic relations and economic prospects. There may be limited scientific debate of the line between security and the environment but there surely is empirical evidence for example there is a huge migration due to the effects of climate change.

In conclusion, the interaction between climate change and global warming, environmental degradation, environmental diplomacy and sustainable development is important. These factors contribute in a large way to state survival in the Horn of Africa. However, they cannot be examined each in isolation because they interdependently interact to portray the state of environmental security in the region. The Horn of Africa as a region is highly dependent on natural resources and good climate for the sustenance of economies in the region. This is because Agriculture serves as the main driver of the economies however, the recent past has been marred by unpredictable weather patterns that affect the agriculture and tourism industry. Natural resources are also a contentious issue in the Horn and the manner in which the profits from the resources are shared to the manner in which the resources are exploited. These also contribute to the state of national security within the different countries in the Horn of Africa.

2.6 Conclusion

The interdependence between climate change, global warming and environmental degradation is the major cause of environmental insecurity in the Horn of Africa today. This is mainly because the interrelationship between these is one between nature coupled with negative human activities and hence the insecurity. The threat multiplying nature of climate change and

global warming is particularly of major concern due to its ability to create climate refugees out of diminishing climatic conditions to support the existence of populations in the Horn of Africa. Environmental degradation is directly linked to natural resource based conflicts in the region. The over-exploitation of natural resources mainly minerals has been a cause of many conflicts dependent on how profits from these minerals are shared with the regular citizens of countries in the region.

Sustainable development may be viewed as the most subtle issue in the environmental security debate and its link to national security not obviously recognizable. Its importance and role to national security can only be considered in the realms of ensuring the survival of the state. It captures the economy, the environment and the social aspects of survival and hence its wholesome nature in contributing to the pursuance of national security. Lastly, environmental diplomacy can be described as the politics of environment. Environmental diplomacy has been defined as "the conventions regulating the use of natural resources and conventions regulating pollution."[66] It is the arm by which international legal frameworks for the management and protection of the environment are drafted, debated and adopted by states. The involvement of the state in this is purely to pursue its national interests in relation to international environmental law and secure its national security priorities.

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[66] Dorsey Kurk (2002) *Encyclopedia of American Foreign Policy*

CHAPTER THREE

Issues contributing to insecurity in the Horn of Africa

3.1 Introduction

Contrary to popular belief, Africa is not the only continent that suffers great misfortunes when it comes to security issues. Each unique region has its unique issues of security to deal with. For the Horn of Africa, the origins of these security issues are however diverse. The identification of these issues in Africa and the Horn of Africa to be specific have in many incidences done under the backdrops of many stereotypes about Africa.

Paul D. Williams notes the different shades of Africa constructed in the minds of people around the world especially those not inhabitants of the continent. "There is Africa as a 'scar on the world's conscience' a stricken continent in need of charity, whose development should be seen as a moral imperative. There is Africa as a haven for 'terrorists' a potentially dangerous continent that needs order and strong governments capable of effectively policing their territory. There is Africa a source of risks, threats and problems such as war, famine, drought, migration, disease and environmental degradation a neglected continent that needs fixing before these problems wind up on our shores. And there is Africa as a source of opportunity and riches with abundant sources of minerals, energy and wildlife: a bountiful continent that is ripe for a renaissance but in need of stability and investment".[67]

Insecurity in the Horn of Africa is most often entrenched as a feature in the politics of the region. There is no doubt that security has been redefined in an effort to securitize various issues

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[67] Paul D , Thinking about security in Africa, *International Affairs*, Vol. 83, No. 6, (2007) pp. 1021-1038

in the region: from the environment, poverty, disease, refugee crisis, political instability, conflicts and the economy. These issues are interdependent and one either leads to the other or they are interlinked to create the security situation in the region. These issues interlinked or independently affect the issues securitized within the national security strategies of countries in the region. This definition is particularly practical in the Horn of Africa seeing as human security is a major security issue in the region, hence the notion of freedom from fear as defining what security really means is familiar in the Horn of Africa.

Insecurity in the Horn of Africa is particularly of a regional nature. The UNDP crisis brief of December 2011cites that "fragile livelihoods and poor security and governance turned drought into famine in the Horn of Africa".[68]Whenever there is a conflict in any of the countries it equally affects the neighboring countries. There is a historical tendency to intervene in conflicts in the neighboring countries to ensure peace and human survival. This has over a period of time produces a region with an interventionist kind of character. This is commonly because most conflicts not only in the Horn of Africa but in the African continent have a tendency to result into not only fallen states but also break up of states. The breakup of Eritrea from Ethiopia, South Sudan from Sudan and Somalia is said to be giving the same symptoms seeing as Somaliland has been running its affairs separately from Somalia for more than 10 years now. "Conflict inside any one country or between any two will always have important ramifications for all the rest. As in Somalia, neighbors get drawn in to support their own protéges".[69]

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[68] UNDP Crisis Brief: Horn of Africa, 2011

[69] Sally H, *Hostage to conflict security and economic interdependence in the horn of Africa,* from: http://africanarguments.org/2011/12/07/hostage-to-conflict-security-and-economic-interdependence-in-the-horn-of-africa-%E2%80%93-by-sally-healy-chatham-house/- accessed 08/12/2013

Despite there being other underlying grave causes of security unrest in the Horn of Africa, political unrest is the icing on the cake and is the fuel to most of the conflicts in the region. The political unrest arises when in most of the cases in the countries in question the political class is usually from a particular dominating tribe, clan, race, religion, and political party affiliation. All these are inclined to what particular group is in control of primary resources in the region. This constant segregation of a particular community is the formula for cessation in the Horn of Africa.

The history of cessation in the region may be for a particular reason which is to resolve political problems so as to avoid or end violent conflict. This then means that the underlying problems are only put to sleep and does not provide solutions for living together in other aspects of national coexistence. Besides not solving the underlying problems in question they are also increasing the geopolitical dependencies created by land-lockedness in the Horn of Africa. Seeing as the region is already host to three landlocked countries: Uganda, Ethiopia and now South Sudan.

The dependency level for developing countries on the already stressed region is creating a tense and urgent situation of interdependencies. The economic challenges that these landlocked countries face have been a major contributor to the interdependency in the Horn of Africa and surrounding regions especially in the access to ports. Sally H notes that "The Ethiopian imports and exports have expanded rapidly in the last ten years and so has the port of Djibouti on which it depends. Good political relations are an economic necessity for both countries, but in the long run Ethiopia's expanding economy needs port options. One of the economic questions that hang

over the region is whether, when and how Ethiopia might return to using the Eritrean port of

Assab on which it relied for well over 80% of its trade before 1998"[70].

However, this relationship is not one of economic interdependency only seeing as

anything that interrupts the running of one of the countries affects the rest. The interdependency

has warranted the manner in which countries in the Horn of Africa respond to crisis in their

neighboring counterparts.

3.2 Climate change, climate refugees and rapid population growth

Climate change may have been a cause to a lot of implications and environmental

situations especially in the Horn of Africa. Insufficient attention has been given to the

humanitarian implications of environmental changes. As Sir John Holmes, Under-Secretary

General for Humanitarian Affairs and Emergency Relief Coordinator notes "Climate change is

already undermining the livelihoods and security of many people, exacerbating income

differentials and deepening inequalities. Over the last two decades the number of recorded

natural disasters has doubled from some 200 to over 400 per year. Nine out of every ten natural

disasters today are climate related."[71]

With the anticipation of future natural disasters due to continuously escalating poor

climatic conditions, the movement of population in places affected by droughts and floods is

bound to increase. In Kenya, there was intense rainfall that has been continuous and

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[70] ibid

[71] Sir John Holmes, Under-Secretary General for Humanitarian Affairs and Emergency Relief
Coordinator, Opening remarks at the Dubai International Humanitarian Aid and Development Conference
and Exhibition "DIHAD 2008 Conference', 8th April 2008, available at
http://www.reliefweb.int/rw/rwb.nsf/db900sid/YSAR-7DHL88?OpenDocument.

uncontrollable in the months of March and April in 2013. It caused massive devastating damage to infrastructure, loss of lives during landslides and many more. This has not been experienced ever in the country. The frequency of famine and droughts in the Horn of Africa has increased. Hence increasing the number of climate refugees. Such has been experienced in the northern parts of Kenya, parts of Somali and Southern Sudan. This will be and already is a cause of stress and insecurity in the Horn of Africa.

Since the fall of Siad Barre's government; January 1991, in Somalia, the influx of refugees trickling into neighboring countries especially Kenya has been on the rise. Siad Barre was toppled over a power struggle between warring clan lords, Mohammed Farah Aideed and Ali Mahdi Mohammed. This led to civil war and thousands of Somalis died of disease and starvation. This is not only the case with Somalia but there is also Sudan. "The security concerns that engulf this region encourage the closure of borders and seek to clamp down on freedom of movement and open commerce. The logic of economic integration would point in the opposite direction, and would benefit from all the connections that exist".[72] Environmental degradation has been attributed to the rapidly growing population that is accelerating at a higher rate than the resources they depend on is regenerating. The population in the Horn of Africa has doubled in the past half a century. This has prompted a number of human activities that are a strain to the environment hence a major cause of environmental degradation.

Sally H, *Hostage to conflict security and economic interdependence in the horn of Africa,Opcit*

Figure 2: Percent Growth in Population

Percentage Growth in Population
from 1960 baseline

Legend: Ethiopia, Kenya, Somalia, Sudan, Uganda, World
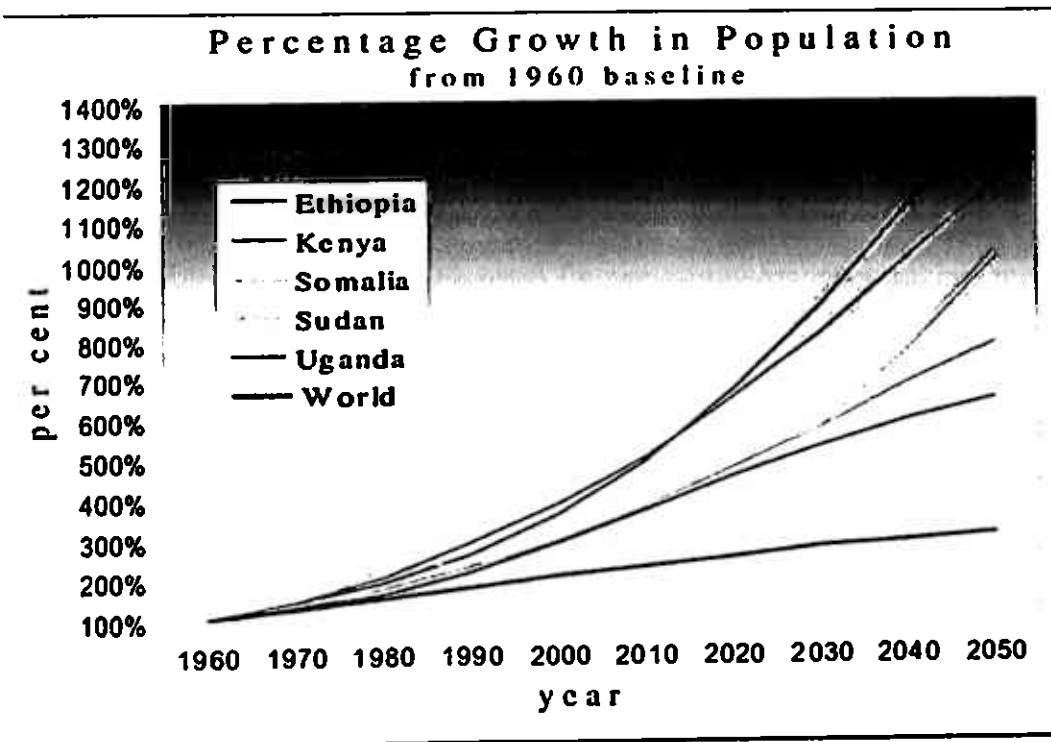
Source: UN Population Division 2011.

Since 1960 population growth across the horn of Africa has dramatically outpaced global population growth. Uganda's population is projected to grow to 14 times its 1960 population by 2050. The rate, extent and intensity by which land use and land cover is being depleted to accommodate this rapidly growing population is indeed putting a lot of strain on the environment. "The United Nations High Commissioner for Refugees (UNHCR) has observed that environmental considerations are increasingly affecting the movement of refugees in the Horn of Africa. According to available qualitative and quantitative information (IPCC 2007), this region – in which many people of concern to UNCHR are located – is one of the areas projected to be most negatively affected by climate change. Environmental change in the Horn of Africa

today includes prolonged droughts, desertification, flash floods and land degradation, all of which may be exacerbated by climate change in the medium and long term."[73] With the culture and traditions in Africa and a rapidly growing population only accelerates the amount of land that is cleared for agriculture and more trees are cut for construction and firewood. Many parts of the region are suffering serious problems because of the growing population and increasing numbers of livestock coupled with more frequent droughts, overgrazing and shortages of quality pasture.

As Sanders notes, "the region is also witnessing a growing number of climate refugees. Persistent droughts are forcing peasants and nomads to flock to cities or refugee camps to avoid starvation. The numbers of climate refugees and displacements are difficult to estimate since there are other factors that cause displacements. Climate-induced displacements have become a growing problem. UN officials, for example, estimate that about 10% of the nearly 300,000 refugees at the Dadaab refugee camp in northern Kenya are climate refugees".[74]

Climate has been a subject of debate from a scientific, social, economic and now political. It is transcending from low politics to a subject of discussion in high politics. In the Horn of Africa, for example the discussions at IGAD have centered mainly on the effects of climate change in the region and how to adapt and mitigate these effects. High politics as traditionally defined by the state as the unitary actor, extrapolates to national security. In the recent years, matters of security have been discussed under the premises of environmental security and its status in the region. This is the case not only in Africa but on the globe as well.

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[73] http://www.ehs.unu.edu/article/read/human-mobility-in-the-horn-of-africa accessed 08/16/2013

[74]Sanders, Edmund. *'Changing Climate, Changing Lives - Fleeing Drought in the Horn of Africa'*, Los Angeles Times, 25 October 2009.

Climate change has been a core component of research and analysis in almost all aspects of investments in the world today for example technology, agriculture, science, education, arts and music. With this kind of attention in the social, economic and political areas of human existence, it is a subject that cannot be shelved in the 21st century seeing as the effects are transcending boarders, race, status quo and continents.

As noted by the Institute of Environmental Security, "Conflicts are no longer purely the result of different interest groups with competing claims to natural resources, or indeed conflicting opinions on the needs of the poor but rather a direct conflict between humanity and its own living space: the earth".[75] The misuse of natural resources is mainly the cause of these conflicts especially in the Horn of Africa are mainly because of Conflicts in the Horn of Africa exhibit similar characteristics: environmental degradation, competition for natural resources, economic underdevelopment and political oppression. These have been a major cause for most of the conflicts in the region and will escalate if something is not done to alleviate situations caused by climate change in the Horn of Africa.

The security implications of climate change are more than just being a subject of discussion and policy from governments and the international community. The subject has risen in attention and priority from both the international community with African leaders viewing the implications as injustice from the developed world and hence demanding for compensation. The rise of advocacy works within civil society in Africa towards climate justice as an indication of the North South debate in the subject of environmental security.

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[75] *What is Environmental Security*, www.envirosecurity.org/espa/PDF/ESA_HOA.pdf accessed 08/16/2013

The Horn of Africa has in the past 50 years experienced rapid changes in climatic conditions. Rise in temperatures, change in length and frequency of rainfall patterns. The impact of environmental fluctuations out of the norm is immense. From land degradation, droughts, deforestation and pollution. This has caused massive migration of wildlife, loss of biodiversity especially indigenous species, refugee influx and conflicts all of which have exacerbated the already precarious conditions in the region.

Arthur observes that "environmental security is comprised of two interconnected parts: environmental protection from wartime and similar abuse from medically unacceptable pollution and, in some instances, from any permanent human intrusion and sane resource utilization, with the renewable resources utilized sustainably and the non-renewable resources utilized efficiently and frugally".[76]

The inspiration behind environmental security is derived from the World Charter for Nature, which was and still is a reminder to humankind of how to treat the environment. That the exploitation of nature should not be in excess of their natural capability to regenerate. Environmental security in the Horn of Africa is a subject that is discussed as a subtopic to human security. This clear when considering the definition of human security.

Practically in the Horn of Africa, the situation of human security is to a very large extent a product of the situation of environmental insecurities in the region. Most of the extreme environmental conditions in the region as a result of biospheric nature coupled with human activities involving both the local and international community. Hence the alleviation of these conditions will require the willingness and coordinated efforts of the international community.

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[76]Auther H. Westing, Environmental security and its relation to Ethiopia and Sudan, *Environmental Security*.Vol20. No 5, (1991) pp168-171

"Climate change represents the latest in a series of environmental drivers of human conflict that have been identified in recent decades, following others including drought, desertification, land degradation, falling water supplies, deforestation, fisheries depletion and even the ozone depletion".[77]

Just as the effects of environmental insecurities to the world at large are devastating so it is in a region with minimal states policies towards resilience, adaptation and mitigation to the effects of climate change. Environmental insecurities in the Horn of Africa are attributed to two main factors just as the rest of the world. First is the global climatic change in the form of rising global temperatures, melting Iceland and increasing sea levels. Second are the human activities that have led to changes in land use and land cover.

The changing dynamics of environmental changes are in totality contributing to the exploitation of the environment in a way that exceeds the regeneration of these environmental resources. A combination of these two factors couples with an unprepared region that is struggling with a lot of developmental issues is a good recipe that is the security situation in the Horn of Africa. Human activity is no doubt the greatest contributor to the environmental situation in the Horn of Africa and it will take efforts from both the locals and the international community to alleviate the region from the implications of these environmental changes. The Horn of Africa is one of the regions in the world that is the most affected by the impacts of climate change.

African culture and resilience has most of the communities remain as traditionalists despite efforts of urbanization and globalization. Most of the communities in the Horn of Africa

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[77] T. Homer-Dixon, On the Threshold: environmental changes as causes of acute conflict, *International security* 16:2 1991 pp76-116

are said to be pastoralists. Even with the growing population against receding resources, most communities in the Horn of Africa still ascribe to practices of pastoralist and community land ownership which strains the resources available. Growing population and rapid increase of livestock with frequent droughts, flooding, overgrazing as well as shortages in quality pasture is a serious problem in the region that is leading to insecurities in the form of cattle rustling and inter-clan disputes and conflicts which in the recent past have escalated to violent conflicts.

According to Institute of Security Studies, Situation Report "it is believed pastoralists occupy 72% of the national land mass in Kenya, 75% in Somalia, 52% in Ethiopia and 66% in the two Sudan's."[78] Other factors that have contributed and continue to contribute are the declining standards of living with a reasonable percentage of people living in the region living below a dollar a day. Besides this, as mentioned above in line with African traditions and culture is the declining adherence to traditional conservation measures and more adherence to measures that would ensure the survival of the population at the expense of land resources.

3.3 Land politics and natural resource sharing

Land politics is a common phenomenon in the Horn of Africa and it threatens both the security and survival of states in the region. The question of land ownership in the Horn of Africa has been in existence since independence and has been a contributing factor in almost all the conflicts in the region. Land has not only brought about questions of ownership but of land use as well. Governments in Africa have increasingly engaged in the awarding of land concessions to both local and foreign investors at the expense of the traditional land rights of their citizens. Environmental degradation in the region is therefore exacerbated by the

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[78] Ahmed A et.al *Post-drought recovery strategies among the pastoral households of the Horn of Africa:* A review, Development Research report, Addis Ababa: OSSREA, 2002.

appropriation of communal land by the state. The quality of service on a corporate responsibility share cannot be compared to the environmental pollution to the community. Corruption among authorities in the region has ensured that these industrial investors go scot free even when they are operating against the law. Environmental degradation has caused detrimental socioeconomic problems in the region most notably famine and food security.

The United Nations Development Program (UNDP) Africa Human Development report focused on food security 'Towards a Food Secure Future'. According to this report of the sub Saharan Africa most cultivated land in the region is rain fed. A shift in the rain patterns as is anticipated to increase due to climate change then interferes with food security patterns in the region. Temperatures are rising by the day at a very rapid speed that if not reduced will be detrimental to the planet by 2050. "A hotter climate with less precipitation will be especially detrimental since higher temperatures will increase the loss of water to the atmosphere and further dry soils already punished by lower rainfall. If these changes come slowly, ecological systems could adapt. But current adaptation capacity is weak".[79]

Martin et al (eds) Climate Change 2007: *Impacts, adaptation and vulnerability. Contribution of working group 2,* Fourth Assessment Report of The Intergovernmental Panel on Climate Change ,Cambridge, UK and New York: Cambridge University Press

Figure 3: Food Security situation in the Horn of Africa
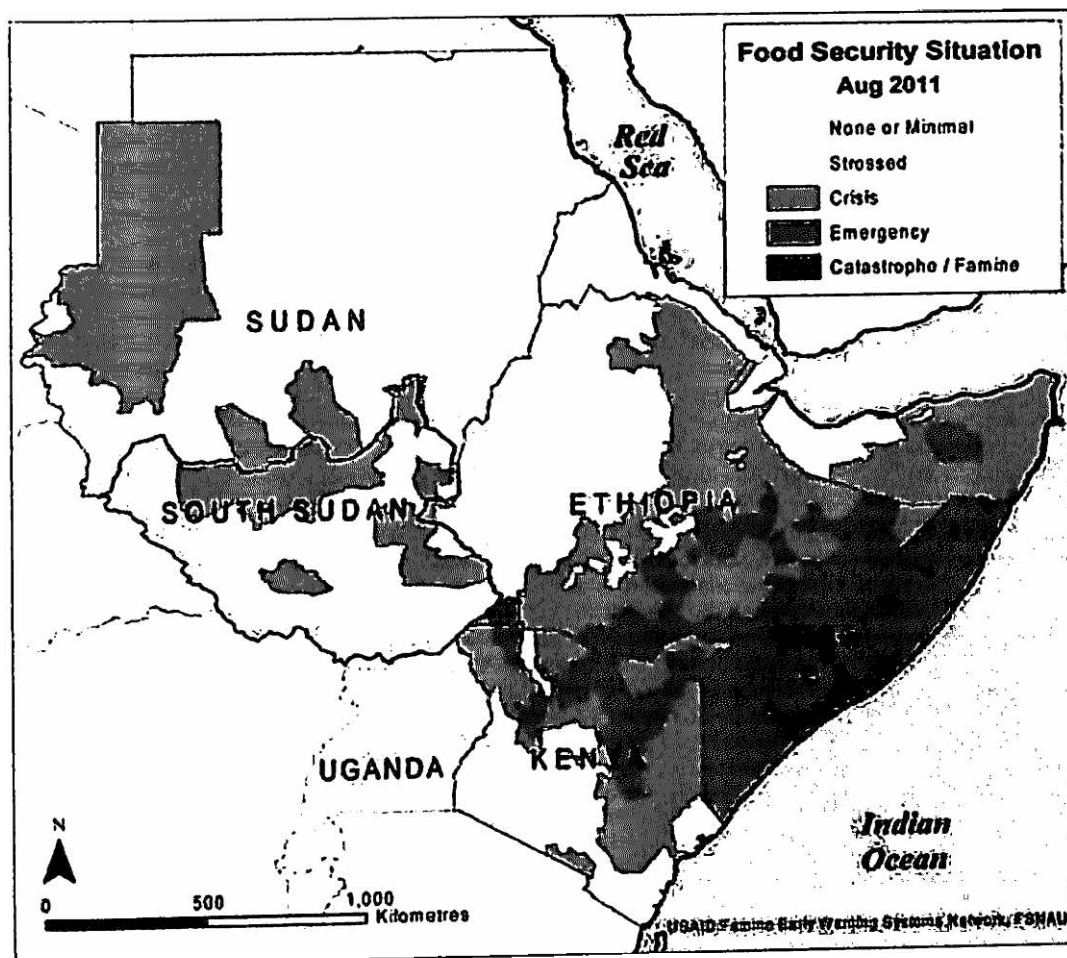
Source: USAID Early Warning Systems.

Shows the food security situation as of August 2011 in the Horn of Africa

3.4 Politics of environmental diplomacy

Another issue of concern in the Horn of Africa with regards to environmental security is environmental diplomacy. This is because it is the only political process that links the socioeconomic realities in the region to the political processes that allow for adoption of certain policies and frameworks geared towards addressing issues of climate change on a global basis. It is therefore important for the region to be part of the process seeing as climate change and

related issues are issues of a global nature. The United Nations Framework Convention on Climate Change (UNFCCC) process among other processes geared towards building resilience on climate change, environmental degradation and the impacts of these to the survival of states and populations therein.

The Horn of Africa has not been left behind in this political process and the region together with the African continent at large has been participating in the process as the African group. The Convention was adopted on 9 May 1992, and opened for signature a month later at the UN Conference on Environment and Development in Rio de Janeiro, Brazil. It entered into force on 21 March 1994, after receiving the requisite 50 ratifications. The adoption of this convention opened doors for negotiations on global issues on climate change and most importantly negotiations towards a universal environment regime.

Africa and specifically the Horn of Africa is represented in the process with all the eight countries in the Horn of Africa as members to the convention. Debate Climate change issues and the involvement of Africa became vibrant with the inception of the Kyoto protocol at the 3rd Conference of Parties in December 1997. The multilateral climate negotiations at the United Nations Framework Convention on Climate Change have been seen as a political market place where deals are lobbied from a willing buyer willing seller basis.

The state of national security in the Horn of Africa is a subject that has dominated discussion in the international community. With the different constructions of what Africa means to people not only outside the continent but within the continent itself there is bound to be different facts that prove these conceptions either right or wrong. What do states in this region consider of a matter of national security and what measures have been put in place to ensure they

are guarded and attained. The Horn of Africa is particularly a very strategic region for the connection of Africa to the rest of the world and vice versa. This makes the region of importance to the rest of the world for the access to opportunities in Africa and with its current state of security in the region it is important for the access to humanitarian aid from the rest of the world. This prompts the need to explore the circumstances within the state that contribute to this situation. The national interests of the state are to be pursued both within and outside the state dependent on the specific national security strategies. This allows for the securitized items of national security to be prioritized depending on the security needs in that particular country at the time.

Historically and traditionally national security of states has been equated to economic and military priorities in that country. That national security is about deterrence and self-defense from neighboring countries. This a concept that needs revision seeing as threats to the internal security of states are taking a toll on the overall security of states in the Horn of Africa and causing a lot of instability in countries in the region. Hence looking into the internal threats to state security will in the end contribute to the ultimate security of the region.

Bill MsSweeney argues that "it would be absurd to postulate a subject of security other than people...that is from the human need to protect human values that the term 'security' derives its meaning...and that a security policy derives its legitimacy and power to mobilize resources. In basic terms, security must make sense at the basic level of the individual human being for it to make sense at the international level".[80]

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[80] Bill McSweeney, *Security, Identity And Interests : A Sociology Of International Relations*(Cambridge: Cambridge University Press) pp. 33,16

With the current security situation in the Horn of Africa where the threat to security is often internal than it is external, it is only wise that the states concerned view themselves as a means to providing security for their people as opposed to as an end to security policies. This then should be the means to structuring and implementation of national security policies: That the ultimate goal of national security is not only to protect and ensure the survival of states but to also ensure the survival of people therein.

While at the time the Horn of Africa is depicted as an insecure region and a threat to the security of the world at large. It is also not resistant to globalization and the threats that come with the phenomenon. Terrorism is of major concern and threat to national security on the Horn of Africa and the rest of the world. This region is prone to such crimes among others like piracy and smuggling of illegal goods because the security systems in this region are either failed or weak in nature with a lot of loopholes that allow for the thriving of these crimes. Securitizing of these new issues into the national security strategy arising from globalization should be of major concern and priority for the countries in the Horn of Africa. Global disease pandemics like HIV/AIDS, polio, tuberculosis are also issues that need to be addresses from a security perspective especially with the implications it has had to the economy of these countries in the Horn of Africa.

Paul D. Williams argues that "given the complex ways in which HIV/AIDS impacts upon social, economic and political structures, and given its potential to wreak even greater levels of damage, a focus on the disease is justifiable. But it should remain only one part of a holistic perspective that attempts to overcome Africa's numerous health challenges".[81] The

[81] Paul D. Williams, *Thinking About Security In Africa*, International Affairs, Vol. 83, No. 6, Africa and Security (2007) pp 1021-1038

complexities brought about by the health situation in the Horn of Africa affect the socioeconomic life of the region. Prompting emergency relief activities as well as shifting in the economic burden and priorities in countries in the region to ensure the survival of affected populations.

Military wars and conflicts on the other hand have not spared the environment. According to the United Nations Environmental Program (UNEP) governing council report, it was noted that "military wars and conflicts do not respect environment limitations and imperatives. UNEPs post conflict assessment work has demonstrated that after a war, a costly and much needed process of restoring the environment".[82] Military activities carried out both legally by states and illegally by non-state actor armed militia in the region have been among the greatest in Africa. This has contributed in a massive way to insecurity in the region. Military policies and spending in the region have been given more priority compared to issues like food security which have been of greater danger to the existence of population in the region compared to the threat of external interference.

3.5 Natural resource based conflicts

Conflicts and wars in the Horn of Africa are fought over the access and use of natural resources and with the help of resources as well. The extent of environmental degradation caused by military activities is almost unquantifiable because the role of the military activities has nothing to do with conserving the environment as a priority. Hence the extent of destruction caused to the environment may not be an issue of evaluation even after the military activities end.

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[82] UNEP Governing Council Report, 2005

Lothar Brock argues that "since war activities are no longer confined to any particular confined to any particular battlefield but may spread over the entire territory of the adversaries, they also may cause increasing environmental destruction parallel to their growing impact on the civilian population".[83] The military equipment popular in use especially in the 21st century is not environmentally friendly. The cost and possibility of looking into more environmental friendly assault weapons and the quest to even do that does not have a lot of political will to do because of its economic implications to states. Besides the destruction of the environment in battlefields and surrounding areas, it may be argued that the destruction is inevitable and unplanned for but others argue that the opposite is also possible.

Principles of military aggression require that aggression be invoked at whatever costs. Hence decisions to do with what activities are made based on the level of aggression required to win the war and the caliber of war that is being fought as well as what is to be gained by winning the war. In such situations the military then plays a crucial role in the decision-making on the use of natural resources both during active war and in the planning and strategizing stages of the same. It can therefore be argued that if the implications of war to the environment are not only confined to the battlefield but massively also to areas that are surrounding physical areas, then international pressure to avoid wars should mount for ecological reasons but that is not the case seeing as state operations are carried out in a realist view and hence the rise of the debate on environmental politics to slowly creep into high politics is a phenomenon that is unacceptable in the world today. This then allows for the military to alter the environment as a means of warfare because of the role of the environment in human existence. In the Horn of Africa the already

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[83] Lothar Brock, Security through defending the environment: An illusion? In *New Agendas For Peace Research* ed Elise Boulding, (1992), UK, Publishers: Lynne Rienner pp. 84

precarious conditions are being exacerbated by military activities in the region both to restore stability in the region and to destabilize the region.

Okumu et al on discussing the status of Armed Non-State Actor Groups (ANSG) in Africa notes that "ANSG activities are rooted in the crisis of resource management and distribution, and especially the issues of who owns, controls and benefits from the economy of natural resources. Particularly, grievances and rebellion are fermented in the struggles for access to resources by diverse claimants".[84] The policies on the exploitation and use of natural resources in the Horn of Africa have not been implemented to the latter in a manner that will allow for the utilization of resources in a conservative manner. Such loopholes as poor policies and institutions to guard the exploitation of natural resources coupled with poor governance and corruption have opened the gates for the overexploitation of resources in the Horn of Africa and hence the current situation where the fight over resources has been and is being fought by military means.

The struggle for resources that are supposed to be guarded by the state are now being advanced by these groups. Policies on exploitation of the same resources have net been well laid down allowing for uneven and often uncontrolled exploitation of these resources leading to degradation of the environment. "In most of the regions in Africa, rebels, militias, renegade soldiers and intervening countries have exploited and traded in minerals through mining operations, extortion, taxes and sharing schemes with miners and traders. A combination of forces, which includes transnational companies, international black market and underground syndicates, states in the region and even host governments, supports and sustains regimes and

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[84] Wafula O et.al, *Introduction: towards conceptualization and understanding of the threats of armed non-state groups to human security and the state in Africa in Human Insecurity and State Crises in Africa*, Institute of Security Studies, 2010

accordingly conflicts in resource plunder and trading in Africa's resource rich regions".[85] This then complicates the natural resource based conflicts even more seeing as the parties to the conflict come with different dynamics to the conflict and with different goals as well. This is the scenario for most of the natural resource based conflicts in the Horn of Africa.

3.6 Conclusion

Environmental issues in the Horn of Africa are affecting a larger part of the world as could have been imagined. Efforts to resolve problems of droughts, famines, floods and rising temperatures requires political, economic and diplomatic efforts of the region as a whole. It is a question of how the region adapts to the rapidly changing weather patterns and climatic conditions. This kind of cooperation will be of great benefit to the security of the region. "Reidulf Molvaer describes environmental cooperation among the nations of the Horn of Africa as a confidence-building measure.

A firm belief that environmental cooperation could set the stage for greater dialogue amongst the nations of the Horn, possibly leading to increased political and diplomatic contacts".[86]This kind of cooperation is evident in the East African Community (EAC)would ensure that issues unique to the Horn of Africa concerning the environment are negotiated for at global engagements for example the United Nations Framework Convention on Climate Change. The East African Community Protocol and on Environment and Natural Resources Management gears towards the attainment of sustainable development through efficient and effective management of the environment and natural resources.

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[85] ibid

[86] Reidulf K. Molvaer, *Environmental Cooperation in the Horn of Africa*: A UNEP Perspective, Bulletin of Peace Proposals 21(2) (1990): pp. 135-142

This would also ensure that there is accountability in the exploitation of resources in the region and most importantly such kind of cooperation would ensure that the use of shared natural resources for example water and pasture are done so in a controlled manner to preserve and conserve for future generations. This will not only be beneficial to the environment and ecosystem but to the peace and security situation in the region. Conflicts related to climate change and natural resources can be made easier to resolve when there is cooperation from all the regional members of the region and more especially those who in one way or another gain from the resources in question.

Hence, besides traditional aspects of national security these states should address to a larger extent issues of human security in the region seeing as issues within human security are of the greatest threat to national security. Food security is a great threat to individual survival and security. The influx of population movement or refugee migration to areas that have basic survival commodities for survival for example water and pasture which causes conflict between citizens and refugees as both compete for already constrained resources which is some cases usually escalates to violent conflict.

Finally, the role of regional groups such as the EAC and IGAD, in the Horn of Africa cannot be underestimated in the security of the region. The interdependence of the region in tackling and adapting to implications of climate change and environmental degradation is inevitable and important seeing as individual countries in the region have a low capacity to adapt to climate change. Security in the Horn of Africa is dependent not only on state survival but the survival of the population therein that ensures that the state is secure from both internal and external threats to national security.

CHAPTER FOUR

Environmental security and national security: A critical analysis of emerging issues in the Horn of Africa

4.1 Introduction

Environmental security and national security are no doubt subjects of the greater security of the Horn of Africa as a region. Environmental security in the Horn of Africa is a key component in the attainment of national security in the region. Although traditionally national security has been considered as a means of the survival of the state, the concept seems to be losing some of its tenets in regions of the world such as the Horn of Africa. Survival of the state and the guarding of its interests against external interference are under threat from internal interferences. These internal interferences are mainly of a human security nature that involves the survival of the population therein.

Richard Matthew notes that "when one broadens the concept of security to encompass non-military forms of threat and vulnerability that have a significant impact on the extent to which people are free from danger, fear, want and deprivation, the significance of the 'state' as the unit of analysis diminishes in some contexts."[87] This is so because this has made the emergence of transnational and subnational non-state actors. The effects of environmental insecurity in the Horn have contributed with other factors in creating a humanitarian crisis in the region.

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[87] Richard Matthew et al, *Report on Global Environmental Change and Human Security: Conceptual and Theoretical Issues,* Global Environmental Change And Human Security Program Office, University of California: Irvine

This explains the number of non-state actors in the region and their role in easing the crisis as well as contributing to insecurity in the region. Responding to the impacts of climate change requires long-term engagements, fifty (50) years is the earliest that results of actions taken today can be visible, and it is likely that it would take (100-200) years for the world's population to notice the reversal of the negative impacts of climate change.

The population in countries in the Horn of Africa is rapidly growing at a rate that is faster than the speed at which explorable natural resources are regenerating. This then has created a scenario where the growing population is competing for the diminishing and already degraded environment and resources to survive. On the other hand, climate change, global warming and other global environmental phenomena are complicating the already precarious conditions of survival of both the state and the population therein.

Environmental degradation is a major contributor to the violent conflicts in the Horn of Africa. In Somalia for example there are people from same religion, ethnic groups and even speak the same language but they are divided into clans and sub-clans tracing their roots from different ancestors. This gives room for fighting over natural resources especially water and pasture because most of these communities are pastoralists. "Repeated droughts, soil erosion, desertification, and deforestation brought about by climate change and natural disasters compel large groups to move from one area to another, which in turn, increases pressure on scarce resources, and provokes strong reaction from local populations.

It is the issue of insecurity brought about by the prospect of exclusion from resources, or the perceived threat of starvation, that ignites most violent conflicts".[88] There needs to be a collaborative effort in the Horn of Africa to ensure security that does not only entail the conventional military means but from a more human security approach. Conventional military means is only a temporary solution to the security of the Horn of Africa. There needs to be a more comprehensive way of stabilizing the region.

Natural resources in the Horn of Africa are the main source of livelihood for the greatest percentage of the population. All the economies in the Horn of Africa depend on these natural resources for survival. Wildlife, land, minerals, water masses, lakes, rivers and other natural physical environmental features. For the Horn of Africa, environmental security is important in national security because it provides the fabric of interaction between natural resources, social fabric and the economic structures in the region. The role that it plays in the security of the region cannot therefore be undermined.

4.2 Internal security of states

The Horn of Africa as a region mainly administers its political and economic will power through The Inter-Governmental Agency on Development. IGAD is the multilateral platform where the Horn of Africa raises its complaints and addresses inter-boundary issues of development. Environmental security has been a key subject of engagement in this high leveled governmental agency. IGADs response to natural disasters that are related to climate change for example, droughts, famines, and flooding cannot be ignored either.

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[88] Mohamed Sahnoun, Algeria. *Degradation of the environment as the cause of violent conflict*, a thematic essay which speaks to principle 16 on using the Earth Charter to resolve the root causes of violent conflict in Africa.

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Although IGAD has in the recent past had its share of media outrage concerning its slow response to disasters in the region but it still remains the main platform of diplomatic engagement in the region both bilateral relations and multilateral relations. The role that the organization plays in the region in terms of addressing environmental security issues is immense with its various policies towards development in the region.

Makumi Mwagiru proposes a fourth leg in addition to the three legged traditional Africa stool analogy of the arms of national security. He argues that the internal security situation within a country contributes to the state of national security in that country. National security should therefore be able to capture the realities of a specific region in context. "Contemporary security studies examine the specific security realities of the third world, which exist in a different security environment from the traditional, western one."[89] The role of national security strategies in the Horn of Africa should therefore address the various security challenges in the region that are only specific to the region.

National security strategies should be able to not only ensure state survival and guard national interests outside its borders but should also be able to guard the survival of the state from internal threats. Internal security threats in the Horn of Africa are to a higher degree out of natural resource based conflicts in the region. Inter-clan conflicts are mostly due to shared natural resources especially land, water and pasture. The livelihood of the population in the Horn of Africa is out of these natural resources.

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[89] Mwagiru M., Coordination of National Security Strategy: Perspectives on Grand Strategy Formulation in Kenya, *Opcit.*

4.3 Natural resource sharing

The sharing of these resources as was noted earlier especially by the governments in the region is also biased to the majority ethnic groups hence increasing the tension further. The insecurity dilemma in the Horn of Africa is complex and is usually dealt with on a temporary basis. Job reiterates that "the notion of an insecurity dilemma is defined by the need for these states to address internal rather than external threats, and by the fact that, given the weakness of their states, their citizens are also preoccupied by the need to protect themselves from their states and institutions."[90]

This complex security nexus in the Horn of Africa is one that is a concrete mixture of issues that are environmental in origin from environmental degradation, natural resources, climate change and global warming and their effects. These effects however are more than often contested in the platforms of ethnic tension, economic grievances, natural disasters, politics and human rights. This then makes the security situation in individual countries in the Horn of Africa difficult to understand. Therefore, this leads to intervention to stop conflicts as the solution to the insecurity in the region. The political and economic will power in the Horn between the various actors in the region is also missing hence efforts to delve into the core grievances are minimal and sometimes not even there.

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[90] Job L., The Insecurity Dilemma; National, Regime and State Securities, *Opcit.*

Figure 4: Relationship of Factors that Contribute to Environmental Security
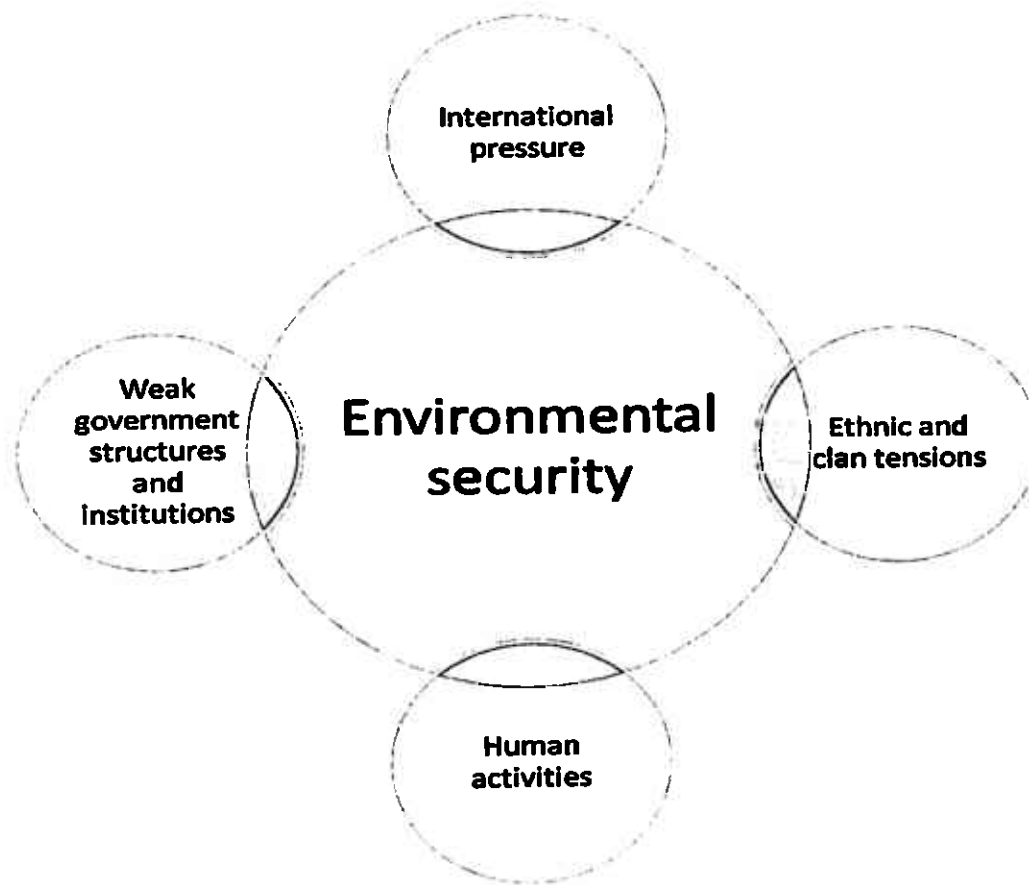
Illustrative diagram showing the relationship of factors that contribute to environmental security.

Figure 4 above indicates the relationships that make security in the Horn of Africa complicated and explains the relationship in this complexity. At the core of the complexity and the aspect that plays a major role in the security of the region is environmental security. It does not however act on its own. Environmental security plays a major role in National Security especially with the level of human activity. William notes "wherever man appears with his tools, deformity follows his steps. His spade and his plough, his hedge and his furrow, making shocking encroachments on the simplicity and elegance of landscape".[91] .Its effects and

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[91] McCormick, J. *Reclaiming Paradise :The Global Environmental Movement,* (1989) ,Bloomington and Indianapolis: Indiana University Press.

implications are made precarious by other factors that include among others weak government structures. Government structures in Africa have been accused of massive corruption deals that have led to inefficient implementation of policies, among them policies that ensure environmental stability and protection. This has often lead to unequal distribution of natural resources and thereby leading to conflicts among communities. Environmental security is very dependent on proper policies and effective government structures that are able effectively implement them.

Ethnic and clan tensions are one among the factors that are related to environmental security. Activities that are often related to ethnic and clan tensions are the neglect of the environment when degraded, since human security is more of a priority then. Human activities such as overgrazing in the pastoral communities, deforestation to create land for settlement in the urban setting; are among the activities that threat environmental security.

Proper utilization of these natural resources is vital in its sustainability and posterity for future generations' survival. International pressure in terms of the processes of international environmental law to govern climate change implications and the environment have also played a key role to facilitate the state of environmental security in the Horn of Africa. "The international politics of the environment is concerned with the process by which interstate agreements on the environment are negotiated; with the rules and regimes established to facilitate environmental co-operation; with the international institutions that have been, or need to be, created to implement those rules; and with the conflicting political forces on whose

resolution any successful regional or global environment initiatives must depend."[92] Aspects of the UNFCCC pro climate change adaptation and mitigation, technology transfer, capacity building, climate finance and carbon trading, offer a framework for addressing issues on climate change in the Horn of Africa. The relationship is one of interdependence but the existence of environmental security secures the other externalities. Environmental security in this context is a key phenomenon in the national security and environmental security.

Environmental threats to national security in the Horn of Africa are best manifested in the Nile River and the countries concerned. Egypt, Ethiopia and Sudan are among the most water stressed countries in the world. Earlier in the history of the Nile Waters, Ethiopia and Sudan were the first two countries to confront Egypt over the use of water in the River Nile. Egypt however strongly objected to the agreement for the two countries to extract water from the Nile to meet their water needs. Egypt uses these waters to almost solely to support irrigation schemes for agriculture; a sector that massively contributes to the economy of Egypt.

The main fear for Egypt was that this move would adversely affect the downstream flow of water into Egypt. However, the rapid population growth and the increasing water demand for agriculture, coupled by the risk for conflict that includes military clashes among the countries affected will even be greater with the changing weather patterns. Ho-Won Jeong argues that environmental security has become critical in recent years, particularly fundamental has been addressing ecological degradation and natural resource scarcity. "That environmental degradation needs to be considered in a more interactive concept of global security.

[92]Kingsbury, A. H. *The International Politics of the Environment: An Introduction,* (1992), New York: Oxford University Press.

Environmental security has become a common security issue due to the recognition that the environment provides the fundamental life support system."[93]

4.5 The role of regionalism in addressing environmental issues

The commonality of environmental issues in the Horn of Africa is a call for the region to address issues of environmental security as a region with a common end for the management of resources. Issues of security in the Horn of Africa should be addressed in the context of their environment. In examining the extent to which environmental security is an important factor in attaining national security in the Horn of Africa, The redefinition of security in the region is eminent with concerns of lack of prioritization and research on security lacking in the security institutions in the Horn of Africa.

The definition of environmental security as is evident in the responses from different practitioners and researchers on environmental issues and security is closely linked with the coexistence between humans and the environment and the containment of threats that could interfere with the relationship between humans and the environment. It is clear however that environmental security is currently not a concept but a debate. It exists behind the acceptance by traditional security experts. It is an ideological debate among the experts who provide frameworks that are to be implemented by security practitioners in the Horn of Africa. This however gives room for disconnect between the ideologies and recommendations and the realities on the ground. This then gives pressure over exhibiting security results that are positive in nature in an anarchic atmosphere both at the local level and internationally.

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[93] Ho-Won Jeong,(2000) *Peace and conflict studies: An Introduction*, Aldershot, pp95-105

Different actors however play different roles in complicating further the security nexus in the region. the rich natural resource 'banks' that are of high demand globally and the strategic position of the region to the rest of the world; make the region susceptible to a huge and diverse number of both local and international actors with different interests and hence complicating the nexus even deeper.

The definition of environmental security in the Horn of Africa is therefore important to the analysis to the role that it plays in the attainment of national security. Environmental security can therefore be defined as the status of the coexistence between humans and the environment and the containment of threats to the coexistence of humans and the environment.

National security on the other hand has traditionally been considered within the context of state survival. The case is not different therefore in the Horn of Africa since we are still dealing with the survival of the state. The traditional precepts of national security are however a challenge to the practicality of the same in the region. This is because the Horn of Africa region exists around the realities of poverty, crime, ethnic tensions, religious fanatism and poor governance. "The notion of redefining security therefore comes under scrutiny because of the link that the environment holds with security. In this case, environmental security, a relatively new and still somewhat contentious concept, may be defined as the intersection of environmental and national security considerations at a national policy level".[94]

The research reveals a not so far away practical definition of national security within the context of the Horn of Africa. The argument is that national security within the context of the Horn of Africa is contested on the grounds of good neighborliness and an absence of military

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[94] B.R. Allenby Environmental Security: Concept and Implementation, *International Political Science,* Opcit

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engagement with other parties. This however lies within a background of a region that historically is known for rampant conflicts and political instability. This would explain the threat that bad neighborliness and the proliferation of arms in the region for the protection of natural resources by individuals.

Weak states and the chronic weakness of state institutions is the other status quo in the Horn of Africa that is a threat to national security both as primarily internal threats and external from neighboring countries. These are structural problems in nature which provide loopholes for the embezzlement of natural resources and hence the proliferation of ethnic hostilities and hence leading to violent conflicts over resources meant to be utilized nationally and are now locally individualized. With this, the practical yet alarming definition of national security among security and environment practitioners and experts is the protection of the state against external military intervention and the maintenance of good relations with neighboring countries. Logaard notes "the concept of environmental security challenges established frames of mind and political conduct. It conveys the message that environmental problems have a legitimate claim for status at the level of 'high politics', just as much as military problems have".[95]

This however is not a great deviation from the traditional notion of national security where the precepts are the advancement of national interests and the maintenance of state survival.

4.6 Linkages in environmental security and national security in the Horn of Africa

The key element of national security in the Horn of Africa and to the rest of the states in the world is the economy. Therefore going by the contribution by various sectors to the GDP of

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[95] Lodgaard, *Environmental Conflict Resolution*, 17, Opcit

countries in the Horn of Africa is natural resource based in the form of fossil fuels, wildlife and ecosystems, lakes, beaches, indigenous species and culture. These through tourism contribute massively to the economies in this region. The extent to which environmental security is an important factor in the attainment of national security is debatable. Ensuring the peace and security of the population in the Horn of Africa is no doubt a key element to the successful attainment of national security. The existence of a peaceful and harmonious environment and relationship between the state and the population is the key ingredient.

Environmental security as practically defined in the Horn of Africa in this research ensures the perfect environment for national security to be pursued. Without this coexistence between humans and the environment the ecosystem is disrupted. The ecosystem is not the only disruption caused by the disruption of the relationship between environment and humans. The social structure, economic structure, political structure and cultural structures are also disrupted. Both environmental security and national security exist in different paradigms of the international system and international relations. However within the context of the Horn of Africa, national security and environmental security are interdependent.

The attainment of them in isolation is therefore depends on the status of the other within the context of the Horn. On the question of how issues in the environmental security debate shape national security policies in the Horn of Africa. There are four main issues as exhibited in this research that molds the environmental security debate: climate change and global warming, environmental degradation, environmental diplomacy and sustainable development. These issues within the context of the Horn of Africa play a key role in the implementation of national security policies. Climate change and global warming is probably the issue that has produced the

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worst effects on the Horn of Africa. The changing weather patterns that is affecting the crop seasons in the region are diminishing the production of food in the region.

This alongside rising temperatures and changing rainfall patterns have highly contributed to the soaring food insecurity in the region that has in turn contributed to massive migrations of climate refugees in the region. This creates pressure on the countries that take them in with already scarce or diminishing resources to support new population. This interferes with the economy of the countries that are taking in climate refugees running away from drought and famine as well as looking for pasture and water for their pasture.

Environmental degradation on the other hand in the Horn of Africa is experienced in two main ways. There is environmental degradation that is driven by human activity and environmental degradation that is caused by the effects of climate change. Most of the human activity in the Horn of Africa that is of concern to natural resources are mainly for economic benefit. This in the region is a major question of contestation.

Resource exploitation is highly individualized hence the profits from their exploitation do not or scarcely benefit the common citizenry. This creates a bond of rivalry considering the Horn of Africa is clustered into ethnic groupings. According to Ahmed et. al, "it is believed pastoralists occupy 72% of the national land mass in Kenya, 75% in Somalia, 52% in Ethiopia and 66% in the two Sudan's."[96] Pastoral land has been exhausted out of overgrowing and poor or lack of policies on land and land use across the Horn of Africa. It is human activities such as these that overwhelmingly contribute to degradation. Natural resources in the Horn of Africa are key to the attainment of the economy as a key arm of the national security strategy. It may be

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[96] Ahmed A, *Post-drought recovery strategies among the pastoral households of the Horn of Africa: A review, Development Research Report*, (2002) Addis-Ababa: OSSREA.

argued also that environmental security debate is taking precedence in the Horn of Africa over issues of national security. While practitioners within the region have been forced to make such conclusions especially because of the humanitarian crisis in the Horn of Africa and the realities that they meet on a daily basis while on their job.

Environmental security cannot however be concluded as the solely the main contributor to the security nexus that makes up the Horn of Africa. National security also plays a key role especially in the individual countries. It cannot therefore be ignored that states are unitary actors and they act in pursuance of their state interests. This provides a different complexity to the already weak security system in the Horn. However, it should be noted from the survey that both national security and environmental security act in interdependence to produce the current state of security affairs in the Horn of Africa.

The issues in environmental security therefore contribute substantially to the manner in which national security policies are executed in the Horn of Africa. This is because they are responsible in creating the environment to the thriving of such policies and therefore their state determines how much is attained and how it is attained. There may be a need to change particular strategies on the ground because of the humanitarian situation created out of natural disasters for example.

In the question on whether emphasizing or highlighting issues of environmental security in the national security strategies and policies is important, it is evident that there are varied responses. In the survey people were asked to rank the importance of emphasizing environmental issues in the security policies in the Horn of Africa.

The scale of reference was 1 to 5 with 1 denoting very important and 5 denoting least important. 40% of the respondents ranked environmental issues as important in the security policies in the region. This would explain the reason why many conflicts in the Horn of Africa are born out of the struggle to access resources that are scarce with a rapidly growing population. Of the 40% who responded in this manner 80% of these respondents were practitioners in implementation of land policies in the Horn of Africa. 20% of the respondents ranked the importance of emphasizing at number 2 on the scale, 15% ranked at number 3, 20% at number 4 and 5% at number 5. This then alludes that the importance of emphasizing environmental issues in security policies in the Horn of Africa cannot be ignored.

It is clear that environmental issues should be emphasized in national security policies. The importance of this may vary but it is clear that environmental issues are important in policy making. However, this may not mean that environmental issues take precedence over what is securitized as a matter of national security. It only means that emphasizing environmental issues provides a better breeding ground for the pursuance of national security in the Horn of Africa.

In rating the influence of environmental degradation in the conflicts in the Horn of Africa, most of the respondents rated environmental degradation as a core element in fueling of conflicts in the Horn of Africa. Environmental degradation was particularly chosen as a variable in these ratings because among all the issues in the environmental security debate discussed in this study, the greatest prominence is given to environmental degradation as the element that is fueling the insecurities in the Horn of Africa. This may be said to be true considering the rate at which the population in the Horn of Africa is increasing which is at its highest since the 1950s. Competition for the already diminished or scarce resources is very high.

On the other hand policies on natural resource use are weak allowing for corruption and overexploitation. Denise Garcia reiterates that "The impact of climate change can exacerbate conflicts and entanglement over non-renewable resources such as oil and gas and especially water. It can also affect other trends that can diminish human security in the twenty first century, such as rising sea levels and migration, internal population displacement, loss of territory, crop failure, and many other unforeseen but drastic weather events that may dramatically reduce human security in many regions of the world."[97]

The respondents were asked to rank the influence of environmental degradation in the conflicts in the Horn of Africa on a scale of 1 to 5 with 1 denoting very important and 5 denoting least important. 35% of the respondents ranked the influence as very important with 29% ranking it at number 2 on the scale. 18% ranked at number 3, 12% at number 2 and 6% at 1. Of the 35% and 29% ranking the influence at number 1 and 2 respectively, more than 60% of the respondents were practitioners in the field of security and land policy. This then alludes that policies on the use of natural resources and security should complement each other to avert the frequency of natural resource based conflicts in the Horn of Africa. It should however be noted however that environmental degradation does not act solely in this but it is the core contributor to the conflicts in the Horn of Africa.

On the question of the influence of international environmental diplomacy processes to the national security policies in the Horn of Africa, the respondents gave very variant and closely related responses. The respondents were asked to rank the influence of environmental diplomacy processes on national security policies. The scale was from 1 to 5 with one alluding to least

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[97] Denise Garcia, Warming to the redefinition of international security: the consolidation of a norm concerning climate change, *International Relations*, Vol 24, No 3, 2010, pp.271-292

influence and 5 alluding to most imfluence.11% of the respondents rated the influence at 1, 28% at 2, 22% at 3, 22% at 4 and 17% at 5. The question of environmental diplomacy may not be considered from a traditional security point of view as important to national security. The responses from the survey indicate that the processes of environmental diplomacy influence national policies. These responses however allude an average influence of environmental diplomacy processes on national security policies in the region. This is because environmental diplomacy at its highest level is practiced by heads of state. Environmental diplomacy processes for example the United Nations Framework Convention on Climate Change processes are political processes. They are highly politicized based on national interests of individual countries and other non-state actor.

4.7 Conclusion

The emerging issues in the security of the Horn of Africa with reference to environmental security and national security are not exhaustive. It is important to note that some of them discussed are causative while others are reactionary/ Land politics and natural resource use are mainly of particular prominence in the Horn of Africa. This is mainly because over 50% of the population in the Horn of Africa are subsistence farmers and pastoralist whose main dependency is on land, water and pasture. Availability of these resources has however diminished hence creating a nexus of competition.

A critical analysis of the study in the Horn of Africa reveals a complex interrelationship between issues in environmental security and their threats to national security in states in this region. This complex security nexus however needs objectivity to study it and policy making that will reflect the various characteristics of the region. Environmental security and national security in the Horn of Africa are concepts that are intertwined and in some cases have overriding

functions. There needs to be a reexamination of policies that address issues of environmental security and those of national security to allow for efficiency in tackling security issues in the Horn of Africa.

CHAPTER FIVE

Conclusion and Recommendations

5.1 Summary

There are mainly four issues in the environmental security debate discussed that are a threat to national security in the Horn of Africa. Environmental degradation, climate change and global warming, the inefficiencies that restrict the attainment of sustainable development, and poor engagement in the environmental diplomacy processes in international relations. The Horn of Africa is highly dependent on the environment and especially natural resources in the survival of the states and the population there in. This therefore alludes to the importance of emphasizing the conservation and management of natural resources and the environment at large to ensure the security of the region.

Environmental security plays an important role in the attaining of national security in the Horn of Africa. This as was observed earlier is because issues in the environmental security debate are a clear threat to security in the Horn of Africa. They are redefining the dynamics of security in the region seeing as threats to security in the region are not majorly from external entities but from internal entities within the countries and the state of the environment versus the population that depend from it for their survival.

Based on the broad definition of security that recognizes the importance of political, economic, social and environmental factors, more comprehensive notions of security are developing increasing the trend towards recognizing the importance of human security and environmental security issues. The security dimension of climate change is therefore compelling the emergence of environmental security as a critical concept of international security.

5.2 Key Findings

The challenges that come with the internationalization of conflicts make the conflicts more complex with the addition of international actors both state and non-state. These are the complexities of conflicts in the Horn of Africa. With the threat to state security coming from internal threats than from external threats then this situation calls for states in the Horn of Africa reexamining their national security strategies and national interests to accommodate the current and emerging threats within the states instead of clinging to the traditional notions of national security.

The realities in these states outdo the ideal notion of national security that is based on the Westphalia state system provision. These realities that make up the three arms of national security namely economy, military, and diplomacy and for years since the institution of states this has been the back bone of ensuring state survival. Mwagiru notes that, internal state security especially in states across Africa is more threat to the state survival than external interference. However, "apart from the change in trends towards intrastate conflicts, more comprehensive notions of security are developing, for there is an increasing trend towards recognizing the importance of human security and environmental security issues. Human security implies protecting vital freedoms."[98]

Currently with the concept of sustainable development and the emerging trends in globalization, the magnitude and nature of threats and challenges of climate change are redefining the understanding and definition of international security because the environment is a global common. As noted earlier, climate change acts as threat multiplier making existing

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[98] Report of the Commission on Human Security, presented to the UN Secretary General Kofi Annan, 1 May 2003.

concerns such as water scarcity and food insecurity more rampant. This aggravates the already precarious living conditions especially in low lying countries and also has led to the escalation of diseases such as an increased risk of malaria, cholera, typhoid and other diseases hence presenting a burden on poor countries.

The inability to pursue wealth due to the above precarious conditions among citizens will lead to instability and failed states which will in turn be breeding grounds for conflicts over resource and power to control the scarce resources left. These coupled with other social-economic factors escalates conflicts and entanglement over nonrenewable resources such as oil, gas, and now access to water, land and pasture in the Horn of Africa.

Therefore, international security in the recent past has been debated on the line of environmental security and human security, where the new thinking and ideology is challenging the notion of national security by arguing that the proper referent of security should be in relation to the individual rather than the state. Makumi Mwagiru notes the traditional notion of security was seen as closely related to the threat or use of violence, and as such military means was regarded as central to the provision of security."[99]

The thought held is that global security is a large perspective of human security, where human security is best described on a holistic perspective as is fronted by the United Nations Development Program as including economic, social, health, environmental, personal, community and political security. Abbot argues that "beyond economic power, superior military intelligence and artillery is highly regarded to and often pursued by states. The endeavor has drawn the attention of great powers where they feel threatened and use all means, diplomatic and

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[99] Michael Renner, State of the World 2005: Redefining security, in Makumi Mwagiru and O. Oculi (eds), Rethinking Global Security: An African Perspective? Nairobi 2006, pp1-11

otherwise to allay their fears by ensuring that transparency is achieved in auditing military systems that are in pursuit of nuclear power."[100] This comes especially with the role of the military in environmental security.

The role of the military as earlier noted cannot be underestimated. It runs from the equipment used in war time and the implications of the outcomes to the environment. There is also the decision making processes that the military is engaged in while in the battlefield and in the planning and strategizing stages of war. With the traditional notions of security that states still ascribe to it may be an uphill task to change their military strategies and artillery in the name of conserving the environment. However there can be a lot of concessions made only with political and economic willpower of leaders of the state.

The call to the use of renewable resources for military purposes is a tall order on these states especially considering their military and political rivals who are in competition with across the world. "The claims by states in question have centered on environmental conservancy through reduction on reliance on non-renewable resources to nuclear power as the ultimate substitute. This has often been seen as a struggle between the East and the West."[101]The struggle in countries not necessarily East and West but states in general in the balance of power. The contest is overall about the maintenance and proliferation of power over others that ensures their survival in an anarchic system.

The ability to get another actor to do what it would not otherwise have done. It is believed that states are as powerful as to the extent to which they affect others as opposed to how

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[100] C. Abbot, Global responses to global threats(United Kingdom: Oxford Research group, 2006)

[101] A. Acharya, Human security: East versus West, International Journal, 442-460 (2001)

others control them. The state centric notion of security is however changing with the contexts and the changing nature of state behavior towards each other. The world is changing with issues for example globalization has made issues to have a global nature. The threat to security in the Horn of Africa as mentioned earlier is not from interstate conflicts but from intra state conflicts that are internationalized through media, and the fact that these conflicts are producing refugees in countries across the Horn of Africa.

5.3 Recommendations

The next phase of international negotiations on an environmental regime are very critical for the restoration of the environmental security situation in the Horn of Africa. This requires the commitment of not only countries in the Horn of Africa to engage critically in the process but also to the world on seeing the critical situation that needs restoration that can partly be provided for by the environmental regime. It will require a lot of contextualization on the part of the negotiators from the Horn of Africa to also realize a solid environmental legal framework that will be of benefit to the region at large. The concerted efforts of all these countries and their negotiators require cooperation and consensus from within themselves. There should be a regional strategy that feeds into the broader African position at the negotiations. Technical and political assistance on the cooperation to help with the development of the region is required from IGAD.

Joseph Aldy argues that our main aim in the next phase of climate negotiations must be an international strategy that will take humanity substantially further towards a restored climate."[102]In the Horn of Africa there needs to be a concerted effort by the countries concerned

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[102] Joseph E et. al,(2007), *Addressing Global climate change in the Post Kyoto world*, New York: Cambridge University Press, pp 260

to be able to address issues of environmental security jointly. Seeing as issues of environmental security are a global common it will therefore require the efforts of all the actors in the international system. The current environmental diplomacy processes should be able to usher in a new dispensation of a legal framework on environmental issues in the world. With respect to this the Horn of Africa needs to clearly state the strategy that the region needs to adopt and front it in the international negotiations.

Daniel Esty argues that "rather than refocusing the global response to climate change around a series of new protocols, with added emphasis on geoengineering, he argues for a 'Beyond Kyoto' approach that would restructure the current regime of international cooperation with an aim of creating a more comprehensive, effective and efficient international policy architecture. In this regard the model provided by the most successful global environment policy structure, the Montreal protocol and its affiliated agreements, deserves renewed attention."[103]

Another recommendation to help tackle the security issues in the Horn of Africa is that the region needs to put in place frameworks to monitor and address tension and natural resource based conflicts. Addressing issues like scarcity and policies for especially the institutions that are in charge of protecting and the exploitation of natural resources for economic gain. There needs to be an interest group strategy especially due to the diverse number of actors operating within the Horn of Africa with different self-interests. Media framing is very important in the Horn of Africa. The media needs to portray the realities of the region in stories of hope.

The portrayal of the Horn of Africa to the rest of the world especially international media gives the region 'the CNN effect'. The place of natural resource based conflicts in the Horn of

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[103] Daniel C. Esty, *Beyond Kyoto: Learning from the Montreal Protocol, Opcit*

Africa usually take a political turn. The role of IGAD in this case is very key seeing as it is a governmental regional grouping that is capable of addressing the issues from a governance perspective hence it easier to affect policy in the Horn of Africa through IGAD than other avenues.

The role of IGAD has been and is not limited to the development of early warning systems to prevent or stop environmental degradation and conflict and improve human security. The Horn of Africa states came together to create the Intergovernmental Authority on Drought and Development(IGADD) in 1986 to deal with famines, droughts and other disasters which were affecting farmers and pastoralists in the region. This later was transformed in 1996 to the Inter-Governmental Authority on Development and given the mandate to develop early warning systems to prevent or stop environmental degradation, conflict and other developmental issues in the region. Resource based conflicts have been one of the most resilient problems in the each state at the Horn of Africa. Proper use and protection of these resources is vital in ensuring that involved parties have no cause of tension. Cases of depletion of natural resources have in the end caused unrest.

The role of individual governments however is key to the management of natural resources. There needs to be a review on mining policies in countries in the Horn of Africa to allow profits to the common citizenry. The question of scarcity and diminishing of these resources can be addressed by policies that limit how mining is done to avoid overexploitation. Policy can be amended to include and emphasize benefits to the common citizens. These policies should also include frameworks on pollution and stiff penalties for those who do not adhere to them.

On the protection of natural resources, countries in the Horn of Africa should reexamine land and land use policies to ensure that there is proper utilization of land resources and at the same time the activities do not interfere with the equilibrium state of land in the region. This will help to renew the resources hence conserve for the benefit of future generations. These policies should include frameworks that will help to avoid the expansion of cultivated land into natural ecosystems, constant improvement of soil quality as recommended by soil experts in the Horn of Africa should be emphasized in the region. This will facilitate the attainment of sustainable agriculture that meets the needs of the region in food security while at the same time protecting natural resources.

The domestication of international legal frameworks and agreements in the tackling of climate change and its effects are inevitable in the Horn of Africa. A greater percentage of these effects are felt by women, children and youth. A key component in tackling the adverse effects of climate change is emphasizing the inclusion of the gender aspect in adaptation. This includes both short term and long term adaptation mechanisms to enhance effectiveness in terms of conceptualisation and implementation to the grassroots.

Such consideration levels out the unevenness that prey on the vulnerabilities of the demographic referred to above that constitute a great risk to effective implementation of adaptation mechanisms in addition to enhancing effectiveness in terms of addressing the key specific needs on the ground. Key however is the effective participation in decision making by stakeholders in the climate change debate; adaptation mechanisms to enhance effectiveness in decision making and implementation. This will ensure the equitable participation of men and women in the decision-making and actual implementation of policy.

There is great potential in developing ways to enhance effective mitigation mechanisms with regard to climate change, more so with the inclusion of gender perspectives to enhance effectiveness of such mechanisms. Effective participation at all levels both in decision making and capacity building especially with regard to mitigation projects not only safeguards the integrity of the projects. It also enhances efficiency in developing specific implementation strategies and projects which will have tangible and verifiable impact on the ground.

This will be achieved through general mitigation projects, such as clean energy deployment for domestic use, or through consideration of the specific impacts relating to gender that are resultant of such projects during the planning and decision making phase. These impacts include realities such as revenue, social impacts and impacts on livelihoods of particularly women, youth and children hence improving livelihoods allowing time for the pursuit of additional opportunities.

Besides these, tackling gender differences in the rights to own property can improve of the outcomes of natural resource management policies in the Horn of Africa. This is possible because it will allow for efficiency, environmental sustainability, equity, and empowerment of the resource users. It is important to identify the nature of rights to ownership of land, trees and other natural resources as they are owned by men and women and how these resources are handed down from generation to generation.

Governments in the region need to invest more in human security as to ensure the root causes of conflicts and insecurities in the region are dealt with. Issues of food security, environmental security, poverty and disease are still of major impacts in the region yet governments spend more in military spending than in food security. Spending on agriculture

versus military in the Sub-Saharan Africa alone is negligible in comparison to the threats that come with food insecurity. According to the Human Development report in 2012, "Kenya, Ethiopia and Uganda use more than 1.5% of their GDP on military spending compared to less than 1% on agriculture."[104] The security needs of the Horn of Africa need to be addressed based on the context of the realities in the region as opposed to traditional security beliefs.

While the environmental and natural resource policy is changing over the past period of years, there needs to be a political will to address these issues in the Horn of Africa. National security strategies in the Horn of Africa should include environmental security wholesomely to allow for the tackling of issues in environmental security alongside the pursuance of national security interests both within and outside the countries. The use of "Collaborative learning" as proposed by Daniels et. al was "designed to mainly address issues of decision making while at the same time address complex policy issues. In the Horn of Africa this would be of great benefit seeing as the problems of security are partly a failure of policy and political will to address them."[105]

In conclusion, the question of sustainable security for countries in the Horn of Africa can be tackled by addressing issues of environmental security seeing as they compose a large percentage of the threats that are prominent to disrupt the security in the Horn of Africa. This however means that there needs to be a reexamination of the term security in the context of the Horn of Africa and its surrounding regions.

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