



NATIONAL OPEN UNIVERSITY OF NIGERIA

PCR 851



Environmental Security and Conflict Resolution **Module 1**

PCR 851 Environmental Security and Conflict Resolution

Module 1

Course Developer/Writer

Chinasa Ugwuanyi, National Institute for International Affairs, Lagos

Course Editor

Prof. Osita Agbu, National Institute for International Affairs, Lagos

Credits of cover-photo: Henry Ude, National Open University of Nigeria

National Open University of Nigeria - 9I, Cadastral Zone, Nnamdi Azikwe Express Way, Jabi, Abuja, Nigeria



www.nou.edu.ng centralinfo@nou.edu.ng

oer.nou.edu.ng oerunit@nou.edu.ng OER repository

Published in 2021 by the National Open University of Nigeria

© National Open University of Nigeria 2021



This publication is made available in Open Access under the [Attribution-ShareAlike4.0 \(CC-BY-SA 4.0\) license](https://creativecommons.org/licenses/by-sa/4.0/). By using the content of this publication, the users accept to be bound by the terms of use of the Open Educational Resources repository oer.nou.edu.ng of the National Open University of Nigeria.

The designations employed and the presentation of material throughout this publication do not imply the expression of any opinion whatsoever on the part of National Open University of Nigeria concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The ideas and opinions expressed in this publication are those of the authors; they are not necessarily those of National Open University of Nigeria and do not commit the organization.

How to re-use and attribute this content

Under this license, any user of this textbook or the textbook contents herein must provide proper attribution as follows: “First produced by the National Open University of Nigeria” and include the NOUN Logo and the cover of the publication. The repository has a version of the course available in ODT-format for re-use.

If you use this course material as a bibliographic reference, then you should cite it as follows: “Course code: Course Title, Module Number, National Open University of Nigeria, [year of publication] at oer.nou.edu.ng

If you redistribute this textbook in a print format, in whole or part, then you must include the information in this section and give on every physical page the following attribution: Downloaded for free as an Open Educational Resource at oer.nou.edu.ng If you electronically redistribute part of this textbook, in whole or part, then you must retain in every digital file (including but not limited to EPUB, PDF, ODT and HTML) the following attribution:

Downloaded for free from the National Open University of Nigeria (NOUN) Open Educational Resources repository at oer.nou.edu.ng

Unit I Basic Definitions of the Concept Environmental Security

1.0 Introduction

Security is applied to different things that are valued (such as jobs, health, organisations, countries) and also refers to different types of risks (such as unemployment, lack of food, and change of government). The environment has also been seen as one of the things that are valued (referent object) and changes in the environment has been seen as a security risk. Therefore, the connection between the environment and security is referred to as environmental security.

Environmental security as one of the new non-traditional security issues helps to broaden and deepen the concept of security. In broadening security, it considers risks other than war (such as risks posed by environmental change) to the things that people value. There have been various efforts to assess the extent to which environmental changes cause violence within and between countries; explain ways in which environmental change could undermine national security; investigate ways in which war and its preparations can affect the environment and also investigate the linkages between environmental security and development issues such as poverty and human security. From the environmental perspective, there are concerns that this concept has led to the militarisation of environmental issues, but form the main security paradigm; there are concerns that it has invariably undermined the issue of national security. Generally, the concept of environmental security has influenced policies despite the various debates about its usefulness.

2.0 Objectives

At the end of this unit, you should be able to:

- explain the meaning of environmental security
- Identify the various approaches to environmental security.

3.0 Main Content

3.1 Definitions of Environmental Security

Environmental security is an important concept in both security studies and environmental studies, yet its meaning is still unclear because of the ambiguity of the two words - environmental and security. Environment simply means the surrounding and everything that affect an organism during its lifetime. In another words, "Environment is defined as the sum total of water, air and land, their interrelationships among themselves and also with human beings, other living organisms and property." Thus, it includes both the physical and biological surroundings and their interactions; while security is defined as the assurance people have that they will continue to enjoy those things that are most important to their survival and wellbeing. Security can also be defined as relative freedom from war, coupled with a relatively high expectation that defeat will not be a consequence of any war that should occur (Bellamy, 1981:102). Objectively, security measures the absence of threats to

acquire values but subjectively, it is the absence of fear that such values will be attacked. Therefore, environmental security means different things to different people. It is one of the new non-traditional security issues that have deepened and broadened the concept of security as it considers not only the security of states, but also the security of the global environment as well as its various sub-systems and social systems.

3.2 Approaches to Environmental Security

As a result of the ambiguity of the word *environmental security*, the following approaches arose:

1. Environmental security is seen as being about the impacts of *human activities* on the environment. This is also called ecological security, which consistently expresses the fact that it is the ecosystem and the ecological processes that should be secured and that the threat to ecological integrity or environment is human activities. The approach draws its view from both Green philosophy and ecological theory in which systemic interdependence; complexity; flux; uncertainty; harmony and sustainability are their key themes. This approach states that there is the need for shift from the action of individual and national interest to a concern for the overall welfare of the entire social - ecological system of the planet.
2. Environmental security focuses on *common security*. It notes that the causes and impacts of environmental problems are borderless. Environmental problems such as the ozone layer depletion and climate change are global in nature and are caused by cumulative gas emissions from industrialised countries which in turn affect many countries like the developing countries. All countries of the world are not equally responsible for the cause of the environmental change neither are all countries equally at risk from them.
3. Central to the concern of environmental security is the nexus between *change and violence*. Focusing on the realist international relations theory and resource scarcity and conflict between states, it is argued that there are connections between environmental degradation and violence noting that resources could be strategic goals and strategic tools. There are also the possibility of interstate wars caused by resource and environmental problems. There is also the possibility of war between countries with shared water resources. The project on environment, population and security at the University of Toronto in 1994 and another project – the Zurich-based ENCOF (Environmental Conflict Project) carried out case studies on the linkages between environmental degradation and violence and found that consumption of unequal scarce resources is an important factor in violent conflicts; violent conflicts where environmental scarcity is a factor are more likely in low-income resource-independent societies; population pressure can indirectly be a contributing factor to violent conflict and when mechanism that enable adaptation to environmental scarcity fail, violent conflict is a possible outcome. Studies by both Homer-Dixon (1999) and Baechler (1999) found that environmental change is not an immediate cause of conflict but could exacerbate it and is likely to cause war between countries. From further studies, three new developments arose in environmental violence research. The first new development shows that strong states tend to be less prone to internal conflicts while states under-going significant economic and political transition are more prone to internal violent conflict. It is also observed that it is the abundance of natural resources or their scarcity that

drives conflict and poverty is vital causal variable in internal wars. The second new development in environmental violence research is that peaceful responses to environmental change rather than from instances of violence is an important approach in preventing conflict because understanding what works to promote peace is as important as understanding what causes violence. Therefore, groups or countries experiencing common environmental problems can cooperate to address these problems. The third new development in environmental violence research stressed the importance of unequal outcomes of social and environmental changes as seen in the case of the Niger Delta where inadequate distribution of the returns from resource extraction activities has been an important factor of violence. Thus, a range of economic, political and cultural processes that produce and sustain power are more important in causing, preventing and resolving violent conflict than the actual environmental changes that take place.

4. In explaining environmental security, the existing theories of national security are taken into consideration and environmental issues are then factored in and these have helped in giving a lot of attention to environmental violence. Environmental changes irrespective of whether or not it can cause violent conflict within or between states can undermine national security as it weakens the economic base that determines military capacity. In most developing countries and some developed countries, natural resources and environmental services are important variable for economic growth and employment. For example, revenue from and employment in various sectors like agriculture; forestry; fishing and mining and from environmentally dependent services like tourism are adversely affected by environmental change. Hence, if economic development can be ecologically unsustainable, the national security can be too because if national capital base of a country's economy erodes, it affects the long-term capacity of its armed forces. Despite the fact that many environmental problems that countries face are primarily caused by internal developments within those countries, some are basically beyond their control since the effects of climate change are borderless. Example include the impacts of global emissions of ozone depleting substances on rates of skin cancer in southern latitudes and the impacts of global emissions of greenhouse gases on low-lying countries and countries with high climatic variability. Therefore, trans-boundary flows of environmental problems differ from traditional external security threat because they are uncontrolled and unintended. This is what Prins (1993) called "threat without enemy." Deudney (1990:461) argued that three reasons are responsible why linking environmental issues to national security is problematic. These include – a) that military threats which are deliberately imposed and causes easily identifiable, are different from environmental threats which are accidental and their causes uncertain; b) that linking environmental issues to national security may not mobilise much attention and action on environmental problems but strengthens existing security logic and institutions; c) and environmental change is not likely to cause wars between countries as earlier mentioned. Hence, the issue of linking environmental problems to national security remains the issue of understanding what constitutes national security, who it is for and how it is to be achieved. In linking environmental change with security, there is the need to consider the militaries whose goals are to win wars. So their training and fighting of wars have devastating consequences for the people and the environment.
5. Armed forces wage wars which are extremely bad for environmental security as warfare always result in environmental degradation which last beyond the end of

fighting. Such direct impacts of war on the natural environment include the use of nuclear weapon in Japan, defoliants in Vietnam, depleted uranium ammunition in Kuwait and Kosovo, the burning of oil wells in Kuwait, the destruction of crops in Eritrea and the draining of marshes in South-eastern Iraq. Warfare also have indirect impacts on the environment as spending on fighting is sustained by resource extraction, which in some cases is the major source of conflict. It affects the economic development in ways that indirectly impact on the environment. For instance, money spent on weapons could be spent on social and environmental activities. Wars affect foreign investment and aid, negatively disrupting domestic markets with resultant decrease in export. It damages the labour force, creates health burden, destroys productive assets such as factories, communication, energy, infrastructure and also, results in increased foreign debt, income inequality, reduced food production and GDP per capita, thereby creating refugees and internally displaced persons. War therefore, has environmental, economic and social effects which will impact negatively on the people's access to the kind of resources they need to develop themselves in an ecologically sustainable ways. It also reduces the amount of economic resources available to governments and communities to implement policies and programmes, restrict access to the kinds of technologies needed for sustainable economic growth, suppresses educational attainment and restrict the policy learning necessary for understanding and responding to environmental problems, damaging the infrastructure needed to efficiently and equitably distribute resources such as water, electricity, food and weaken the institutions and social cohesion necessary for a society to manage its environmental problems. The issue that environmental change is likely to make for a more unstable international environment through environmentally induced wars. Thus, the armed forces are required to help manage these negative effects.

6. Now, environmental changes have been identified as human security issue because the way it affects individuals and communities are obvious. People are environmentally insecure in the following ways – where people live and the nature of environmental changes in those places, how susceptible people are to damage caused by environmental changes, and people's capacity to adapt to environmental changes. For example, subsistence farmers in Nigeria rely mainly on their own farm produce for food, earn very little money, their farms do not have irrigation, farm soils not very fertile, infrastructure for storage and transportation of food not well developed, agricultural productivity low and rainfall varied. So with the varied rainfall, farmers no longer know when to plant resulting to decrease in food production with negative impact on their source of livelihood. Recently, massive cases of flooding have been reported in some states in Nigeria (Lagos, Kaduna, Borno, Adamawa, Benue, Plateau, Nassarawa, Kogi, Bauchi, and Niger states). This has resulted to the loss of lives, properties and farmlands which in turn has created the problem of Internally Displaced People (IDPs). Over time, conflict will result over land and resources. But environmental change does not undermine human security in isolation from a range of social factors including poverty, the degree of support communities receive from the state, the effectiveness of decision-making processes and the extent of social cohesion within and surrounding vulnerable groups. These factors determine people and communities' capacities to adapt to environmental change so that what they value, are not adversely affected. For environmental change, the upstream users of water, distant atmospheric polluters, multinational logging and mining companies, regional-scale climatic processes, distant actors and larger scale processes influence the security of individuals' uses of natural resources

and services. But for the social determinants of insecurity, larger processes such as warfare, corruption, trade dependency and economic liberalisation affect people's sensitivity to environmental changes and their adaptive capacities to these changes. Therefore, in understanding human environmental insecurity, there is the need to understand the larger scale, past and present processes that create wealth in some places and poverty in other and environmental change in some places and not in others. Since the focus of human security is the individual, the processes that undermine or strengthen human security are often extra-local. Hence, the best approach to address the issue of human environmental insecurity is not just with the local people but also with the institutions like the states, the international system, the private sector, civil society and consumers in the developed countries and must take into account nation-state and their policies.

Self-Assessment Exercise

In detail, discuss environmental security.

4.0 Conclusion

Environmental security is one of the new security issues that helped us to understand the meaning of security in the post-Cold War period. This is made possible by a) efforts of environmental movements to popularise the environmental issues and contest the practices of national security; b) increased recognition that environmental problems demand common security approaches and the growth in multilateral agreements; and c) strategic vacuum created by the end of the Cold War.

Environmental security is therefore about the impact of human activities which include military activities and the way environmental changes undermine human security with research and policy focusing on the impact of environmental problems on women and children, livelihoods and human development. These environmental problems include – the increased concentration of greenhouse gases in the atmosphere, increased intensity of climatic hazards such as cyclones, flood, drought, desertification and increased water scarcity. This led to the various multilateral environmental agreements reached to help mitigate and adapt to these changes.

5.0 Summary

In summary, from the current debate on security and the environment in international relations, three distinct viewpoints that combine security and the environment are recognised. These are: environmental conflict, environmental security, and ecological security.

The environmental conflict perspective is the approach that most clearly links traditional security concerns to the environment. Most authors who examine environmental conflict focus on the possibility that groups within society will engage in violent conflict as natural resource stocks diminish due to environmental degradation. These conflicts are understood to threaten the stability of the state. There are several broad trends that are identified as increasing the likelihood of environmentally induced conflicts. These include: expanding and migrating human populations; water, arable land and other resource and environmental scarcities; globalisation which brings people (and disease) into closer proximity; and increasing recognition of the injustice of Northern-induced underdevelopment of the South.

Central to these discussions is the concept of scarcity. Thomas Homer-Dixon (1999) identifies resource scarcities as potentially being so severe that they can seriously undermine human well-being. He identifies three types of scarcities: supply-induced scarcity, demand-induced scarcity, and structural scarcity. The main argument is that some types of scarcity, coupled with other factors, can contribute to violent conflict.

The environmental security approach is concerned with the negative impacts of environmental degradation on human beings. While environmental conflict can still directly be linked to military security, environmental security is more closely linked to notions of “human security.” In other words, environmental security is a broader notion than environmental conflict because it is concerned with all of humanity, not just those directly susceptible to environmental conflicts. In environmental security, the security referent is people, and threat is located in negative consequences of environmental damage. Some of the main themes in this scholarship include the environmental impact of accelerating globalisation, concerns over population increases, the spread of disease, and the potentials for sustainable development.

The ecological security approach is a perspective that focuses on the negative impacts human behaviors have on the environment. Security of the environment is the concern in this approach. Katrina Rogers (1997:30) explains that ecological security refers to “the creation of a condition where the physical surroundings of a community provide for the needs of its inhabitants without diminishing its natural stock.” This definition says nothing explicitly about human beings. It reflects the idea that human beings constitute one part of the environment, but are not necessarily present in all ecosystems. That being said, it is important to note that ecological security scholars are not completely unconcerned with the fate of human beings. Human beings are seen as an essential part of ecosystems. Ecological security scholars, however, do not privilege humans as the most important species. In this approach, species and ecosystems are preserved for their own sake, not for their value to humans. The scholars who use this framework are interested in the security of the environment, including human beings that are threatened largely by human activities. From an ecological security viewpoint, items like water, fertile soils, and fossil fuels are seen as parts of the total environment rather than resources available for human consumption.

6.0 Self-Assessment Exercise

From your viewpoint identify three distinctive approaches to environmental security.

7.0 References/Further Reading

Alan Collins (2007). “Introduction: What is Security?” In: Alan Collins (Ed.), *Contemporary Security Studies*. New York: Oxford University Press.

Baechler, G. (1999). *Violence Through Environmental Discrimination: Causes, Rwanda Arena and Conflict Model*. Dordrecht: Kluwer.

Bellamy, I. (1981). “Towards a Theory of International Security.” *Political Studies*.

Detraz, N. (2009). “Environmental Security and Gender: Necessary Shifts in an Evolving Debate.” *Security Studies*, 18:345–369, Routledge: Taylor & Francis Group.

Deudney, D. (1990). “The Case against Linking Environmental Degradation and National Security.” *Millennium: Journal of International Studies*, Vol.19, no.3.

9 - downloaded for free as an Open Educational Resource at oer.nou.edu.ng

Karen, T. L. (1999). "Constructing Environmental Security and Ecological Interdependence." *Global Governance* 5, no. 3.

Prins, G. (Ed.). (1993). *Threats without Enemies: Facing Environmental Insecurity*. London: Earthscan.

Rogers, K. (1997). "Ecological Security and Multinational Corporations." *Environmental Change and Security Project Report*, no. 3.

Homer-Dixon, T. (1999). *Environment, Scarcity, and Violence*. Princeton: Princeton University Press.

Unit 2 Origins of Environmental Security

1.0 Introduction

Security applies to different things that are valued by people such as jobs, health, organisations, countries and also to different kinds of risks such as unemployment, lack of food, change in government and war. Recently, the environment has been valued and its change has been seen as security risk, hence the concept of environmental security whose approaches are diverse. Environmental security is one of the new non-traditional security issues that have served to deepen and broaden the concept of security as it not only considers the security of states but also the security of the global environment. Environmental security involves much research which attempts to assess the extent to which environmental changes causes violent conflict within and between countries, explain ways in which environmental changes may undermine national security, investigate ways in which wars and their preparations affect the environment and also investigates the linkages between environmental security and development issues such as poverty and human security. These led to policy development in countries like the United States; intergovernmental organisations such as the United Nations and NATO and non-governmental organisations such as the World Conservation Union and Greenpeace.

2.0 Objectives

At the end of this unit, you should be able to:

- describe the origin of environment security
- relate environment to security
- suggest measures to secure the environment and
- explain the transnational element of environmental security.

3.0 Main Content

3.1 Origins of Environmental Security

In the early 1960s, environmental security emerged as an important concept in security studies due to the following reasons:

First, it emerged as an important concept with the continuous growth of environmental consciousness in the developed nations which stimulated and sustained the growth of the environment movements during this period. Various events which resulted to sustained awareness of environmental issues include – the publication of Rachel Carson in 1962 titled the “silent spring” which explained the impacts of pesticide DDT on animals and food chain. Other notable personalities such as David Attenborough, Jacques Consteant, David Suzuki and a number of international environmental non-governmental organisations like the World Wildlife Fund (1961); Friends of the Earth (1969); Greenpeace (1971) whose functions include networking across countries, research, awareness-raising, policy

development and monitoring, capacity building, fund-raising and lobbying at local, national and international fora. In 1970s, international summits on environmental issues and proliferation of international agreements on environmental issues began with the United Nations Conference on the Human Environment (UNCHE) being the first major global environmental summit held in Stockholm in 1972. This summit initiated a number of intergovernmental investigations, meetings and agreements on global environmental problems which resulted to the World Commission on Environment and Development's (WCED) report in 1987 titled "Our Common Future". This report popularised the term "sustainable development" and introduced the term environmental security. The WCED report also led to the watershed United Nations' Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil in 1992 with follow-up conference in 1997 and 2002.

The second issue that led to the emergence of environmental security is the debate by scholars about the orthodox security discourses and practices. These include the works of scholars like Richard Falk titled "This Endangered Planet" and Harold and Margaret Sprout's titled "Towards a Politics of Planet Earth" which argued that there is the need for international political system to respond collectively to the common environmental problems, because they pose serious threats to international stability and national well-being of the people. In 1977, Lester Brown in his *Worldwatch* paper titled "Redefining National Security" stated the inability of exclusionary national security institutions such as the military, to manage common environmental problems and further suggested that disarmament and budgetary reallocations are important initiatives for solving environmental degradation. Four biophysical systems – fisheries, grasslands, forest and croplands were identified by Brown to be under stress and he went ahead to the problem of climate modification as it relates to food security. In 1983, Richard Ullman's publication titled "Redefining Security" noted that environmental change might cause serious war, when it defined national security threat as anything which can degrade the quality of life of the people of a state or which narrows the choices available to the people and organisation within the state. He further observed that environmental degradation is likely to make developing countries' governments more militarily confrontational in their relations with the developed nations (as is the issue now with environmental negotiations which is based on the principles of differential responsibilities and polluters pay). Ullman also examined the possibility of illegal immigration by environmental refugees (now a major environment concern). Environmental scientists such as Norman Myers and Peter Gleick continually argued that environmental degradation will induce violent conflict as Myers in his article in 1986 noted that food shortages, fisheries depletion, water scarcity, climate change and deforestation will cause conflict which will result to environmental refugees and also further explored the costs of military security relative to the costs of environmental security. Also in 1986, Arthur Westing's article focused on using environmental measures to strengthen international security.

The third reason is the shift in strategic landscape because for the United States and its allies, security meant national security from military and ideological threat of the Soviet Union and its allies, whose principal strategy to achieve was to build and maintain military superiority. But following the oil embargo by the Organisation of Petroleum Exporting Countries (OPEC) in 1973, which resulted in increased oil price in the world market, it was observed that the industrial capacity that underpinned the military superiority of the west was vulnerable to the dictates of the suppliers of energy. Coupled with the minor oil crisis of 1979, the idea of mainstreaming energy security was also established in security planning. It was at the end of the Cold War that other dimensions to security gained significant prominence on security policy.

It was the call for a common security approach to “Our Common Future” and the preparations for the UNCED conference in Rio that provided the intellectual and policy opportunity for environmental security to be considered as one of the new security issues. Thus, from 1989, there have been several publications and studies on environmental security.

3.2 Linking Environment to Security

There are four reasons which explain the linkage between changes in the environment caused by human activity and security. These include:

1. Environmental degradation is a severe threat to human security and all life on earth. Air and water pollution, deforestation, soil erosion, etc., resulting from civilian and military activities can and do cause changes in our living conditions. This is why many definitions of environmental security have focused on sustainable utilisation and protection of the human environment (Westing, 1989: 7). Nature is no longer the opponent of society, against which humanity must struggle to survive but must protect from the negative consequences of our own activities.
2. Environmental degradation or change can be both cause and consequence of violent conflict. Environmental degradation and poor respect for environmental resource management, may lead to disputes within countries and between countries. And when environmental degradation is a consequence of intentional acts of warfare, it often escalates the conflict. Environmental degradation may also exacerbate a conflict that originated from other causes such as ethnic, religious tension and socio-economic inequalities. Regular non-warfare military activity can also have a negative impact on the environment in terms of pollution and resource use as well as the severe threats from nuclear testing, accidents in nuclear-powered submarines or ice-breakers, dumping of radioactive material in the ocean. Thus, military preparations represent a potential threat to the environment and to individuals even if they may not represent a threat to state security. Examples of positive linkages between the military sector and the environment include the discussions through Russian-Norwegian cooperation about the use of military means to protect the rainforest, and fish stocks in the Barents Sea from illegal fishing.
3. Predictability and control are essential elements of military security considerations, and also in safeguarding the environment. Under certain circumstances, irreparable environmental degradation or changes in the ecological systems may increase the likelihood of violent conflict eruption. The definition of environmental security by Lodgaard (1992:20) includes not only sustainable utilisation and protection of the environment but also minimisation of the risk or probability for experiencing negative consequences of environmental change. This could be related to industrial activities and technology where there is a potential for major damage to the environment. According to Westing (1989:117), environmental security, by way of its international confidence-building effects and by alleviating some causes of military insecurity, may lead to improvements in political security. Hence, solving environmental problems may promote cooperation and therefore may be seen as security policy or peace-building. Environmental security therefore can be defined as a normative linkage designed to cope with the negative linkages between the environment and human activities (Brock, 1991:407). It is important to predict and control wide-scale migration or displacement of huge population of masses from

environmentally devastated areas into neighbouring region that could cause social tension and political instability thereby leading to violent conflict due to the fact that environmental degradation strains further the resources of the recipient region or state (Homer-Dixon, 1991:76, 1994:5).

4. Since the linkage between the environment and security has been established, it is therefore, legal for politicians to speak out in favour of an environmentally responsible security policy. Though environmental security is still a political issue, environmental sustainability has now become part of the high politics sphere in most developed countries.

3.3 Securitisation of the Environment

Securitisation of the environment describes a way of handling environmental issues where threats to the environment are seen as urgent and immediate, requiring a quick response at top political level (Buzan *et al.*, 1995). Politically unstable and/or economically poor or dependent states may have to choose between cheap and quick industrialisation and environmental protection. The two strategies may be mutually exclusive but equally important to satisfy the international community. Scholars have argued, on the contrary, that by including a non-military threat like the environment, the concept of environmental security then represents the demilitarisation of security thinking. The concept acknowledges the need for a political leadership to ensure the security of its citizens above and beyond their military security as a wider concept of security may also increase the range of legitimate policy choices available (Ullman, 1983:133). Indeed, for politicians to devote themselves to a given issue, it helps a great deal if this issue falls within the realm of high politics. This is the most important political contribution of the concept of environmental security not its potential demilitarisation of security thinking. In the long run, de-securitisation or politicisation may be preferable to securitisation. Buzan *et al.*, (1995:15) defined politicisation as 'a recognition of social-political responsibilities for changes in the quality of environmental conditions' which makes environmental issues part of the usual day-to-day political business. If environmental concerns become part of 'low politics' and lose their sense of political importance and urgency, they attract less public interest. But popular mobilisation against environmental degradation is at its peak now especially in the case of potentially dangerous man-made environmental degradation.

3.4 The Transnational Element of Environmental Security

The issue of environmental security should be discussed at national, regional and global levels with primary concerns focusing on individuals rather than the states. Decisions made by one state to appropriate, or degrade, common property resources will affect other states. And without international or supranational law, states cannot protect themselves from the negative consequences of environmental degradation originating outside their borders. Even most existing international environmental treaties have failed to take these facts into account because they are weak in compliance or enforcement measures. Incentives for taking protective steps depend on a state's vulnerability to a potential environmental threat. For example, the low-lying states like the Netherlands and the Maldives have particularly strong incentives to have carbon dioxide (CO₂) emissions reduced to prevent global warming because rising sea levels represent an existential threat to them. In addition, due to the time-frame for negotiating international environmental treaties and their entering into force, decades may have passed before any reasonable change is achieved. By then, new and more pressing environmental challenges may have

emerged, or the challenges at which agreements were originally directed may have exceeded the level at which they may be resolved. The intergovernmental negotiation model is based on the realist paradigm which stresses the role of states as rational unitary actors and divides the world into territorially distinct countries. This paradigm pays little attention to the increasingly trans-boundary character of state economies, politics, technology and environmental problems which raises an important problem in linking the environment to a traditional security perspective. The trans-boundary character of most environmental problems makes it difficult for them to fit into the state-centred ideology of security policies, but the world security cannot continue to depend on such conceptions and institutions of state security alone. However, few environmental threats can be resolved by claiming national sovereignty, still, some 'pooling' of sovereignty will be vital.

Self-Assessment Exercise

States have a choice between quick industrialization and environmental protection. Discuss.

4.0 Conclusion

The new concept “environmental security” is justified and should not be completely dismissed as a concept just because no single definition has been universally accepted. Its present definition should rather be extended to include the various components of the concept which include military preparedness, technological and industrial installation and other activities that could damage the environment resulting in security threat. The issue of environmental security should be discussed at national, regional and global levels with its primary concern focused on individuals rather than states. However, the resolution of most environmental threat involves the pooling of sovereignties.

5.0 Summary

In this unit, we have discussed the origin of environmental security, securitisation of the environment and linked environment to security. We also explained the transnational element of environmental security. Decisions made at national, regional and global levels by one state to appropriate or degrade common resources will affect other states.

6.0 Self-Assessment Exercise

Explain the linkages of environmental changes to security and the transnational element of environmental security.

7.0 References/Further Reading

Barnett, J. (2007). “Environmental Security.” In: Alan Collins (Ed.), *Contemporary Security Studies*. New York: Oxford University Press.

Brock, L. (1991). “Peace through Parks: The Environment on the Peace Research Agenda.” *Journal of Peace Research*, Vol. 28, no. 4.

Buzan, B., O le Waever & Jaap de Wilde (1995). “Environmental, Economic and Societal Security.” Working Papers, no. 10. Copenhagen: Centre for Peace and Conflict Research.

Graeger, N. (1996). "Environmental Security?" *Journal of Peace Research*, Vol. 33, no. 1, International Peace Research Institute. Sage Publications, Ltd.

Homer-Dixon, T. (1991). "On the Threshold: Environmental Changes as Causes of Acute Conflict." *International Security*, Vol. 16, no. 2, Fall.

Homer-Dixon, T. (1994). "Environmental Scarcities and Violent Conflict: Evidence from Cases." *International Security*, Vol. 19, no. 1, Summer.

Lodgaard, S. (1992). "Environment, Confidence-Building and Security." In: Sverre Lodgaard & Anders, H. af Ornas (Eds). *The Environment and International Security*, PRIO Report (2).

Ullman, R. (1983). "Redefining Security." *International Security*, Vol. 8, no. 1, Summer.

Westing, Arthur H. (Ed.). (1989). *Comprehensive Security for the Baltic: An Environmental Approach*. London: SAGE Publishers.

Unit 3 Environmental Security Analysis

1.0 Introduction

It was only with the emergence of this global environmental problem like the depletion of the ozone layers or global warming in the 1980s that the debate on environmental security gained momentum. Environmental security is intended to increase the importance of environmental problems in the political arena. At the United Nations General Assembly, Gorbachev stressed that the relationship between man and the environment has become menacing and noted that the threat from the sky is no longer missiles but global warming (Myer, 1993:11) while promoting the establishment of an Ecological Security Council. The alarming concerns for the hole in the ozone layer transformed environmental problem into a threat to security generally. The environmental security discourse has focused on conflicts, transforming the threat to the environment and the people that depend on it into a threat to global order and stability. It has also challenged a set of security practices which has focused on military threats and reactive measures and outlined how military responses and preparation are inadequate to deal with environmental issues.

2.0 Objectives

At the end of this unit, you should be able to:

- discuss the growth of environmental security analysis
- Identify the dissimilarities between security from violence and security from environmental threats.

3.0 Main Content

3.1 Growth of Environmental Security Analysis

In the post-World War II period until late in the 1980s, the U.S. and USSR faceoff was based essentially on Mutually Assured Destruction (MAD) associated with nuclear weapons. Military deterrence became the principal concern of foreign affairs. National security was narrowed to power relations, and power was calculated in terms of military might and technologies (and the economy to support them). But this narrow focus proved inadequate to address evolving challenges. Thus, in the 1980s, scholars started challenging the idea that the military should have predominant control over security issues. In 1990, the Brundtland Commission of the UN's Environmental Programme conducted a study, which concluded that there was a "deepening and widening environmental crisis" presenting a threat to national security, and even human survival. The Commission concluded that the crisis is more alarming than the challenges posed by military might and hostile state relations and its report observed that, 'the arms race (in all parts of the world) pre-empt resources that might be used more productively to diminish the security threats created by environmental conflict and the resentments that are fueled by widespread poverty. There are no military solutions to environmental insecurity' (Odelia, 1993:323). In the late 1980s and through the 1990s, environmental security studies and concepts gained substantial attention in research and policy forums. As the Cold War ended, defense spending was cut, leaving a "peace

dividend” that could be reallocated to other needs, including addressing environmental concerns. Rather than preventing war, there was a new concern with “waging peace,” which meant proactive programmes to improve conditions that might otherwise lead to hostilities. Environmental problems were of high priority. Gross abuses and environmental degradation in the former Soviet Union - with a correspondingly reduced average life expectancy, myriad health problems, and a loss of natural resources - became widely known (Odelia, 2011:73). Scholars and policy analysts critically examined environmental damages, including the long-term destruction associated with armed conflict. For example, the deliberate widespread environmental destruction through the use of toxic chemicals by the U.S. in the Vietnam War; and the use of land mines. Challenges posed by various biological and chemical threats and other risks that do not respect borders gained increasing international political attention, including issues related to biological and chemical weapons, biotechnology, and managing infectious diseases. In 1990s, the Montreal Protocol marked a successful effort to negotiate reductions in harmful CFCs (chlorofluorocarbons).

3.2 Environmental Degradation as a Threat to Security

In identifying environmental degradation as a threat to security, it is important to note that the two phenomena - security from violence and from environmental threats are not similar because they have little in common. Four major dissimilarities identified are:

1. Environmental degradation and violence pose very different types of threats. Both may kill people and may reduce human well-being, but not all threats to life and property are threats to security. Disease, aging, accidents routinely destroy life and property but they are not threats to security. And when an earthquake or hurricane causes extensive damage, it is a natural disaster, not an event threatening security.
2. The scope and source of threats to environmental well-being and security from violence are very different. Few environmental threats afflict just one nation, and many ignore national borders. But it would be misleading even to call most environmental problems international, because perpetrators and victims are within the same country. There is nothing distinctively national about the causes, harms or solutions.
3. Threats to environmental well-being and security involve greatly differing degrees of intention. Threats of violence are highly intentional in that organisations are mobilised, weapons procured, and wars waged with relatively definite aims in mind. Environmental degradation is largely unintentional but due to the side effect of many other activities. With the limited exception of environmental modification for military purposes, no one really sets out to harm the environment.
4. Organisations that provide protection from violence differ greatly from those engaged in environmental protection. Citizens typically delegate the goal of achieving national security to organisations far removed from the experience of civil society. Military organisations are secretive, extremely hierarchical, and centralised; they typically deploy expensive, highly specialised, and advanced technologies. The specialised professional group is trained to kill and destroy. Responding to environmental problems requires opposite approaches and organisations. Everyone is involved, because certain aspects of all everyday activities like house construction, farming techniques, waste treatment, factory design, land-use planning, must be reformed. And the professional culture of environmental restoration is stewardship - respectful cultivation and protection of plants, animals, and the land. Since, threat to national security from violence and

environmental degradation has little in common; linking them may create a conceptual disorder rather than a paradigm shift.

Self-Assessment Exercise

Security from violence and security from environmental threats are not the same. Discuss.

4.0 Conclusion

Historically, the environment has been a background factor in conflicts rather than an issue on its own right. Since the late 1960s when most African countries are celebrating their independence, the scientific world was becoming increasingly aware of how the environment represented a threat to the universe. The awareness of the nature of the environment as a source of conflict began to increase. As the population of the world increased, the levels of human economic activities increased resulting to ecosystem degradation. The threat presented by the environment is no respecter of any defined political boundaries thus, the inhabitants of the universe (all species) feel the impact and are all threatened. It was the earth summit held in Rio de Janeiro, Brazil in June 1992 that drew attendance generally for countries of the world to come together for two reasons to address this issue – the belief that the world is facing a common crisis (global warming) and the belief that it is in the interest of everyone to join hands to combat the crisis and other forms of environmental decline. The environment is governed by natural laws and cannot be controlled by any particular individual state alone thereby representing a serious problem politically and economically. Hence, this is an environmental crisis which is caused by humans and can only be resolved by joint efforts of all stakeholders.

5.0 Summary

We have discussed the growth of environmental analysis and environmental degradation as a threat to security. In doing this, we identified the dissimilarities between security from violence and security from environmental threats.

6.0 Self-Assessment Exercise

Discuss the growth of environmental security analysis and identify the dissimilarities between security from violence and security from environmental threats.

7.0 References/Further Reading

Deudney, D. (1991). "Environment and Security: Muddled Thinking." *The Bulletin of the Atomic Scientists*, Vol.47, no.3.

Myer, N. (1993). "Ultimate Security: the Environmental Basis of Political Stability." New York: Norton.

Odelia, F. (2011). "The Biopolitics in Environmental Security Analysis." *Politics and the Life Science*, Spring, Vol. 30, No. 1.

Odelia F. (1993). "National Security and the Environment." In Norman J. Vig & Michael E. Kraft, (Eds), *Environmental Policy in the 1990s*, (2nd ed.). Washington DC: Congressional Quarterly Press.

Trombetta, M. J. (2008). "Environmental Security and Climate Change: Analysing the Discourse." Centre of International Studies.

Unit 4 Environmental Problems as a Threat and The United Nations' Security Council (Unsc)

1.0 Introduction

Environmental change is now a main stream part of international political agenda because it is not solely a technical issue to be resolved by scientists, but also a political issue with political implications at all levels of global governance. It is now a major concern of governments, international organisations, business and non-governmental organisations as well as increasing numbers of people globally. Many environmental problems generate public demands for actions as they are extremely complex involving substantial scientific and policy-related uncertainties. The emergence of global environmental problems such as global warming and ozone depletion resulted in one of the first attempts to securitise environment on a global scale. The alarming concerns for the hole in the ozone layer transformed the problem into a threat to human health and promoted fairly successful agreements to deal with the issue at an international level. The debate on the broad scope of environmental security was captured by discussions about environmentally induced conflicts. Thus, the debates about environmentally induced conflict has since evolved. Then if the UNSC identifies a threat to the peace, breach of the peace or act of aggression, the Council has the authority under article 39 to make recommendation or to decide what measures shall be taken in accordance with articles 41 and 42 to maintain or restore international peace and security.

2.0 Objectives

At the end of this unit, you should be able to:

- identify two different situations in which environmental problems can constitute a threat to international peace and security
- Explain why the UNSC can take legally binding decisions on states in relation to environmental conflict.

3.0 Main Content

3.1 Environmental Problems as a Threat and the United Nations' Security Council (UNSC)

The UNSC may make suggestions regarding the peaceful resolution of international dispute and has over the last decade placed considerable emphasis on developing its conflict prevention role, but the significant aspect of the Security Council entering into the international politics of environmental issues would be if it were to draw on its chapter VII powers to make decisions with which states were legally bound to comply (Article 25 of the UN Charter). This contrasts with the multilateral treaty-making process typically used to address environmental issues. If the UNSC were to make a decision in relation to environmental problems, the resulting obligations would supersede other legal obligations

for the states concerned (Article 103 of the UN Charter). For the Security Council to take a decision legally binding on states, it must first identify a threat to the peace, breach of the peace, or act of aggression (Article 39 of the UN Charter). Two different situations in which environmental problems can constitute a threat to international peace and security to the extent of triggering a Chapter VII response by the UNSC include:

1. Environmental problems are portrayed as a security threat because they act as a catalyst for violence and war. For example, the problem of desertification can lead to fighting over access to inadequate supplies of water. This could be from local skirmishes to an internal breakdown of law and order, to terrorism or interstate conflict. Environmental problems could either be the primary cause of the conflict or may exacerbate existing socio-economic tensions. Presenting environmental problems as a cause of violent conflict and war is not departing from the traditional understanding of threats to security but identifying them as one cause of conflict (Scott, 2009:150). A study by International Alert released in 2009 noted that 46 countries are facing high-risk of armed conflict as a result of environmental changes. Some of these countries are – Afghanistan, Bosnia and Herzegovina, Guinea Bissau, Iran, Iraq, Lebanon, Peru, the Solomon Islands and Sri Lanka (Scott, 2009). Some analysts question whether environmental changes could be a principal cause of violent conflict but the United Nations Environmental Programme released a report in June 2007 to show that it has been one factor in the complicated conflict in Darfur. Competition for pastoral land and water has long been a driving force behind some local confrontations in Darfur which has become difficult to contain (UNEP, 2007:85).
2. Regarding environmental changes as a security threat because it impacts directly on human life and well-being. For example, extreme weather events could severely damage military bases in the US or industrial production in China thus, with global implications for global economy (Busby, 2007). Tuvalu may need to be abandoned if it goes under the sea and heavily populated areas of Bangladesh might be flooded. Melting glaciers may form unstable lakes prone to flooding which could drown local communities thereby leaving the area without adequate supplies of fresh water (Paskal, 2007:7). These threats to human life and well-being come from the first situation because the threat is not from violent people or from people in need like the refugees but from our environment.

The second scenarios of viewing environment change as a security threat are sufficient to warrant the UNSC identifying a “threat to the peace” as stated in Article 39 prerequisite to a Chapter VII decision on environmental change on the part of the UNSC. What the war-time United Nations planners had in mind was the invasion of one country by another as the principal threat to international peace and security but article 39 does not use the same language. Thus, since the end of the Cold War, the Council has broadened its understanding of the term. Hence, the UNSC should not wait until environmental changes had prompted war before it would act. For instance, in December 1992, the UNSC responded to the crisis in Somalia in which drought was a factor with a resolution authorising “Operation Restore Hope” (Murphy, 1998-1999:1181).

Self-Assessment Exercise

How can the United Nations Security Council intervene in addressing global environmental problems?

4.0 Conclusion

The international politics of environmental change is evolving rapidly. Over the last couple of years, there is serious debate as to whether it is appropriate to label environmental change as a threat to international peace and security opens and up the possibility of the UNSC taking a lead role in addressing environmental conflict/war and drawing on its Chapter VII power which require states to take action on the scale needed. Even the UNSC authority still depends on the willingness of Council members to reach agreement on the action to be taken and a perception that what is demanded of states is legitimate.

5.0 Summary

In this unit, we have discussed environmental problem as a threat and the United Nations Security Council. For the Security Council to take a decision that will be legally binding on states, it must identify a threat to peace, breach of the peace, or act of aggression before it could draw on its Chapter VII power to require states to take action.

6.0 Self-Assessment Exercise

Discuss the different situations that could trigger a Chapter VII response by the UNSC.

7.0 References/Further Reading

Bushy, J. W. (2007). "Climate Change and National Security: An Agenda for Action" CSR32, New York: Council on Foreign Relations. Available www.cfr.org/content/publication/attachments/Climatechange_CSR32.pdf. Accessed 16/12/2012.

Murphy, M. K. (1998). "Achieving Economic Security with Swords as Plough-shares: The Modern Use of Force to Combat Environmental Degradation", *Virginia Journal of International Law*, 39:4.

Paskal, C. (2007). "How Climate Change is Pushing the Boundaries of Security and Foreign Policy" Chatham House Briefing Paper, Energy, Environment and Development Programme, EEDP CC BP 07/01, June, p7. Available at www.chathamhouse.org.uk, accessed 16/12/2012.

Scott, S. V. (2009). "Securitising Climate Change: International Legal Implications." In: Harris, P. G. (Ed.). *The Politics of Climate Change: Environmental Dynamics in International Affairs*. New York: Routledge.

The United Nations' Charter.

United Nations Environment Programme (UNEP). (2007). Sudan: Post-conflict Environmental Assessment Nairobi, Kenya: