



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**DEPARTMENT OF PEACE STUDIES AND CONFLICT RESOLUTION, FACULTY OF  
SOCIAL SCIENCES**

**COURSE CODE: PCR 851**

**COURSE TITLE:  
ENVIRONMENTAL SECURITY AND CONFLICT RESOLUTION**

## Course Guide

### PCR 851: ENVIRONMENTAL SECURITY AND CONFLICT RESOLUTION

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## **INTRODUCTION**

### **Welcome to PCR 851: Environmental Security and Conflict Resolution**

PCR 851 is a 3 credit course consisting of 20 units. It has a minimum duration of one semester and is suitable for all students of Peace Studies and Conflict Resolution.

This course examines in detail issues on environmental security and conflict resolution. It covers various topics such as definition of environmental security, international relation theories applied to environment, theoretical overview of environmental security, and environmental laws. Conceptualization of conflict, linkage between environmental threat

to conflict, theories of conflict and conflict resolution techniques among others were also addressed in this course.

There are compulsory prerequisites for this course. The course guide tells you briefly what the course is all about, what you are expected to know in each unit, what course materials you need to use and how you can work your way through these materials. It also emphasizes the necessity for tutor–marked assignments. There are also periodic tutorial classes that are linked to this course.

### **WHAT YOU WILL LEARN IN THIS COURSE**

The overall objective of **PCR 851: Environmental Security and Conflict Resolution** is to expose the students to the whole range of issues surrounding the environment and conflict. It seeks to acquaint the student with the basic concept of environmental security

- what distinguishes environmental conflict from other forms of violence, causes of environmental threat, types of conflicts, origin of environmental security and various methods of conflict resolution especially in this contemporary time.

### **COURSE AIMS**

The basic aim we intend to achieve in this course is to expose the student to the complex phenomenon of environmental security, its various perceptions and analysis, to show students how environmental threat has contributed in undermining international peace and security. The course is geared towards exposing the student to the understanding of environmental security as a new paradigm in security studies, how environmental threats cause and exacerbate conflict and various conflict resolution techniques used to control and manage conflicts.

### **COURSE OBJECTIVES**

Several objectives can be delineated from this course as each unit has specific objectives. The unit objectives can be found at the beginning of a unit. You may want to refer to them during your study of the particular unit to check on the progress you are making. You should always look at the unit objectives after completing a unit. This is to ensure that you have covered what is required of you in that unit.

### **ON SUCCESSFUL COMPLETION OF THE COURSE, YOU SHOULD BE ABLE TO:**

1. Explain the origin and meaning of environment security
2. Securitize the environment.
3. Identify the different situations in which environmental problems can constitute a threat to international peace and security.
4. Discuss the various international theories that applies to environment
5. Explain the basis for the Green theory.
  
6. Provide the perspective of political ecology on the environmental debate.
7. Define the environment.
8. Explain why International Environmental law was developed.
9. Explain the various Multilateral Environmental Agreements/Treaties entered into by states.

10. Explain the various interventions by Nigerian government aimed at addressing environmental degradation.
11. Understand the distinct views of both environmental conflict and environmental security.
12. Describe the linkage between environment and conflict.
13. Describe the various environmental challenges facing humanity.
14. Describe those environmental problems facing Nigeria as a country.
15. Explain what natural resources are.
16. Link these resources to conflict.
17. Describe the various types of conflict.
18. Understand some of the theories of conflict developed by conflict scholars.
19. Provide useful explanations under which conflict always occur.
20. Define conflict Resolution.
21. Describe the conditions necessary for conflict situation to exist.
22. Identify the stages of responses to conflict resolution.
23. Explain the various conflict resolution techniques.
24. Identify the various methods of ending conflict.
25. Identify the different processes involved in conflict management.

### **WORKING THROUGH THIS COURSE**

To complete this course, you are advised to read the study units, read recommended books and other materials provided by NOUN. Each unit contains tutor-marked assignment, and at some points in the course you are required to submit assignments for assessment purposes. At the end of the course, there is a final examination. The course should take you about twenty weeks to complete. You need to allocate your time in order to complete the course successfully and on time.

### **COURSE MATERIALS**

The major components of this course are:

1. Course Guide
2. Study units
3. Textbooks and References
4. Assignment File
5. Presentation

### **STUDY UNITS**

There are twenty study units in this course, as follows: Unit 1

Basic Definition of Environmental Security Unit 2 Origins of

Environmental Security Unit 3 Environmental Security

Analysis

Unit 4 Environmental Problems as a Threat and the United Nations' Security Council Unit 5

International Relation Theories applied to Environment

Unit 6 Theoretical Framework applied in Environmental Security Unit 7

Green Political Theory

Unit 8 Environmental Security versus Political Ecology Unit 9  
Understanding the Environment  
Unit 10 Development of International Environmental Law Unit 11  
Multilateral Environmental Agreements/Treaties Unit 12 National  
Environment  
Unit 13 Defining Environmental Conflict and Environmental Security Unit 14  
Linking Environmental Threat to Conflict Unit 15 Environmental Challenges  
Unit 16 Natural Resources and Conflict  
Unit 17 Conceptualization of Conflict  
Unit 18 Theories of Conflict  
Unit 19 Conflict Resolution Techniques  
Unit 20 Conflict Management

Each unit contains a number of tutor-marked assignments which will assist you in achieving the stated learning objectives of the individual units and of the course in general.

### **TEXTBOOKS AND REFERENCES**

Abolurin, Ade (2010), *Democratisation and Conflict Management in Nigeria*, Ibadan, John Archers (Publishers) Ltd.

Shedrack Gaya Best (ed)(2011), *Introduction to Peace and Conflict Studies in West Africa*, Ibadan, Spectrum books Ltd.

Barnett, Jon (2001), *The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era*, New York: Zed Books.

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

Osita C. Eze and Ogaba Oche, (eds)(2010), *Climate Change and Human Security*, NIIA, Lagos.

Ross, Marc (1993), *The Management of Conflict: Interpretations and Interest in Comparative Perspective*, New Haven: Yale University Press.

J. Vogler and M. Imber. (eds.)(1996), *The Environment and International Relations*, London: Routledge.

Shedrack Gaya Best (2011) "The Methods of Conflict Resolution and Transformation" in Shedrack Gaya Best (ed.) *Introduction to Peace and Conflict Studies in West Africa*, Ibadan: Spectrum Books Ltd.

Birgitta Johansson, Formas Fokuserar (ed.)(2009), Stockholm , "The UN's Climate Panel, the IPCC" in *Climate Challenge – the Safety's Off* .

Thomas Homer-Dixon (2009), *Environment, Scarcity, and Violence*, Princeton: Princeton University Press.

Wali, R.C. (2008), "Managing the Consequences of Conflict and its Post Traumatic Disorder" in Sylvester, V. M. and R. C. Wali (eds.) *Reading in Peace and Conflict Resolution*, Stirling-Horden Publishers (Nig) Ltd.

Westing, Arthur H., (ed.)(1989), "Comprehensive Security for the Baltic" An Environmental Approach. London, SAGE.

World Commission on Environment and Development (WCED) (1987), "Our Common Future", Brundtland Report.

### **ASSIGNMENT FILE**

There are two aspects to the assessment of this course. In this file, you will find all the details of the work you must submit to your tutor for marking. The marks you obtain for these assignments will count towards the final mark you obtain for this course. Further information on assignment will be found in the Assignment File itself, and later in this Course Guide in the section on assessment. There are many assignments for this course, with each unit having at least one assignment. These assignments are basically meant to assist you to understand the course.

### **ASSESSMENT**

There are two aspects to the assessment of this course. First, are the tutor-marked assignments; second, is a written examination. In tackling these assignments, you are expected to apply the information, knowledge and experience acquired during the course. The assignments must be submitted to your tutor for formal assessment in accordance with the deadlines stated in the Assignment File. The work you submit to your tutor for assessment will account for 30 per cent of your total course mark.

At the end of the course, you will need to sit for a final examination of three hours duration. This examination will account for the other 70 per cent of your total course mark.

### **TUTOR-MARKED ASSIGNMENTS (TMAS)**

There are 20 tutor-marked assignments in this course. You only need to submit some of the assignments. The best four (i.e. the highest four of what you submit) will be counted. Each assignment counts for 20 marks but on the average when the five assignments are put together, the score will count 30% towards your total course mark. The Assignments for the units in this course are contained in the Assignment File.

You will be able to complete your assignments from the information and materials contained in the reference books, reading and study units. However, it is always desirable at this level of your education to research more widely, and demonstrate that you have a very broad and in -depth knowledge of the subject matter. When each assignment is completed, send it together with a TMA (tutor-marked assignment) form to your tutor. Ensure that each assignment reaches your tutor on or before the deadline given in the Assignment File. If, for any reason you cannot

complete your work on time, contact your tutor before the assignment is due to discuss the possibility of an extension. Extensions will not be granted after the due date unless there are exceptional circumstances warranting such.

### **FINAL EXAMINATION AND GRADING**

The final examination for **PCR 851: Environmental Security and Conflict Resolution** will be of three hours' duration and have a value of 70% of the total course grade. The examination will consist of questions, which reflect the practice exercises and tutor-marked assignments you have previously encountered. All areas of the course will be assessed. Use the time between the completion of the last unit and sitting for the examination, to revise the entire course. You may find it useful to review your tutor-marked assignments and comment on them before the examination. The final examination covers information from all aspects of the course.

### **COURSE MARKING SCHEME**

**Table 1: Course marking Scheme**

<b>ASSESSMENT</b>	<b>MARKS</b>
Assignments	Four submitted, best three accounts for 30% of course marks.
Final examination	70% of overall course marks
<b>Total</b>	<b>100% of course marks</b>

### **HOW TO GET THE MOST FROM THIS COURSE**

In distance learning, the study units replace the university lecture. This is one of the great advantages of distance learning; you can read and work through specially designed study materials at your own pace, and at a time and place that suits you best. Think of it as reading the lecture instead of listening to the lecturer. In the same way a lecturer might give you some reading to do, the study units tell you what to read, and which are your text materials or reference books. Each of the study units follows a common format. The first item is an introduction to the subject matter of the unit, and how a particular unit is integrated with the other units and the course as a whole. Next to this is a set of learning objectives. These objectives allow you to know what you should be able to do by the time you have completed the unit. These learning objectives are meant to guide your study. The moment a unit is finished, you must go back and check whether you have achieved the objectives. If this is made a habit, then you will significantly improve your chances of passing the course. The main body of the unit guides you through the required reading from other sources. This will usually be either from the reference books or from a Reading section.

The following is a practical strategy for working through the course. If you run into any trouble, telephone your tutor. Remember that your tutor's job is to help you. When you need assistance, do not hesitate to call and ask your tutor to provide it.

1. Read this Course Guide thoroughly, it is your first assignment.
2. Organize a Study Schedule. Design a 'Course Overview' to guide you through the Course. Note the time you are expected to spend on each unit and how the assignments relate to the

units. Important information, e.g. details of your tutorials, and the date of the first day of the Semester is available from the NOUN Website. You need to gather all the information into one place, such as your diary or a wall calendar. Whatever method you choose to use, you should decide on and write in your own dates and schedule of work for each unit.

3. Once you have created your own study schedule, do everything to stay faithful to it. The major reason that students fail is that they get behind with their course work. If you get into difficulties with your schedule, please, let your tutor know before it is too late to get help.
4. Turn to Unit 1, and read the introduction and the objectives for the unit.
5. Assemble the study materials. You will need your set books and the unit you are studying at any point in time.
6. Work through the unit. As you work through the unit, you will know what sources to consult for further information.
7. Up-to-date course information will be continuously posted there.
8. Well before the relevant due dates (about 4 weeks before due dates), access the Assignment File on the NOUN Website and download your next required assignment. Keep in mind that you will learn a lot by doing the assignment carefully. They have been designed to help you meet the objectives of the course and, therefore, will help you pass the examination. Submit all assignments not later than the due date.
9. Review the objectives for each study unit to confirm that you have achieved them. If you feel unsure about any of the objectives, review the study materials or consult your tutor.
10. When you are confident that you have achieved a unit's objectives, you can start on the next unit. Proceed unit by unit through the course and try to pace your study so that you keep yourself on schedule.
11. When you have submitted an assignment to your tutor for marking, do not wait for its return before starting on the next unit. Keep to your schedule. When the Assignment is returned, pay particular attention to your tutor's comments, both on the tutor marked assignment form and also the written comments on the ordinary assignments.
12. After completing the last unit, review the course and prepare yourself for the final examination. Check that you have achieved the unit's objectives (listed at the beginning of each unit) and the course objectives (listed in the Course Guide).

## **TUTORS AND TUTORIALS**

There are 15 hours of tutorials provided in support of this course. You will be notified of the dates, times and location of these tutorials, together with the name and phone number of your tutor. Your tutor will mark and comment on your assignments, keep a close watch on your progress and on any difficulties, you might encounter and provide assistance to you during the course. You must mail your tutor marked assignments to your tutor well before the due date (at least two working days are required). They will be marked by your tutor and returned to you as soon as possible. Do not hesitate to contact your tutor by telephone, e-mail, or discussion board. The following might be circumstances in which you will find help necessary. Contact your tutor if:

- i. You do not understand any part of the study units or the assigned readings.
- ii. You have a question or problem with an assignment, with your tutor's comments on an assignment or with the grading of an assignment.

## **SUMMARY**

You should try your best to attend the tutorials. This is the only chance to have face-to-face contact with your tutor and ask questions which are answered instantly. You can raise any problem encountered in the course of your study. To gain the maximum benefits from course tutorials, prepare a question list before attending them. You will learn quite a lot from participating in the discussions.

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Unit 3 Green Political Theory

Unit 4 Environmental Security versus Political Ecology

### **Module 3**

Unit 1 Understanding the Environment

Unit 2 Development of International Environmental Laws

Unit 3 Multilateral Environmental Agreements/Treaties

Unit 4 National Environmental Law

### **Module 4**

Unit 1 Defining Environment Conflict and Environmental Security Unit 2

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Unit 4 Natural Resources and Conflict

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Unit 4 Conflict Management

### **Module 1 Structure**

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### **Unit 1 Basic Definitions of the Concept - Environmental Security**

#### **Unit 1 Structure**

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### **End of the Module Questions**



#### **1.1 Introduction**

Security is applied to different things that are valued (such as jobs, health, organizations, 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 militarization of environmental issues, but from 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.



## **1.2 Learning Outcomes**

It is hoped that by the end of unit, you will be able to

- i. Explain the meaning of Environmental Security
- ii. Identify the various Approaches to Environmental Security



## **1.3 Definition of Environmental Security**

The ambiguity of the concept of environmental security is made so by the vagueness of the twin words conjoined together – environment and security. The general meaning associated with the word ‘environment’ connotes externality, what is outside of or surrounds an entity. However, Boyden et al (1990, p. 314) have, perhaps, more accurately, defined environment as the living organisms and the physical and chemical components of the total earth system. The term security also suffered from

this vagueness but Soroos (1997, p. 236) seems to have resolved this by defining it “as the assurance people have that they will continue to enjoy those things that are most important to their survival and well-being.”

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 well being. 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, p. 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.



#### **1.4 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. The ecosystem is made up of land (which in the past four decades nearly 1/3 of

existing cropland has been abandoned because of erosion and over 25% of available land affected by some form of land degradation). The ecosystem is also made up of forests, which during the 1990s alone, 16.1 million hectares of natural forests were cleared each year and between 1990 and 2000, 3 million hectares of forests were cleared in Africa, Latin America and the Caribbean alone. Included within the ecosystem are freshwater (with 80% countries containing 40% of the world's population suffered from acute shortage and approximately half of the world's wetlands lost, human activities have also decimated coastal and marine areas with approximately half of the mangrove forests cleared and 58% of the world's coral reef threatened. The concentration of carbon dioxide in the atmosphere has greatly increased by 30%. Finally is the biodiversity with about 184 species of mammals, 182 species of birds, 162 species of fish and 1,276 species of plants critically endangered (UNEP, 2002, 2005). Ironically, Pirages and DeGeest (2004) have pointed out that our security as human beings is irrevocably tied with that of the environment. Based on this recognition, Dalby (2009, p. 172) has extended the notion of ecological security to embrace the idea of 'anthropocene security.' This means "security in terms of ecological understandings of humanity as a new presence in the biosphere that we are already changing drastically."

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 industrialized 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 ENCOP (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. Examples 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, p. 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 mobilize 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 receives 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 liberalization 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 Exercises 1

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

1. Environment includes both the \_\_\_\_\_ and \_\_\_\_\_ surroundings and their interactions. a. spiritual and physical b. physical and biological c. mental and emotional d. biological and mental
2. \_\_\_\_\_ reduces the amounts of economic resources available to governments and communities to implement policies and programmes. a. environment b. society c. war d. all of the above



## 1.5 Summary

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 popularize 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.

In summary, from the current debate on security and the environment in international relations, three distinct viewpoints that combine security and the environment are recognized. 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 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 globalization, 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.



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## 1.7 Possible Answers to SAEs

### Self-Assessment Exercises 1

1. b. physical and biological
2. c. war

## **Unit 2                   Origins of Environmental Security**

### **Unit 2 Contents**

2.1 Introduction

2.2 Learning Outcomes

2.3 Origins of Environmental Security

2.4 Origins of Environmental Security

2.5 Linking Environment to Security

2.6 Securitization of the Environment

2.7 The Transnational Element of Environmental Security

2.8 Summary

2.9 Possible Answers to Self assessment exercise



### **2.1 Introduction**

Security applies to different things that are valued by people such as jobs, health, organizations, 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 organizations such as the United Nations and NATO and non-governmental organizations such as the World Conservation Union and Greenpeace.



## 2.2 Learning Outcomes

At the end of this unit, it is expected that you should be able to:

- i. Describe the origin of environment security
- ii. link environment to security,
- iii. securitize the environment, and
- iv. explain the transnational element of environmental security.



## 2.3 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 Constean, David Suzuki and a number of international environmental non-governmental organizations 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 popularized 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 organization 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 Organization 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.



#### **2.4 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 utilization and protection of the human environment (Westing, 1989, p. 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, p. 20) includes not only sustainable utilization and protection of the environment but also minimization 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, p. 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, p. 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, p. 76, 1994, p. 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.

### Self-Assessment Exercises 2

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

3. The first major global environmental summit held in Stockholm in 1972 was the \_\_\_\_\_. a. United Nations Conference on the Human Environment (UNCHE) b. Organization of Petroleum Exporting Countries (OPEC) c. World Commission on Environment and Development's (WCED) d. none
4. \_\_\_\_\_ is a severe threat to human security and all life on earth. a. environmental security b. environmental degradation c. political issue d. peace-building



## **2.5 Securitization of the Environment**

Securitization 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 industrialization 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 demilitarization 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, p. 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 demilitarization of security thinking. In the long run, de-securitization, or politicization, may be preferable to securitization. Politicization as defined by Buzan et al., (1995, p. 15) is '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 mobilization against environmental degradation is at its peak now especially in the case of potentially dangerous man-made environmental degradation.



## **2.6 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 (CO<sub>2</sub>) 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 Exercises 3

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

5. \_\_\_\_\_ 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. a. Politicization b. demilitarization c. mobilization d. securitization
6. The issue of environmental security should be discussed at \_\_\_\_\_, regional, and global levels. a. state b. national c. international d. locally



## 2.7 Summary

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. In this unit, we have discussed the origin of environmental security, securitization 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.



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## **2.9 Possible Answers to SAEs**

### Self-Assessment Exercises 2

3. a. United Nations Conference on the Human Environment (UNCHE)
4. b. environmental degradation

### Self-Assessment Exercises 3

5. d. securitization
6. b. national

## **Unit 3 ENVIRONMENTAL SECURITY ANALYSIS**

### **Unit 3 Structure**

- 3.1 Introduction
- 3.2 Learning Outcomes
- 3.3 Growth of Environmental Security Analysis
- 3.4 Environmental Degradation as a Threat to Security
- 3.5 Summary
- 3.6 Reference/Further Reading
- 3.7 Possible Answers to Self assessment exercise



### **3.1 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, p. 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.



### **3.2 Learning Outcomes**

At the end of this unit, it is expected that the student should be able to:

- i. Discuss the growth of environmental security analysis
- ii. Identify the dissimilarities between security from violence and security from environmental threats.



### **3.3 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, p. 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, p. 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).



### **3.4 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 organizations are mobilized, 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) Organizations that provide protection from violence differ greatly from those engaged in environmental protection. Citizens typically delegate the goal of achieving national security to organizations far removed from the experience of civil society. Military organizations are secretive, extremely hierarchical, and centralized; they typically deploy expensive, highly specialized, and advanced technologies. The specialized professional group is trained to kill and destroy. Responding to environmental problems requires opposite approaches and organizations. 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 Exercises 4

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

7. \_\_\_\_\_ became the principal concern of foreign affairs. a. Military deterrence b. degradation c. security d. survival
8. Threats of violence are highly in that organizations are mobilized, weapons procured, and wars waged with relatively definite aims in mind. a. unintentional b. highly c. mobilized d. intentional



### 3.5 Summary

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.

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.



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### **3.7 Possible Answers to SAEs**

Self-Assessment Exercises 4

- 7. a. Military deterrence
- 8. d. intentional

## **UNIT 4 ENVIRONMENTAL PROBLEMS AS A THREAT AND THE UNITED NATIONS' SECURITY COUNCIL (UNSC)**

### **CONTENT**

- 4.1 Introduction
- 4. 2 Learning Outcomes
- 4. 3 Environmental Problems as a threat and the United Nations' Security Council (UNSC).
- 4.4 Summary
- 4.5 References, Further Readings, **Web Sources**



### **4.1 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 organizations, business and non-governmental organizations 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 securitize 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 have 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.



## **4.2 Learning Outcomes**

At the end of this unit, the student should be able to

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



## **4.3 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, p. 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. 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, p. 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, p. 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 authorizing “Operation Restore Hope” (Murphy 1998-1999, p. 1181).

## Self-Assessment Exercises 5

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

9. Environmental problems could either be the \_\_\_\_\_ cause of the conflict or may exacerbate existing socio-economic tensions. a. secondary b. tertiary c. primary d. all of the above

10. Environmental changes are a security threat because it impacts directly on \_\_\_\_\_ and well-being. a. environment b. well-being c. human life d. decision



### 4.4 Summary

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. 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.



### 4.5 References, Further Readings, Web Sources

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Available [www.cfr.org/content/publication/attachments/Climatechange\\_CSR32.pdf](http://www.cfr.org/content/publication/attachments/Climatechange_CSR32.pdf).

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.

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Scott, S. V., (2009), “Securitizing Climate Change: International Legal Implications” in Harris, P. G. (ed.) *The Politics of Climate Change: Environmental Dynamics in International Affairs*, New York, Routledge, New York.

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Nairobi, Kenya: UNEP).



## 4.6 Possible Answers to SAEs

Self-Assessment Exercises 5

9. c. primary

10. c. human life

## GLOSSARY

### Environmental Security

This can be defined as the preservation of the living organisms and the physical and chemical components of the total earth system for the benefit of generations.

### End of the Module Questions

1. Environmental security can be said to be one of the new non-traditional security issues that helps us broaden and deepen the concept of security. a. True; b. False
2. Ambiguity associated with the concept of environmental security results from the vagueness of the words conjoined. What are these words?
3. The concept and study of environmental security emerged in the early \_\_\_\_\_1960s.
4. From the post-World War II period until late in the 1980s, the U.S. and USSR faceoff was based essentially on what was known as \_\_\_\_\_ (MAD) associated with nuclear weapons. Maintaining Associated Deals b. Mutually Assured Destruction. C. Mutually Assured Destiny. d. Management of Atomic Devices

Answers

1. a. True
2. Environment and security
3. 1960s
4. b. Mutually Assured Destruction

## MODULE 2

Unit 1 International Relations Theories applied to Environment

Unit 2 Theoretical Framework applied in Environmental Security

Unit 3 Green Political Theory

Unit 4 Environmental Security versus Political Ecology

Glossary

**End of the Module Questions**

## **UNIT 1 THEORIES APPLIED TO ENVIRONMENT**

### **CONTENTS**

1.1 Introduction

1.2 Learning Outcomes

1.3 Various International Relation Theories applied to Environment

1.4 Summary

1.5 References/Further Reading

1.6 Possible Answers to Self assessment exercise

Glossary

**End of the Module Questions**



### **1.1 Introduction**

There are various International Relations Theories that can be applied to the issue of environment. Though many of these theories only deal with the environment indirectly and peripherally, it is important to review them as they relate to the environment.



### **1.2 Learning Outcomes**

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

- i. Discuss the various international theories that applies to environment

- ii. From your understanding of the environment distinguish the theories that best apply to the environment.



### 1.3 Various International Relations Theories on Environment

- 1.3.1 Realism:** The two main concepts of Realist theory are power and the national interest. Realism assumes that states and their populations need natural resources to survive. But there is competition between states for these scarce resources, so war is often the result of such competition and conflict. It leads to "the struggle for power and peace," as Hans Morgenthau noted. Extreme versions of Realism, such as the geopolitical theories of Major-General Karl Haushofer, look at the security implications of strategic raw materials. For example, the German and Japanese expansion in the 1930s was partly a search for raw materials. Even President George Bush's intervention in Iraq is seen as an attempt to secure the oil resources of the Middle East.
- 1.3.2 Malthusianism:** Thomas Malthus believed that because population grows in a geometric progression and food production in arithmetic progression, it would come a time when population growth would inevitably outstrip a country's food production and starvation would result. Although this did not happen because of technological progress, but the opposite is true today. Instead of a population explosion we are experiencing population implosion. There is a severe decline in the fecundity rate in the rich countries and also a decline in the rate of population growth in the developing world.
- 1.3.3 Liberalism:** Liberalism focuses on cooperation and sees people and states competing for scarce environmental resources. A liberal philosophy tends to treat states as competitive participants (not unlike corporations) in markets they have established among themselves. For example, the Stockholm Declaration of 1972 forbids states from inflicting environmental damage on each other, because this would be a violation of the state's sovereignty.

- 1.3.4. Neoliberal Institutionalism:** This also focuses on cooperation. In this approach, the states have a broader sense of self-interest and focus on the public good. This self-interest includes norms, values, principles and expectations which are the ingredients of International Regimes. The states also seek mutually acceptable compromises through international negotiations. The building of International Regimes can benefit the global environment such as the Kyoto Protocol of the United Nations' Framework Convention on Climate Change.
- 1.3.5 Eco-anarchism:** This philosophy which is humanistic and leftist is propounded by Murray Bookchin. Eco-anarchists believe that “the state and ‘big’ capital are inimical to the autonomy of humans and nature”. Therefore, to preserve nature, it is necessary to break society into “small, relatively self-sufficient units”. And to help nature, these units must practice altruism and mutual aid.
- 1.3.6. Social Naturalism:** This, sees “culture and nature as bound together” in a kind of social community. This community in a broad sense includes people, animals, plants, ideas, language, history and the ecosystems. Cooperation between humans and nature is a given. The objective of social naturalism is stated as “the creation of a cooperative ecological society found to be rooted in the most basic levels of being”. This philosophy strongly resembles the worldview and beliefs of certain indigenous peoples. An example is the Navajo that sees the “world as being of an interconnected piece”.
- 1.3.7 Sustainable Growth:** This approach states that the growth in incomes results in economic development. As buttressed by the 1990s World Bank President Barber Conable that “market forces and economic efficiency were the best way to achieve the kind of growth which is the best antidote to poverty”. The proponents of this theory believe that when the poor of the developing countries become richer then it will reduce pressure on the environment. For example, they will be more able and willing to pay the costs of keeping air and water clean.
- 1.3.8 Sustainable Development:** This first appeared in a report issued by the International Union for the Conservation of Nature and Natural Resources (IUCN) in 1980 but was internationally recognized in a 1987 report published by the World Commission on Environment and Development (WCED: 8) titled *Our Common Future*. This report noted that there was no inherent contradiction between environment and development.

Yet there were limits to growth. The concept of sustainable development does imply limits – not absolute limits but limitations imposed by the present state of technology and social organizations on environmental resources, and by the ability of the biosphere to absorb the effects of human activities. This approach focuses on the “needs” of the world's poor and demands for sufficient transfer of wealth from the rich countries to the poor, so that the developing countries can deal with the problem of poverty and environmental damage.

**1.3.9 The Steady-State Economy:** This approach focuses not on more goods, but on the durability and longevity of goods as proposed by Herman Daly. He states that more goods are wasteful and cause environmental degradation and also calls for recycling and minimal exploitation of biological and physical resources. Daly's unit is the nation-state, and each country must seek to be self-sufficient and spend only its own natural resources.

**1.3.10 Radical Redistribution:** This theory believes that environmental degradation is the result of excessive wealth, the injustices of capitalism and the income inequality between the rich and the poor nations. It therefore states that: 1) the rich must drastically reduce their consumption so as not to burden the earth's resources and environment and 2) the rich must transfer massive amounts of capital and technology so that the poor countries can grow economically and preserve the environment.

**1.3.11 Eco-socialism and Eco-Marxism:** Eco-socialists and eco-Marxists blame capitalism for environmental degradation. Capitalism is seen as inherently anti-ecological and anti-nature because by always seeking cheaper raw materials and fatter profits, they impose wastes on nature. Hence, the mode of production matters for the environment. While eco-socialist programme relies heavily on revolutionary action and the demise of capitalism.

**1.3.12 Eco-feminism:** Although many eco-feminists are not Marxists, they are all leftists or liberal in their philosophical orientation. For eco-feminists “the domination of women and nature are inextricably linked”. Some call for liberal reform while others espouse radical redistribution of resources to women, so that they can develop and protect the environment. According to Selleh (1997, p. 14), “Feminine suffering is universal

because wrong done to women and its ongoing denial fuel the psycho-sexual abuse of all others - races, children, animals, plants, rocks, water, and air”. Salleh therefore notes that, eco-feminism offers a comprehensive progressive approach to the ecological crisis.

**1.3.13 Eco-centrism:** This theory believes that humans cannot survive without nature. It idealizes nature and regards it as a source of eternal truth and beauty. Man's exploitation of nature could destroy both nature and themselves. The destruction of nature would result in both biological and spiritual impoverishments. So, many eco-centrists are advocates of wilderness or “wildness” as Thoreau (1862) stated that: “In wildness is the preservation of the world”.

**1.3.14. Bio-politics:** Michel Foucault proposed the theory of bio-politics. According to Mitchell Dean, bio-politics “is concerned with matters of life and death, with birth and propagation, with health and illness, both physical and mental, and with the processes that sustain or retard the optimization of the life of a population”. Dean further stated that bio-politics “must also concern the social, cultural, environmental, economic and geographic conditions under which humans live, procreate, become ill, maintain health or become healthy, and die. ... It is concerned with the biosphere in which humans’ dwell”. All institutions and practices concerned with exploiting, managing, and protecting the environment are expressions of bio-politics.

### Self-Assessment Exercises 1

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

1. \_\_\_\_\_ theory believes that environmental degradation is the result of excessive wealth, the injustices of capitalism and the income inequality between the rich and the poor nations. a. Eco-centrism b. Bio-politics c. Sustainable Growth d. Radical Redistribution

2. who proposed the theory of bio-politics? a. Thoreau b. Herman Daly c. Michel Foucault d. Selah



## 1.4 Summary

Above are some of the basic environmental philosophies that interpret the global environment and structure practices and policies. Many of these philosophies are in contrast and conflict with one another and result in very different interpretations of the reasons for environmental degradation. Some governments and countries may adhere to certain philosophies more than others.

In this unit, we have examined the various international theories that apply to the environment. There is a sizeable literature that helps to broaden the understanding of security issues to include environmental concerns. It was really in the post-Cold War era that the world saw a dramatic increase in international activities around environmental issues.



## 1.5 References, Further Readings, Web Sources

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World Commission on Environment and Development (WCED) (1987), "Our Common Future", Brundtland Report.



## 1.6 Possible Answers to SAEs

Self-Assessment Exercises 1

1. d. Radical Redistribution
2. c. Michel Foucault

## UNIT 2 A THEORETICAL OVERVIEW OF ENVIRONMENTAL SECURITY

### UNIT 2 CONTENTS

- 2.1 Introduction
- 2.2 Learning Outcomes
- 2.3 A Theoretical Overview of Environmental Security
- 2.4 Summary
- 2.5 References, Further Readings, Web Sources
- 2.6 Possible Answers to Self assessment exercise



## **2.1 Introduction**

Environmental security theory because of its own distinctive perspective provides an explanation to the ecological crisis facing humanity and says that focusing on the crisis is possibly the most important issue for human society to deal with and provide a normative basis for dealing with it.



## **2.2 Learning Outcomes**

At the end of this unit, the student should be able to understand the following:

- i. Theoretical framework applied in environmental security.
- ii. Explain the views from which environmental security was drawn from.
- iii. Explain the developments that led to the emergence of environmental security as an important concept.



## **2.3 A Theoretical Overview of Environmental Security**

Environmental security draws its views from both Green Philosophy and Ecological Theory where systemic interdependence, complexity, flux, uncertainty, harmony and sustainability are key themes and emerged as an important concept in security studies due to some interrelated developments beginning in the 1960s. The first of these was the growth of environmental consciousness in developed countries. Notable among these was the publication in 1962 of Rachel Carson's widely read book *Silent Spring* which explained the impacts of pesticide DDT on animals and the food

chain. The second major publication leading to the emergence of environmental security was from the 1970s by a number of scholars to critique orthodox security discourse and practices by highlighting their inability to manage environmental risks to national and international security. This is the origin of the critical component of environmental security (Barnett, 2007:188). Among the first scholars to do this were Richard Falk's *This Endangered Planet* and Harold and Margaret Sprout's *Towards a Politics of Planet Earth*.

Richard (1971) and Harold *et al* (1971) argued that the international political systems need to comprehend and collectively respond to common environmental problems as they pose threat to international stability and national well-being. In 1977, Lester Brown also contested the meaning and practice of national security with his World watch paper titled *Redefining National Security*. Brown highlighted the inability of exclusionary national security institutions and in particular, the military, to manage common environmental problems and suggested that disarmament and budgetary reallocations are important initiatives for resolving environmental degradation. Brown identified four biophysical systems under stress namely fisheries, grasslands, forest, croplands and also discussed the problem of climate modification relating to food security. Like Falk and Sprouts, his paper did not seriously consider the potentials of environmental change to cause conflict. In 1983, Richard Ullman published an article titled "Redefining Security" in which the idea that environmental change might cause war was seriously proposed. Ullman (1983, p. 129) defined a national security threat as anything which can quickly degrade the quality of life of the inhabitants of a state or which narrows the choices available to people and organizations with the state. He also suggested that environmental degradation is likely to make third world governments more militarily confrontational in relations with the advanced, industrialized nation and considered the possibility of illegal immigration by environmental refugees (now a popular concern). In 1986, Norman Myers considered food shortages, fisheries depletion, water scarcity, climate change, deforestation to be issues likely to induce conflict and environmental refugee also figured prominently. Like Brown's, Myers (1986, p. 251) also explored the costs of military security relative to the costs of environmental security.

Environmental security radically challenges security thinking in that, it demands a shift in the reason for action from individual and national interest, to a concern for the overall welfare of the entire socio-ecological system of the planet (Barnett, 2007, p. 188). This radicalism explains why ecological security view is on the periphery of environmental security thinking. According to Barnett

(2007), Environmental Security focuses on common security. The causes and impacts of some of the environmental problems are not confined to the borders of nation-states. Some problems such as ozone depletion and climate change are global in nature, in that, they are caused by cumulative emissions of gases from many countries which in turn affect many other countries. But it is not to say that all the countries are equally responsible for them, or that all the countries are equally at risk from these problems. This means that groups of countries with similar environmental problems cannot easily unilaterally achieve environmental security and their common national security interests require collective action. Even though, many environmental problems are to some degree 'common', no two countries have exactly the same interest and all have sovereign rights.

### Self-Assessment Exercises 2

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

3. Environmental Security focuses on common security. a. sovereign rights b. common security c. collective action. d. none
  
4. Environmental security draws its views from both \_\_\_\_ Philosophy and Ecological Theory.  
a. Green; b. Black; c. Blue. d. none of the above



## 2.4 Summary

Environmental security is one of the new non-material security issues and is sometimes a critical security project which is used to raise the following questions – who and what is being secured and from what risks. For most proponents of environmental security, it is used to bridge the gap between security researchers and policymakers and those working in the environmental field, hence creating new fusion of theory and new opportunity for dialogue. It can only be dealt with in joint and multilateral procedures and mechanisms.

In this unit, we discussed environmental security. Environmental security as noted is a comprehensive approach to international and national security and must transcend the traditional emphasis on military and armed competition.



## 2.5 References, Further Readings, Web Sources

Barnett, J. (2007), “Environmental Security” in Alan Collins, (eds), *Contemporary Security Studies* Oxford University press.

Brown, L. (1997), “Redefining National Security”, *Worldwatch Paper*, No. 14 Washington, Worldwatch Institute.

Meyers, N. (1986), “The Environmental Dimension to Security Issues”, *The Environmentalist*, 6/4.

Ullman, R. (1983), “Redefining Security”, *International Security*, 8/1.



## 2.6 Possible Answers to SAEs

### Self-Assessment Exercises 2

3. b. common security

4 a. Green

## UNIT 3 THE GREEN THEORY

### UNIT 3 CONTENTS

3.1 Introduction

3.2 Objectives

33 The Green Political Theory

3.4 Summary

3.5 References, Further Readings, and Web Sources

3.6 Possible Answers to Self assessment exercise



### 3.1 Introduction

Green Political Theory (GPT) is perhaps the most recent theory even though the environmental issues around which a Green position emerged is not quite prominent in the public eye as they were

in the early 1990s. It is from this that the theorization of what global ecological crises portend for global politics matured. From mid-1970s, Green politics emerged as a significant political force in many countries. Most of the writings of Green philosophers (thinkers) and the practices of Green movements contain both the analyses of the dynamics of global politics and the normative visions concerning the restructuring of global politics. Greens regard the framework of the existing political, social, economic and normative structures as the main origin of environmental crisis and also contend that they are structures which need to be challenged and transcended.



### **3.2 Learning Outcomes**

It is expected that at the end of this unit, the student should be able to:

- i. Explain the basis for the Green theory
- ii. Discuss the distinctive arguments of the Green Political Theory
- iii. Understand how global political structures can be reformed to prevent further destruction of the planet.



### **3.3 Green Political Theory**

The base for Green ideas about international relation is the Green political theory. The three distinctive arguments of this theory include:

- 1) That the defining characteristics is ecocentrism (the rejection of an anthropocentric world-view which places moral value only on humans in favor of the one which places independent value on ecosystem and all living beings). This empirically view the world as ontologically composed of inter-relations rather than individual entities. Thus all beings are fundamentally embedded in ecological relationship and are not free to dominate the rest of nature. Ecocentrism is about emancipation writ large and has four central ethical features which collectively distinguish it from ethical position towards the environment. These features include: resource conservation, human welfare ecology, preservationist and animal liberation. Ecocentrism recognizes the full range of human interests in the non-human world as opposed to narrow, instrumental, economic interests in resource use; the interests of the non-human

community; the interest of future generations of humans and non-human and finally values populations, species, ecosystems and ecosphere as well as individual organisms.

- 2) That the exponential economic growth experienced during the last two centuries is the root cause of the current environmental crisis. The book by Meadows *et al*, 1972 titled *The limits to growth* is the impetus for this argument. This book argues that the exponential economic and population growth of human societies, was producing a situation where the world was rapidly running out of resources to feed people or to provide raw material for continued industrial growth and thus exceeding the absorptive capacity of the environment to assimilate the waste products of industrial production. For Dobson (1990), three arguments are important – first, technological solutions may not work as they may postpone the crisis but cannot prevent it from occurring at some point; second, the dangers stored up over relatively long period of time can suddenly have catastrophic effect and finally, these problems associated with this growth are all inter-related. According to global ecology writers, development is inherently anti-ecological because it undermines sustainable practices and takes control over resources away from those living sustainably in order to recognize commodity production and increases inequality thereby producing social conflicts.
- 3) The argument about why the environment is being destroyed by humans. This is identified as decentralization and it is important to the Green political theory. The argument here is that the nation-state is both too big and too small to deal effectively with sustainability and that the new regional and global structures (alongside decentralization within the state) are needed to coordinate effective responses. The best arguments for decentralization is by John Dryzek's *Rational Ecology* (1987) which summaries the advantages of decentralization as small-scale communities are more reliant on the environmental support services in their immediate locality and also more responsive to disruptions in that environment. They develop a social ontology which determines pure instrumental ways of dealing with the rest of nature identified as the cause of environmental problems. Hence, all political arrangements require some form of coordination of action between political units to respond to trans-boundary environmental problems. Greens therefore, are arguing for a system where power is decentralized as possible to make environmental management more practicable.

### Self-Assessment Exercises 3

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes

5. Ecocentrism is about emancipation writ large and has four central ethical features which collectively distinguish it from ethical position towards the environment. a. Ecocentrism b. ontology c. liberation d. decentralization
6. According to Green ideology, the exponential economic growth experienced during the last two centuries is the root cause of the current environmental crisis? a. True. b. False



### 3.4 Summary

Greens argue primarily for decentralization of political communities below the nation-state rather than new forms of global political authority and also economic and social organization. For the Greens, the modern human societies are ecologically unsustainable and their focus is on the way in which the prevailing political structures and processes contribute to this destruction. Thus, the purpose of this theory is to understand how these global political structures can be reformed to prevent such destruction and provide for a sustainable human relationship to the planet and the rest of its inhabitants.

In this unit, we discussed the Green Political Theory. The key strands of Green politics which provide explanation for the destruction of nature by human species and a normative foundation for resisting this destruction and create sustainable societies are – ecocentric ethics, limits to growth and decentralization of power. Dobson (1990) stated that, the vital distinction between Green politics and environmentalism is the fact that environmentalists recognize the present political, social, economic and normative structures of world politics and try to find ways to ameliorate environmental problems within these structures, but Greens regard these structures as the major cause of the environmental crisis. The assumption is that the states-system can respond effectively to these problems but Green politics is not convinced about the claim that the states-system and other structures of the world politics can provide such a response. Hence, Greens focuses on the need for global-scale political formation rather than institutional tinkering.



### 3.5 References, Further Readings, Web Sources

Dobson, A. (1990), “Green Political Thought”, London: Unwin Hyman.

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Meadows, D. H., Meadows, D. L., Randers, J. and Behrens III, W. W. (1972), “The Limits to Growth”, A Report for the Club of Rome’s Project on the Predicament of Mankind, New York: Universe Books.

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### 3.6 Possible Answers to SAEs

#### Self-Assessment Exercises 3

5. a. Eco centrism
6. a. True

## UNIT 4 ENVIRONMENTAL SECURITY VERSUS POLITICAL ECOLOGY

### CONTENT

- 4.1 Introduction
- 4.2 Objectives
- 4.3 Environmental Security versus Political Ecology.
- 4.4 Summary
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- 4.6 Possible Answers to Self assessment exercise



### 4.1 Introduction

The debate on environment security has been mainly about the relationships between environmental change and violent conflict particularly in the South. Homer-Dixon (1994:5) argues that there is a relation between environmental scarcity (eco-scarcity) and largescale conflict between and within

countries. Political ecology does not view the environment just in terms of the destruction of nature or the social construction of the environment, but examines the ways that nature is “produced” by human and non-human actors. For political ecologists, it is important to examine the activities of government ministries, scientists, international NGOs, local communities, private business and international financial institutions as “producers of nature”



## 4.2 Learning Outcomes

At the end of this unit, the student should be able to

- i. Provide a general overview of the environmental debate
- ii. Provide the perspective of political ecology on the environmental debate



## 4.3 Environmental Security versus Political Ecology

The underlying principle behind environmental security is that with an increasing human population and increasing growth in the global economy, there will be increased pressure on the world’s natural resources. This pressure will lead to more frequent and acute conflicts within and between countries, especially in the developing world since it is believed to be more vulnerable to environmental change and scarcity. The Swiss based Environmental Conflicts Project (ENCOP) and a research group led by Thomas Homer-Dixon, at the University of Toronto (informally known as the Toronto Group) observed that the world will face shortages of major natural resources such as land for growing food, fresh water, oil, forests and so on, and as a result of such eco-scarcities the world will experience more violence in the form of rebellions, ethnic clashes and unrest especially in the developing world (Homer-Dixon, 1999; Homer-Dixon, 1994; and Homer-Dixon 1991). Homer-Dixon’s research group suggests that developing countries will be more vulnerable to environmental change than rich states, and will therefore be more likely to experience large scale violence and acute conflict. Homer-Dixon particularly argues that the developing world will experience four main pressures namely reduced agricultural production, economic decline, population displacement and disruption of regularized social relations as a result of atmospheric, terrestrial and aquatic environmental pressures; and as human populations grow, governments will have less opportunity to intervene through the use of market based mechanisms to alleviate the effects of environmental change (Homer-Dixon, 1991, p. 76). Along with Kaplan, the environmental security argument is

heavily influenced by Malthusian ideas about the relationships between population growth, eco-scarcity and violence. Kaplan (1994) argued that the environment was going to be the national security issue of the 21st century and suggested that disease, overpopulation, crime, resource scarcity, refugees and the erosion of nation-states (amongst other things) will lead Africa into some kind of violent barbarism. Also, Matthew, et al (2002, p. 421) suggest that the environment can be regarded as a security issue because resource scarcity is an important cause of conflict which implies that better resource management practices might contribute to peace and stability. The environmental security argument has been criticized from a number of perspectives. For instance, Gleditsch (1998, p. 381), questioned the methodology used and observed that the research of the Toronto Group failed to state clearly whether it is the issue of environmental degradation or environmental scarcity that causes conflict and noted that the group did not sufficiently acknowledge the role of human ingenuity in coping with environmental change and scarcities. Haas (2002, p. 1) further argues that notions of environmental security are flawed and selectively brought into play by the policy community and by inattentive academics to justify pre-existing state-oriented goals. He contends that resource scarcity and environmental security remain important ideas in international relations and security studies precisely because they justify US foreign policy and the foreign policies of other states, especially in the form of intervention (Haas, 2002). Similarly, Litfin (1999, p. 359) points to the vagueness in the phrase environmental security questioning who and what are to be secured, and if environmental security includes questions about over consumption, uneven development or even about the notion of nature itself?

Political ecologists have seriously engaged with the work on environmental security. Robbins (2004) suggests that political ecology can provide a means of moving away from viewing the environment just in terms of the destruction of nature or the social construction of environments. For Robbins (2004), political ecology allows us to examine the ways that nature is “produced” by human and non-human actors. Therefore, it is important to examine the activities of government ministries, scientists, international NGOs, local communities, private businesses and international financial institutions as “producers of nature”. For political ecologists, it is important to investigate the workings of complex networks of actors involved in managing the environment. This in turn reveals that ecological systems are power laden rather than politically inert because the multiple explanations and interpretations of how ecosystems work and what factors affects them are invested with the political, social and economic meanings (Robbins, 2004). But Peluso and Watts (2001, p. 3)

argue that political ecology provides the tools for thinking about the conflicts and struggles as created by the forms of access to and control over resources. Also observed is the fact that political ecology takes note of a multitude of actors and examines the impacts of their activities (Neumann, 1998, 2001). From the political ecology approach, it is obvious that the assumption that environmental scarcity produces conflict needs to be challenged. It is clear that abundance of resources and not just scarcity also creates new forms of conflict over who has access to and control over them (Peluso and Watts, 2001; Nordstrom, 2004).

#### Self-Assessment Exercises 4

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

7. \_\_\_\_\_ research group suggests that developing countries will be more vulnerable to environmental change than rich states, and will therefore be more likely to experience large scale violence and acute conflict. a. Homer-Dixon's b. Peluso and Watts c. Matthew, et al d. Kleitsch
8. Political ecologists have seriously engaged with the work on \_\_\_\_\_. a. economic meanings b. non-human actors c. environmental security d. vagueness



#### 4.4 Summary

The environmental security debate is highly influential in terms of thinking about how environmental change might produce violence as a result of environmental scarcity. This in turn is related to the increasing fashion for thinking about underdevelopment as a source of danger for the North, which informs foreign policy making towards Sub-Saharan Africa. However, while some environmental processes might well appear to conform to the environmental security model, it is important to more carefully examine the complex processes that produce particular forms of environmental stress, poverty, violence and resource extraction. But the political ecology critique also focuses on the resource itself (in terms of its abundance) as a cause of violence in the South.

In this unit, we discussed the various critiques provided by both environmental security and political ecology on how environmental change could lead to conflict. However, the analyses provided by

political ecology remain useful in terms of analyzing the complex array of interest groups and stakeholders engaged in socially, politically and economically producing nature.



#### 4.5 References, Further Readings, and Web Sources

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#### 4.6 Possible Answers to SAEs

##### Self-Assessment Exercises 4

7. a. Homer-Dixon’s
8. c. environmental security

## End of the Module Questions

1. Realist theory is built on two main concepts, which are \_\_\_\_ and the \_\_\_\_\_.
2. \_\_\_\_\_ is the philosophy that is humanistic and leftist. It was propounded by Murray Bookchin, who believed that “the state and ‘big’ capital are inimical to the autonomy of humans and nature”.
3. How does environmental security radically challenge conventional security thinking?
4. What is securitization of the environment?
5. How can environmental degradation pose threats to man?
6. Environmental security can lead to an increasing human population and increasing growth in the global economy. this can also ultimately result in increased pressure on the world’s natural resources, leading ultimately to conflict. a. True; b. False

### Answer

1. Power, national interest.
2. Eco-anarchism
3. It alters security attention given to individual and national interest, and places the focus on the overall welfare of the entire socio-ecological system of the planet.
4. Securitization of the environment is a phrase used to describes ways of handling environmental issues where threats to the environment are seen as urgent and immediate, requiring a quick response at top political level.
5. Environmental degradation may kill people and may reduce human well-being, but not all threats to life and property are threats to security. It can also lead to disease, aging, accidents routinely destroy life and property but they are not threats to security. Earthquake or hurricane causes extensive damage, it is a natural disaster, not an event threatening security.
6. a. True

## MODULE 3

Unit 1 Understanding the Environment

Unit 2 Development of International Environmental Law

Unit 3 Multilateral Environmental Agreements/Treaties

Unit 4 National Environmental Laws

Glossary

**End of the Module Questions**

## **UNIT 1 UNDERSTANDING THE ENVIRONMENT**

### **UNIT 1 CONTENTS**

1.1 Introduction

1.2 Learning Outcomes

1.3 Understanding the Environment

1.4 Impact of Climate Change

1.5 What is Climate Change?

1.6 The Climate System

1.7 Greenhouse Effect and Global Warming

1.8 Contribution of Human Activities to Climate Change Compared with Natural Influences

1.9 Changing Global Temperature

1.10 Changes in extreme events like heat waves flood and drought due to greenhouse warming

1.11 Impacts of Climate Change

1.12 Summary

1.13 References, Further Readings, and Web Sources



### **1.1 Introduction**

The primary environmental threat in the 21<sup>st</sup> century which is currently enjoying attention is climate change, because it is now realized that human-induced climate change is the most important environmental change facing humanity with implications for food security, natural ecosystem,

freshwater supply, health etc. The expected severity of the impacts will lead to environmental refugees and with competition over scarce resources, will result to conflict.



## **1.2 Learning Outcomes**

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

- i. Define the environment
- ii. Explain climate change
- iii. Explain what constitute the climate system
- iv. Discuss the various effects of human activities on the climate system.



## **1.3 Understanding the Environment**

Environmental Protection Agency (EPA) defines the environment as "the sum of all external conditions affecting the life, development and survival of an organism." China's original 1979 Law on Environmental Protection uses the term environment to encompass "the air, water, land, mineral resources, forests, grasslands, wild plants and animals, aquatic life, places of historical interest, scenic spots, hot springs, resorts and natural areas under special protection as well as inhabited areas of the country". In the 1991 *Beijing Declaration on Environment and Development*, representatives of the 41 developing countries at that year's Ministerial Conference of Developing Countries on Environment and Development, agreed that the more serious and widespread environmental problems are air pollution, climate change, ozone layer depletion, drying up of fresh water resources, pollution of rivers, lakes and the marine environment including the coastal zones, marine and coastal resources deterioration, floods and droughts, soil loss, land degradation, desertification, deforestation, loss of biodiversity, acid rain, proliferation and mismanagement of toxic products, illegal traffic of toxic and dangerous products and wastes, growth of urban agglomerations, deterioration of living and working conditions in urban and rural areas, especially of sanitation, resulting in epidemics and other such problems. Senator Al Gore, in his 1992 book *Earth in the Balance*, tried to identify, categorize, and differentiate environmental threats according to their

presumed reach and impact. Using an ordering scheme similar to that commonly used to characterize different levels of military operations; he described these environmental threats as local, region and strategic threats. The local (or tactical) threats include water pollution, air pollution, and illegal waste dumping. Problems such as acid rain, the contamination of underground aquifers, and large oil spills are fundamentally regional threats, while global warming and ozone depletion are strategic. In turn, Eileen Claussen, the former United States Assistant Secretary of State for oceans and international scientific and environmental affairs, defined global environmental threats as those "which are human-caused and have, or can be expected to have, serious economic, health, environmental, and quality of life implications". These include climate change, the production and trade of highly toxic chemicals, the loss of biodiversity, ozone depletion, and marine degradation. Of all these changes, climate change poses the greatest challenge globally.



#### **1.4 What is Climate Change?**

According to Okali and Eleri (2004), climate is the synthesis of the weather in a given place over a period of at least 30 years. These constituent elements of weather include the following—temperature, rainfall, dew, humidity, wind, sunshine, mist, haze and clouds. The collective expression of these elements over time becomes the climate of a place. Thus, climate change is a change in the collective pattern of expression not just one element of the weather. Over the millennia, the earth had experienced climate changes over varying time scales ranging from the periods of extreme minimum temperatures corresponding to the global ice ages to the warmer periods in cycles of roughly 100,000 years over the past 800,000 years called the “glacial” and “interglacial” periods respectively (Okali and Eleri, 2004). The coldest period of the last ice age occurred some 10,000 years ago with an average annual global temperature of 4 – 5°C, presently, we are in the interglacial period. Okali and Eleri (2004) also noted three major reasons why climate change is receiving global attention. These include:

- a) That global warming is occurring more rapidly than past rises in temperature associated with natural climate change. During the 20<sup>th</sup> century, the global mean surface temperature increased by 0.6 +/- 0.2°C (0.7 °C in Africa), more than during any other century in the last 1,000 years. The 1990s was the warmest decade of the millennium with 1998 the hottest year. Scientists have predicted the global mean temperature may rise between 1.4 °C and 5.8 °C between 1990 and 2100.

- b) There is a strong correlation between the current global warming and increases in the atmospheric concentration of a set of heat-trapping gases known as greenhouse gases (GHGs) which consist mainly of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), halocarbons (also ozone-depleting), ozone (O<sub>2</sub>) itself and water vapour to a negligible extent. The atmospheric concentration of the gases has been on the increase since the beginning of the industrial revolution in 1860s. Deforestation also contributed to emissions besides industries. They reduced the natural ways by which gases such as CO<sub>2</sub> are removed from the atmosphere.
- c) The realization that the current climate change is caused by human activities at both industrial and subsistence levels (for example cutting and burning of firewood). The major human activities driving global change stated by Okali (2004) include:

Growth in human populations; increasing level of consumption of resources by human societies; changes in technology (especially information technology which is promoting globalization); economic advances, increasing per capita resource consumption; and changes in organization of human societies.

The major physical impacts of human activities in the earth's environment which interact with the socioeconomic systems to define the human environment are:

Changes in land use and land cover (urbanization, agriculture and forestry); loss of biodiversity; changes in the composition of the atmosphere; and climate change.



## **1.5 The Climate System**

This is a complex, interactive system made of the atmosphere, land surface, snow and ice, oceans and other bodies of water and living things. The atmospheric component of the system characterizes the climate with solar radiation powering the planet. The climate system changes overtime under the influence of its own internal dynamics and external factors such as volcanic eruptions, solar variations and human induced changes in the atmospheric composition. In turn, the climate responds directly to these changes.



## **1.6 Greenhouse Effect and Global Warming**

The earth's climate is powered by the sun which radiates energy at a very short wavelength. Of the solar energy that reaches the top of the earth's atmosphere, about 33 percent is reflected back

directly to the space (albedo) while the remaining 67 percent is absorbed by the surface. The earth therefore, must radiate the same amount of energy back to space to balance the absorbed incoming energy. The earth radiates at much longer wavelengths because it is much colder than the sun. These thermal radiation emitted by the land and ocean is absorbed by the atmosphere and cloud and re-radiated back to the earth. This is called the greenhouse effect. And without the natural greenhouse effect, the average surface temperature of the earth would be below freezing point of water. The earth's natural greenhouse effect therefore, makes life possible as we have it but human activities especially the burning of fossil fuels and clearing of forest have greatly intensified the natural greenhouse effect causing global warming.

### Self-Assessment Exercises 1

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

1. The earth's climate is powered by the \_\_\_\_ which radiates energy at a very short wavelength. a. moon b. star c. cloud d. sun
2. \_\_\_\_ is the synthesis of the weather in a given place over a period of at least 30 years. a. weather b. water c. climate d. all of the above



### 1.7 Contribution of Human Activities to Climate Change Compared with Natural Influences

Human activities contribute to climate change by causing changes in the earth's atmosphere through emission of greenhouse gases, aerosols (small particles) and cloudiness but the major known means of contribution is from the burning of fossil fuels that releases carbon dioxide gas to the atmosphere. Greenhouse gases and aerosols affect climate by altering incoming solar radiation and outgoing infrared (thermal) radiation which are part of the earth's energy balance. This change can lead to the cooling or warming of the climate system and since the start of the industrial era, the overall effect of human activities on the climate has been a warming influence (Oladipo, 2010, p. 151).



## **1.8 Changing Global Temperature**

Over the past 157 years, temperatures have risen globally with important variations. Warming in the last century occurred in two phases – from the 1910s to the 1940 (0.35°C) and more strongly from 1970s to the present (0.55°C). An increasing rate of warming has taken place over the last 25 years and 11 of the 12 warmest years on record have occurred in the past 12 years. Evidences of global warming are seen in the warming of the oceans, rising sea levels, thawing glaciers, sea ice retreating in the arctic and diminished snow cover in the northern hemisphere. By the end of this century, global average temperature is predicted to rise by 2 – 4.5°C (Oladipo, 2010: p. 152).



## **1.9 Changes in extreme events like heat waves flood and drought**

This is due to greenhouse warming Scientific evidences have shown that the number of heat waves has increased and floods and droughts are becoming more frequent in different parts of the globe. These changes are largely attributed to increasing atmospheric greenhouse gases resulting from human activities such as the use of fossil fuels.



## **1.10 Impacts of Climate Change**

Climate change will affect everyone both the rich and the poor. Those already affected by poverty, malnutrition and disease will face displacement and new hardships. In the developed world, industries, livelihoods and public health will face serious threats from drought, disease and extreme weather events. It is also a threat to the achievement of the Millennium Development Goals (MDGs) especially those related to eradicating poverty and hunger and promoting environmental sustainability. According to Oladipo (2010, p. 154), global climate changes whose effects could be local impacts on the following:

- i. Agricultural production and food security: climate change will affect rainfall, temperature and water availability for agriculture. In sub-Saharan Africa, drought affected areas could expand by 60-90 million hectares. In other developing regions including Latin America and South Asia, they will experience losses in agricultural production which will result to rise in the number of those affected by malnutrition.

- ii. Water stress and water insecurity: Changed run-off and glacial melt will add to ecological stress which will result to reduced water availability for irrigation and human use as an additional 1.8 billion people could be living in a water scarce environment by 2080. Seven of the Asia's great river systems will experience an increase in water flow over a short-term which will be followed by a decline while millions of people in Peru will face more serious water shortages with the collapse of tropical glacier. Also, many countries in the highly water-stressed regions such as those in the Middle East could experience deeper losses in water availability.
- iii. Rising sea levels and exposure to climate disasters: This could rise rapidly with increased ice sheet disintegration. With the global temperature increases of 3 – 4 °C, 330 million people could be permanently displaced through flooding. In Bangladesh, Lower Egypt and Vietnam over 70 million, 6 million and 22 million people could be affected respectively. The impact of the sea level rise could result to the emigration of about 92,000 people who inhabit the 33 coral atolls of Kiribati due to increased flooding of the islands by high tides. Many states in Nigeria have continually been flooded resulting to some deaths, loss of properties worth millions of naira and millions of people been displaced from their homes.
- iv. Ecosystems and biodiversity: About one-half of the world's coral reef systems have suffered bleaching as a result of warming seas. Increased acidity is also a threat to marine ecosystem. At 3°C warming, about 20 – 30 percent of land animal and plant species could face extinction. Increased sea level rise would result in loss of biodiversity, deterioration in land vegetative cover and depletion of water availability through the destruction of catchments and aquifers.
- v. Human health: The greatest impact will be experienced in developing countries due to high level of poverty and inefficient public health system to respond. For example, about 220-400 additional people would be exposed to malaria while dengue fever is evident at higher levels than previously experienced especially in Latin America and parts of East Asia.

### Self-Assessment Exercises 2

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

- 3. Greenhouse gases and \_\_\_\_ affect climate by altering incoming solar radiation and outgoing infrared (thermal) radiation which are part of the earth's energy balance. a. aerosols b. solar c. chemical d. energy
- 4. Over the past \_\_\_\_ years, temperatures have risen globally with important variations. a. 155 b. 152 c. 157 d. 158



### 1.11 Summary

In the last decade of the 20<sup>th</sup> century up to the dawn of the 21<sup>st</sup> century, the dynamics of war, ecological devastation, political uncertainties and the adverse condition of human security seem to dominate security discourses. Desertification is strongly connected to poverty, migration and food security because when people live in poverty, they do not have any alternative than to over-exploit the land. If the land becomes unproductive, the people are forced into internal and cross-border migrations which further strains the environment thereby causing social and political tensions and conflict. In Nigeria, desertification also constitutes environmental hazards but the extent and severity has not been fully established. Although, it is estimated that between 50 percent to 75 percent of Bauchi, Borno, Gombe, Jigawa, Kano, Katsina, Kebbi, Sokoto, Yobe and Zamfara states in Nigeria are affected by desertification. These states which account for 38 percent of the country's land area are classified as the "frontline states" in terms of desertification. These frontline states often experience droughts which expose the land to increased stress from human and livestock thereby causing damage to the environment. The Sahara Desert is advancing into Nigeria at the rate of 0.6 kilometers per annum. Desertification also contributes to the increased decimation of livestock, incidents of diseases like heat-stroke, cerebral-spinal meningitis, acute respiratory syndrome (SARS) and avian flu. All these poses direct threat to human security. Besides desertification and drought, there is the problem of flood which has been ravaging various states of the federation leading to thousands of people losing their homes, farmland and properties.

In summary, climate change which is as a result of greenhouse gas emission into the atmosphere is caused by human activities. It is also the greatest challenge of all the environmental problems facing the world. Climate change will affect everyone both the rich and the poor. Those already affected by poverty, malnutrition and disease will face displacement and new hardships. Environmental threats are those threats which are human-caused and have, or can be expected to have, serious economic, health, environmental, and quality of life implications. These include climate change, the production and trade of highly toxic chemicals, the loss of biodiversity, ozone depletion, and marine

degradation. These environmental threats have also been described as local, region and strategic threats. The local (or tactical) threats include water pollution, air pollution, and illegal waste dumping. Problems such as acid rain, the contamination of underground aquifers, and large oil spills are fundamentally regional threats, while global warming and ozone depletion are strategic. Of all these changes, climate change poses the greatest challenge globally and has become a multi-faceted problem with a number of challenges in the area of environmental governance.



### **1.12 References, Further Readings, and Web Sources**

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### **1.1.3 Possible Answers to SAEs**

#### **Self-Assessment Exercises 1**

1. d. sun
2. c. climate

#### **Self-Assessment Exercises 2**

3. a. aerosols
4. c. 157

## **UNIT 2 DEVELOPMENT OF INTERNATIONAL ENVIRONMENTAL LAW**

### **CONTENTS**

- 2.1 Introduction
- 2.2 Learning Outcomes
- 2.3 Development of International Environmental Law

2.4 Concepts used in International Environmental Law

2.5 Summary

2.6 References, Further Readings, Web Sources

2.7 Possible Answers to Self assessment exercise



## **2.1 Introduction**

Worldwide growth of public concern for the natural environment has been one of the most important developments in recent decades. Globalization has helped to connect societies and their environmental fates move closely than ever before. Thus, environmental problems increasingly transcend national borders and pose serious challenges to the health of the planet. The development of effective environmental laws and legal systems throughout the world has therefore become critical in directing economic development and growth onto a path of environmental sustainability. Increased cross-border collaboration between governments, non-governmental organization (NGOs), multinational corporations and growth of transnational environmental networks have also influenced the development of environmental laws. These growing international linkages promote the emergence of international environmental law.



## **2.2 Learning Outcomes**

It is expected that at the end of this unit, the student should be able to:

- i. Explain why International Environmental law developed.
- ii. Understand various concepts used in the law.



## **2.3 Development of International Environmental Law**

The development of international environmental law began with the Trail Smelter arbitral award in 1938. Despite the fact that there were few environmental treaties in the 1940s and 1950s mostly on fauna (whales, fish, bird and seals) and oil pollution, the era of International Environmental Law began with the Stockholm Declaration of the Principles of 1972 which was adopted by the UN Conference on Human Environment (UNCHE). Principle 21 of the Stockholm Declaration of Principle reflects the Trail Smelter arbitration in confirming the sovereign rights of a state to exploit

its own resource pursuant to its environmental policies subject to its responsibility not to cause damage to other states. In 1972, the United Nations' General Assembly established the United Nations Environment Programme (UNEP) following the UNCHE with headquarters in Nairobi. It has been effective in the adoption of environmental treaties and the development of international environmental law generally. The role of the Environmental Management Group (EMG) with the secretariat in Geneva and chaired by the UNEP Executive Director is to enhance cooperation in environmental matters both within and beyond the UN system. Principle II of the Stockholm Declaration states that environmental policies should not adversely affect the development potential of developing countries to decide how to develop their economies. In 1992, the UN Conference on Environment and Development (UNCED) produced the Rio Declaration on Environment and Development and the Conventions on Climate Change and Biodiversity was adopted.



## **2.4 Concepts used in International Environmental Law**

### **2.4.1 Precautionary Approach**

In Rio Declaration, Principle 15 states that:

In order to protect the environment, the precautionary approach shall be applied by states according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

This concept is seen as an application of the principle of state responsibility in the context of potential environmental harm and not only in the case of trans-boundary activities. This approach has been followed in treaties like the Vienna Convention for the Protection of the Ozone Layer 1985 and its Montreal Protocol 1987. These require parties to reduce the use of CFCs even before it was proved scientifically that they cause damage to the ozone layer (Birnie and Boyle, 2002, p. 115).

### **2.4.2 Polluter Pays**

Principle 16 of the Rio Declaration states that:

National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that

polluter should in principle, bear the cost of pollution with regards to the public interest and without distorting international trade and investment.

This is an economic policy suggestion that a state may follow when apportioning the cost of remedying pollution or other environmental damage so that the state does not have to bear an unfair share.

### **2.4.3 Sustainable Development**

This is a very important concept in International Environmental Law which states that: development (industrial, agriculture, communication etc) is not bad but should take into account its effect on the environment. Industries should exploit natural resources in a way that allows the resources to regenerate and not to be destroyed. For example, over-fishing has become so bad that a common fish is now scarce. This led to the 1958 Convention on Fishing and the Convention of the Living Resources of the High Seas.

### **2.4.4 Environmental Impact Assessment**

The Environmental Impact Assessment was proposed in 1969 and its aim is to discover whether a proposed activity have an adverse effect on the environment at an early stage. Principle 17 of the Rio Declaration states that:

Environmental Impact Assessment, as a national instrument, shall be undertaken for the significant adverse impact on the environment and are subject to a decision of a competent national authority.

This assessment is required mainly in treaties that deal with pollution of the marine environment from sea or land-based sources. This is used in the protocol to the Antarctic Treaty on the Environmental Protection of 1991. Nigeria has a regulation in place called “The Environmental Impact Assessment (EIA) Decree, No. 86 of 1992 which seeks to protect the physical and the aquatic environment. But this has not actually addressed the issue of strategic relevance of the environment.

### **2.4.5 Biodiversity**

According to the United Nations’ Convention on Biological Diversity, Biodiversity is defined as: “The variability among living organism from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species between species and of ecosystems”

### 2.4.6 Ecosystem

This is defined as: “a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit”.

### Self-Assessment Exercises 3

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

5. In\_\_\_\_, the UN Conference on Environment and Development (UNCED) produced the Rio Declaration on Environment and Development and the Conventions on Climate Change and Biodiversity was adopted. a. 1992 b. 1993 c. 1994 d. 1995
6. \_\_\_\_is defined as: “a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit”. a. Biodiversity b. **ecosystem** c. variability d. aquatic.



### 2.5 Summary

With the global growth of public concern about environmental issues over the last decades, environmental legal norms have become increasingly internationalized. This development has reflected both in the surge of international environmental agreements as well as the growth and increased sophistication of national environmental legal systems around the world. These laws are standards established by governments to manage natural resources and environmental quality. Most international environmental laws are basically general principles agreed upon among states which oblige these countries to adopt implementing legislation. There is no international body directly authorized to enforce international environmental laws as the task of direct enforcement is left for member countries.

In this unit, we discussed development of International Environmental Laws and the various concepts used in International Environmental Law. The UN agencies play important role in

developing international environmental laws which began with the Trail Smelter Arbitral award in 1938.



## **2.6 References, Further Readings, and Web Sources**

Birnie, P. W. and Boyle, A. E. (2002), *International Law and the Environment*, Oxford: Oxford University Press.

Husk, A. (2006), “International Environmental Law”, UK, Cambridge, UK, 2006.



## **2.7 Possible Answers to SAEs**

### **Self-Assessment Exercises 3**

5. a. 1992

6. b. ecosystem

## **Unit 3 Multilateral Environmental Agreements/Treaties**

### **UNIT 3 CONTENTS**

3.1 Introduction

3.2 Learning Outcomes

3.3 Multilateral Environmental Agreements/Treaties

3.4 Summary

3.5 References, Further Readings, Web Sources

3.6 Possible Answers to Self assessment exercise



## **3.1 Introduction**

Since the emergence of human life on earth, humans have naturally taken the presence of some environmental conditions for granted; for example, air, shielding from ultraviolet radiation that are

in jeopardy now. Other environmental elements such as fertile soil, water and minerals have been subjected to intense violent intergroup competition (Deudney, 1989). Both the developed countries and the emerging economies are dangerously damaging the ecological systems that underpin human existence. Hence, environmental issue at all levels (locally, nationally and internationally) and how institutions respond to these emerging problems, is likely to shape global politics in a profound manner because environmental problem, for example climate change have no respect for boundaries. The work of Intergovernmental Panel on Climate Change (IPCC) which was established in 1988 by the United Nations' Environmental Programme (UNEP) and the World Meteorological Organization (WMO) is based on evaluating and summarizing scientific knowledge about the potential human impacts on the climate and its consequence. It has more than 190 countries participating in with more than 800 scientists from different research areas actively involved in the work that produced the fourth assessment report published in 2007 which was examined by 2,500 experts. These research areas are - oceanography, physical geography, meteorology, glaciology, geochemical, climate history, hydrology, biology, eco-system analysis, economics and energy systems. The IPCC reports, made use of existing reviewed scientific research published up to 2006, hence, IPCC does not conduct any research and its reports only provide the basis for decision by describing the consequences of the various actions from both a scientific and social science perspective.



### **3.2 Learning Outcomes**

It is expected that at the end of this unit, the student will be able to understand:

- i. The evolution of environmental treaties.
- ii. The various multilateral environmental agreements/treaties entered into by states.



### **3.3 Multilateral Environmental Agreements/Treaties**

3.3.1 International Convention for the Regulation of Whaling (IWC)

3.3.2 Convention on Wetlands of International Importance

3.3.3 Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)

3.3.4 United Nations' Convention on Biological Diversity

3.3.5 Vienna Convention for the Protection of the Ozone Layers

3.3.6 United Nations' Framework Convention on Climate Change

3.3.7 Kyoto Protocol

### **3.3.1 International Convention for the Regulation of Whaling (IWC)**

The IWC was adopted in 1946 and was amended by a Protocol in 1956 with the aim of reversing the process of depletion of whale stocks thereby developing the whaling industry. The IWC has sixty-six parties. The secretariat is in Cambridge, England with members of the IWC Commission representing all the IWC parties and meets at least once a year. The Commission adopts regulations by a three-quarters vote of members (excluding abstentions and absences) and such regulations are binding on all parties after ninety days. The Commission in 1982 imposed a general moratorium on commercial whaling but was not binding on Norway because it lodged objections. Some parties do not support the moratorium while some do. As many more small states become parties, it will be easier to obtain a three-quarters majority to lift or modify the moratorium. Following the establishment of the moratorium, Iceland withdrew from IWC but became a party again at a Special Commission Meeting in 2002 with a modified reservation.

### **3.3.2 Convention on Wetlands of International Importance**

In 1971, the Convention on Wetlands of International Importance was established to preserve the wetlands. Wetlands within parties' territories are designated for inclusion in a "List of Wetlands of International Importance" on the basis of their international significance in terms of ecology, botany, zoology, limnology (study of freshwater phenomena) or hydrology. There are 143 parties to the Convention that meet regularly and are required to promote the conservation of wetlands and waterfowl by establishing nature reserves.

### **3.3.3 Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES)**

This was adopted in 1973 to prohibit or regulate trade in endangered species and to a certain extent trade with non-parties. CITES has 167 parties whose trade sanction imposed in enforcing the Convention against parties and non-parties has proved effective.

### **3.3.4 United Nations' Convention on Biological Diversity**

This Convention was adopted in 1992 and recognizes the fact that conserving biodiversity is vital for the survival of mankind, the sustainable use of the biological resources is allowed. The Convention has 188 parties with neither Timor Leste nor the United States as parties. This Convention emphasizes that, states remain in control of their biological resources.

### **3.3.5 Vienna Convention for Protection of the Ozone Layers**

The Convention adopted in 1987 has few specific obligations but was followed by a more substantial Protocol called the Montreal Protocol on Substances that Deplete the Ozone Layers of 1987. This Protocol has 189 parties which include Brazil, China, the European Community, India, Russia and the United States. Parties are required by the Protocol to reduce and eliminate the production and consumption of certain ozone-depleting substances. It also bans the importation from or exportation to, non parties of such substances. This Protocol has been successful and if allowed to continue to make progress, the hole in the ozone layer over the Antarctica would be closed. Since developing countries have not contributed much to the ozone depletion, they are given more time to comply.

### **3.3.6 The United Nations Framework Convention on Climate Change**

Climate is the greatest global problem facing humanity today and extending across unimaginable stretches of time. International negotiations began with the establishment of the Framework Convention on Climate Change (FCCC) which is advised by the scientific body of the Intergovernmental Panel on Climate Change (IPCC). At the Rio Earth Summit in 1992, international negotiators adopted the United Nations Framework Convention on Climate Change (UNFCCC). This Convention recognizes that climate change is real and results from human activities, including deforestation and the combustion of fossil fuels. The Convention's objective is to "prevent dangerous human interference with the climate system by stabilizing atmospheric concentration of greenhouse gases at safe levels". To accomplish this, all parties that ratified the Convention accepted general commitments to respond to climate change. In particular, the UNFCCC called on the industrialized countries, identified as Annex I parties to take the lead in climate action

due to their historic responsibility for the majority of greenhouse gas emissions as well as their greater financial and institutional capacity to address the problem. Since its adoption, the UNFCCC has been ratified by 192 countries including the United States and regional economic integration organizations (UNFCCC document). The Convention constitutes an essential foundation for international cooperation on climate change and encourages but does not commit countries to actions needed to avert and adapt to this change. It established a procedure for negotiations called Conference of Parties or (COP) meetings involving series of meetings between countries and also established a procedure for creating amendments to it. The most significant is the Kyoto Protocol because it legally commits Parties to reduce emission.

### **3.3.7 The Kyoto Protocol**

The Kyoto Protocol (KP) is a protocol to the UNFCCC or FCCC, aimed at combating global warming. The Protocol was adopted by COP3 on 11 December, 1997 in Kyoto, Japan and entered into force on 16 February, 2005. As at November 2009, 187 countries have signed and ratified the protocol under which, 37 industrialized countries (called the Annex I countries) committed themselves to a reduction of greenhouse gases (GHGs) - carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, hydrofluorocarbons and perfluorocarbons produced by them. Annex I countries agreed to reduce their collective greenhouse gas emissions by 5.2 percent from the 1990 level. Emission limits do not include emissions by international aviation and shipping, but are in addition to the industrial gases, chlorofluorocarbons (CFCs) which are dealt with under the 1987 Montreal Protocol on Substances that deplete the Ozone Layer.

It was opened on 16 March, 1998 for signature by Parties to the UNFCCC. Article 25 of the Protocol specifies that the Protocol enters into force on the ninetieth day after the date on which not less than 55 Parties to the Convention, involving Parties included in Annex I which accounted in total for at least 55 percent of the total carbon dioxide emissions for

1990 of the Annex I countries, have deposited their instruments of ratification, acceptance, approval or accession. The EU and its Member States ratified the Protocol in May 2002. Of the two conditions, the 55 parties' clause was reached on 23 May, 2002 when Iceland ratified the Protocol. The ratification by Russia on 18 November, 2004 satisfied the 55 percent clause and brought the treaty into force, effective 16 February, 2005, after the required lapse of 90 days. As of November 2009, 186 countries and one regional economic organization (the EC) have ratified the agreement, representing over 63.9 percent of the 1990 emissions from Annex I countries. The issue raised by the United States and Australia for opting out of the Kyoto Protocol is the exemption of developing countries from carbon dioxide emission limitations because the Protocol allocates acceptable carbon dioxide emissions for each industrialized country according to how much carbon dioxide they currently emit. The Protocol can be signed and ratified only by Parties to UNFCCC, (Article 24 of KP) and a country can withdraw by giving 12 months' notice (Article 27 of KP).

The five principal concepts of the Kyoto Protocol are:

commitments to reduce greenhouse gases that are legally binding for Annex I countries, as well as general commitments for all member countries;

implementation to meet the Protocol objectives, to prepare policies and measures which reduce greenhouse gases, increasing absorption of these gases (for example through geosequestration and biosequestration) and use all mechanisms available, such as Joint Implementation, Clean Development mechanism and Emissions Trading; being rewarded with credits which allow more greenhouse gas emissions at home;

minimizing impacts on developing countries by establishing an Adaptation Fund for climate change;

accounting, reporting and review to ensure the integrity of the Protocol;

compliance by establishing a compliance committee to enforce commitment to the Protocol (KP document).

Before and after its entry into force, the Kyoto Protocol has been severely criticized for doing little to combat global warming. It was generally criticized for being economically

inefficient in requiring nations to reduce emissions quickly (Aldy, *et al*, 2003), for utilizing absolute emission caps rather than emission intensity targets or a carbon tax (Pizer, 2005) and for not committing the largest developing nations - most China and India to binding emissions reductions. Finally, its flexible mechanisms have been criticized as it is dependent on an emissions baseline that is either unknown or politically determined (Zhang, *et al*, 2005). The most common response to these criticisms is that the Kyoto Protocol has been, since its negotiation the only binding legal document to control global climate change. Furthermore, it has spurred the emergence and growth of institutions and capacities that will likely endure beyond its existence perhaps in altered and improved form. The Kyoto Protocol has given birth to a whole set of institutions and has fostered capacity development both in the developed and developing world that will prove very useful in ultimately overcoming the challenges presented by climate change.

#### Self-Assessment Exercises 4

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

7. the Convention on Wetlands of International Importance was established to preserve the\_\_\_\_\_. a. united nations b. wetlands c. government d. Nigeria

8. The IWC was amended by a Protocol in the year? .a. 1978 b. 1987 c. 1956 d. 1999



#### 3.4 Summary

Negotiations conducted within the United Nations Framework Convention on Climate Change are based on the IPCC's assessments because it is its fourth assessment report that eventually established that human activities are responsible for the majority of the increase in global average temperature experienced in the later 20<sup>th</sup> century with greater than 90 percent certainty. The IPCC consisting of government scientists was formed in 1988 by agencies of the United Nations. The role is to assess the scientific, technical and socio-economic information relevant to the understanding of the

scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation (Archer, 2007:173). The objective of IPCC is to publish reports written by different working groups (WG) summarizing their scientific findings. The IPCC report is divided into three topic areas -

1. WGI, researches into the scientific basis for the climate change forecast;
2. WGII on the impacts of climate change on the natural and human world; and
3. WGIII assesses options for limiting greenhouse gas emissions.

This report is in chapters with various levels of summaries done by researchers at universities not necessarily employed by any government. These chapters which are subjected to rounds of reviews by scientific experts and government workers are grouped together into books that come with technical summaries and summaries for policymakers. These summaries are then subjected to line-by-line review, voting and approval by the entire IPCC. The next IPCC report will be published in 2013-2014.

In this unit, we have examined the various environmental agreements / treaties reached. The issue of environmental problem gained international attention following the reports of the IPCC - the fourth report in particular. Presently, negotiations are going on under the UNFCCC and the KP. A new agreement was to be reached at the Copenhagen Climate Change Talks held in Denmark in 2009 to replace the KP which will expire in 2012 but due to international politics, an accord was reached called the “Copenhagen Accord”.



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### **3.6 Possible Answers to SAEs**

Self-Assessment Exercises 4

7. b. wetlands

8. c. . 1956

## **UNIT 4 NATIONAL ENVIRONMENTAL LAWS IN NIGERIA**

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4.1 Introduction

4.2 Learning Outcomes

4.3 National Environmental Laws

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4.5 References, Further Readings, Web Sources

4.6 Possible Answers to Self assessment exercise



### **4.1 Introduction**

Nigeria’s economy has continually developed since independence and has suffered the pressure of space in her urban cities with diminishing resources and increasing problems of environmental degradation as experienced by developed countries in the course of their industrialization. As a result of this, the government responded with a national policy on environment and also continued with her efforts at strengthening the legal system of environmental protection. Environmental issues gained international awareness following the adoption of Stockholm Declaration in 1972 but for Nigeria, the dumping of 4,000 tons of toxic wastes from Italy in Koko Port in 1988, flagged off Nigeria’s environmental era. As a result, an International Workshop on the Goals and Guidelines of the National Environmental Policy for Nigeria organized by the Federal Ministry of Works and

Housing (Environmental Planning and Protection Division) and the United Nations Environment Program (UNEP). This led to the creation of the Federal Environmental Protection Agency (FEPA) in December, 1988 and the launching of the National Policy on the Environment in November, 1989.



## **4.2 Learning Outcomes**

It is expected that at the end of this unit, the student should be able to:

- i. Discuss what gave rise to Nigeria's environmental era, and
- ii. Explain the various interventions by government aimed at addressing environmental degradation.



## **4.3 National Environmental Laws**

### **4.3.1 Harmful Waste (Special Criminal Provisions etc) Act, 1988**

Following the Koko toxic waste dumping, the Harmful Waste (Special Criminal Provisions etc) Act, 1988 (HWSCP) was passed in 1988. Its main objective is to prohibit the carrying, depositing and dumping of harmful waste on land and territorial waters. This Act imposes both criminal penalties and civil liability on any person who deposits, dumps or imports harmful waste or cause harmful waste to be so deposited, dumped or imported. Such a person shall be liable for any damage resulting from there except where the damage was due wholly to the fault of the person who suffered it, or was suffered by a person who voluntarily accepted the risk thereof. The problems that undermined the effectiveness of this Act include – Nigeria's porous borders, corruption and the enforcement and implementation of provisions of the Act.

### **4.3.2 The Federal Environmental Protection Agency Act, 1988**

The incident of the Koko toxic waste dump led to the enactment of the Federal Environmental Protection Agency Act (FEPA Act) in 1988. The main goal of FEPA was to protect and develop the environment. The FEPA Act was a legislative framework meant to serve as a comprehensive system

for environmental management. Its role was to coordinate, supervise and monitor, and holistically providing an opportunity to handle environmental issues in a coordinated manner. Thus, the Act officially defined “Environment” as including water, air, land and all plants and human beings or animals living therein and the inter-relationships which exist among these or any of them. If clear and unequivocal rights were conferred on members of the public and non-governmental organizations to monitor compliance, FEPA would have been effective. In 2007, the FEPA Act was repealed by the National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007.

#### **4.3.3 National Environmental Protection (Effluent Limitation) Regulations 1991**

The National Environmental Protection (Effluent Limitation) Regulations (NELR) is a subsidiary legislation in which every industry is required to install anti-pollution equipment for the detoxification of effluent and chemical discharges emanating from the industry using the Best Available Technology (BAT), the Best Practical Technology (BPT) or the Uniform Effluent Standards (UES). The NEPR identified selected waste water parameters for respective industries, stipulated additional sectoral effluent limitation treatment and further required treatment of effluent to ensure assimilation by the receiving water into which the effluent is discharged. Where a person breaches a provision of NEPR, such a person shall be guilty of an offence and liable on conviction to the penalty specified under the FEPA Act. The challenges that undermine the effectiveness of NEPR include: lack of required administrative support for continuous monitoring to ensure compliance; non-existent of third-party rights that could compel regulatory officials to perform their duties; and the use of such terms as BAT, BPT and UES were not defined to indicate whether they will be applied with reference to “technology” or “standards” available globally or locally.

#### **4.3.4 National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulations, 1991**

The National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulations (NPAR) is another subsidiary legislation made pursuant to section 40 of FEPA ACT. In this Regulation, industries and facilities are banned from releasing hazardous or toxic substances into the air, water or land of Nigeria's ecosystems beyond limits approved by the Agency.

It also made provision for industries and facilities to: have monitoring pollution units; have a discharge monitoring report that will be submitted to the nearest office of the Agency every month;

report unusual or accidental discharges not later than 24 hours of the discharge; have a list of chemicals used in the manufacturing of its products with details of stored chemicals, storage conditions and name of any secondary buyers; have an approved contingency plan: have machinery for combating pollution hazard; have a permit storage treatment and transport of harmful toxic waste; have permissible limits of discharge into public drains etc; have appropriate equipment in the event they are likely to release gaseous, particulate or solid untreated discharges; to give due cognizance to safety of workers; to dispose of solid wastes in an environmentally safe manner; and to produce environmental audits as may be demanded by the Agency. The Agency is to serve as the “On-the-scene-Coordinator”. Each state of the Federation is to designate industrial layouts and provide buffer zones between industrial layouts and residential areas. Hence, NPAR is required to achieve environmental quality regardless of cost which implies that pollution should be prevented, not just controlled. This approach became unnecessarily rigid since huge demands were placed for combating pollution hazard without due consideration to economic factors. Many of the standards set were also unachievable either because the Agency did not have the capacity to monitor and enforce them or because the Agency was not protected from special or political interests. The Agency failure in using its broad rule-making power to engage in creative setting of standards resulted in the making of Regulations that failed to incorporate incentives strategy or define basic directions for the future.

#### **4.3.5 National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations, 1991**

The National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations (NMSHR) is another subsidiary legislation of section 40 of FEPA Act whose objectives were to identify solid, toxic and extremely hazardous wastes dangerous to public health and environment; provide for surveillance and monitoring of these wastes until they are detoxified and safely disposed of; provide guidelines necessary to establish a system of proper record keeping, sampling and labeling; establish suitable and necessary requirements to facilitate their disposal and research into possible re-use and recycling of these hazardous wastes. In order to achieve its stated objectives, NMSHR established provisions in relation to: dangerous waste list, spills and discharges into the environment, contingency plan and emergency procedure, record keeping in facilities, ground water protection, surface impoundments, land treatment, waste piles, landfills, incinerators, and tracking programme. Despite the comprehensive coverage of NMSHR, it was still not effective for the same

reasons noted in respect of the NELR and NPAR, FEPA. The cost of N200 or imprisonment for one year or both fine and imprisonment for misrepresenting facts was, thus, lower than the cost of compliance and violators will therefore, consider it as cheaper to pay fines than to comply with the Regulations.

#### **4.3.6 Environmental Impact Assessment Act, 1992**

The primary goal of the Environmental Impact Assessment Act (EIA) is to establish before a decision is taken by any person, corporate body or unincorporated body including the government, the likely or significant effect an activity will have on the environment before the activity is embarked upon. This is expected to be a detailed statement concerning the environmental impact of any proposed action which is required to contain information about the unavoidable adverse environmental effects, any irreversible commitment of resources necessary and available alternatives to the action. Public participation is very important for a genuine and successful environmental impact assessment particularly at the review and consultation stages. Affected communities and non-governmental organizations in Nigeria have expressed concerns that the EIA process lacks genuine and considerable public participation. Assessors hardly, consider alternative courses of action at an early stage of the project planning cycle, in order to choose the most favourable. EIA reports are usually put together and presented in such a way that majority of the people do not have the access and opportunity to review them. The few who have access find the reports so technical, unduly complex and of such volume that they are not able to meaningfully participate in the assessment and review within the duration of the display. Those who are responsible for managing the EIA process are faced with the problem of over-bearing political influences, coupled with the absence of information sharing and lack of baseline social-economic and environmental data. All these have militated against the efficiency of this Act.

#### **4.3.7 Constitution of the Federal Republic of Nigeria, 1999**

Specific provision on the environment first applied in the Constitution of the Federal Republic of Nigeria, 1999 (the 1999 Constitution). With the introduction of section 20 into the 1999

Constitution, hopes were raised that environmental issues have finally been elevated to a constitutional level in Nigeria. Not surprisingly, however, the sharp debate regarding the provision has been how directly effective it can be for the environment. This provision is seen as narrow and remote to make any impact on environmental challenges in Nigeria. It is obvious from the constitution that Nigeria is not truly desirous of initiating any environmental change which may disturb its economic direction and strategies in the face of realities that require a country like Nigeria to give a strong and effective constitutional backing to her environment protection strategies. The Constitution should state that the protection of the environment is of a general interest and every individual shall abstain from engaging in acts that may result in the degradation, destruction or contamination of the environment and should be made to proclaim the right of every person in Nigeria to have a healthy and balanced environment.

#### **4.3.8 National Oil Spill Detection and Response Agency (Establishment) Act, 2006**

The primary responsibilities of the National Oil Spill Detection and Response Agency (NOSDRA) are surveillance and ensuring compliance with all existing environmental legislation, and the detection of oil spills in the petroleum sector. Despite the enormous responsibilities of this Act, there is no provision for offences under it.

#### **4.3.9 National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007**

The National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007 (NESREA Act) which repealed the FEPA Act was enacted to provide for the establishment of the National Environmental Standards and Regulations Enforcement Agency whose primary objective is the protection and development of the environment in Nigeria and for related matters. The NESREA Act is a belated response of the law to what was at the time a revolutionary change in the structure of environmental enforcement and regulation in Nigeria. When FEPA was scrapped in 1999 and the Ministry of Environment assumed its functions, the expectations were that a new regulator would be put in place, and also a succeeding legislation that would articulate some of the fundamental provisions that were inarticulate in the FEPA Act. The new law (NESREA Act) was not

put in place until eight years after (July 2007). Since its inception, NESREA has introduced a lot of subsidiary legislation. Eleven (11) of these were introduced in 2009 pursuant to section 34 of NESREA Act, while thirteen (13) others were introduced in 2011. A major challenge that has consistently confronted NESREA is confronted with the disagreement posed by other agencies of government in situations where economic development imposes risk on ecological protection. In this respect, there is an urgent need to achieve effective synergy in intergovernmental Agencies.

### Self-Assessment Exercises 5

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

9. The primary responsibilities of the National Oil Spill Detection and Response Agency (NOSDRA) are \_\_\_\_\_ and ensuring compliance with all existing environmental legislation/ a. protection b. cooperation c. quality d. surveillance

10. The FEPA Act was a \_\_\_\_\_ framework. a. political b. judicial c. legislative d. executive



### 4.4 Summary

Generally, Nigeria's legal framework for environmental protection is broad as several policy actions have been taken to cover a whole range of areas that are directly or indirectly related to ensuring that the environment is protected. These are in relation to natural resources (water, land, air, forest, coastal area, oceans, island and their resources, non-renewable natural resources, protected natural areas, and wild and flora and fauna), environmental protection, environmental quality and international cooperation. Despite all these, Nigeria is facing serious challenges in achieving an effective environmental protection regime.

In this unit, we discussed Nigeria's environmental laws. Since the Koko waste incident in Nigeria, there has been an increased awareness among the people about the ecological challenges in the nation. Also, there are increased numbers of legislation yet the environmental challenges are frightening. These laws need to be updated from time to time to meet with the present day reality.



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#### 4.6 Possible Answers to SAEs

##### Self-Assessment Exercises 5

- 9. d. surveillance
- 10. c. legislative

## GLOSSARY

### The Environment

This is the combination of the external conditions that affects life, development and survival of an organism. It encompasses the air, water, land, mineral resources, forests, grasslands, wild plants and animals, aquatic life, and natural areas under special protection.

### Climate

Climate is the synthesis of the weather conditions in a given locality over a period of at least 30 years. Its constituent elements include: temperature, rainfall, dew, humidity, wind, sunshine, mist, haze and clouds.

### Biodiversity

This can be said to be the varieties of living organism including terrestrial, marine and other aquatic ecosystems.

### Ecosystem

Ecosystem is complex and dynamic array of plant, animal and micro-organism communities and even non-living environment interacting as a functional unit.

### End of the Module Questions

1. The 1991 *Beijing Declaration on Environment and Development*, which included representatives of the 41 developing countries at that year's Ministerial Conference of Developing Countries on Environment and Development, agreed on some more serious and

widespread environmental problems. What are these problems? are air pollution, climate change, ozone layer depletion, drying up of fresh water resources, pollution of rivers, lakes and the marine environment including the coastal zones, marine and coastal resources deterioration, floods and droughts, soil loss, land degradation, desertification, deforestation, loss of biodiversity, acid rain, proliferation and mismanagement of toxic products, illegal traffic of toxic and dangerous products and wastes, growth of urban agglomerations, deterioration of living and working conditions in urban and rural areas, especially of sanitation, resulting in epidemics and other such problems.

2. The rapidity of global warming results from rises in temperature associated with natural \_\_\_\_\_.  
a. Land degradation; b. earth movement; c. climate change; d. desertification.
3. The Environmental Impact Assessment was proposed in \_\_\_\_\_?  
a. 1949; b. 1959; c. 1969; d. 1979.
4. The Kyoto Protocol (KP) was established with the objective to combat \_\_\_\_\_.  
a. global warming; b. Land degradation; c. Environmental impact; d. sea levels.
5. The dumping of toxic waste in Koko led to the enactment of the Federal Environmental Protection Agency Act (FEPA Act) in \_\_\_\_\_.  
a. 1968; b. 1978; c. 1988; d. 1998

### **Answers**

1. The more serious problems include air pollution, climate change, ozone layer depletion, drying up of fresh water resources, pollution of rivers, lakes and the marine environment including the coastal zones, marine and coastal resources deterioration, floods and droughts, soil loss, land degradation, desertification, deforestation, loss of biodiversity, acid rain, proliferation and mismanagement of toxic products, illegal traffic of toxic and dangerous products and wastes, growth of urban agglomerations, deterioration of living and working conditions in urban and rural areas.
2. c. Climate change.
3. c. 1969.
4. a. Global warming.
5. c. 1988.

## **MODULE 4**

Unit 1 Conceptualization of Conflict

Unit 2 Theories of Conflict

Unit 3 Conflict Resolution Techniques

## Unit 4 Conflict Management

### UNIT 1 CONCEPTUALIZATION OF CONFLICT

#### CONTENT

1.1 Introduction

1.2 Learning Outcomes

1.3. Conceptualization of Conflict

1.4 Conceptualization of Environmental Conflict

1.5 Summary

1.6 References, Further Readings, Web Sources

1.7 Possible Answers to Self assessment exercise



#### 1.1 Introduction

Conflict occurs when one party perceives the action of another party as blocking the opportunity for the attainment of a goal. There are hardly any objective conditions which lead to conflict as it all depends on the way the given event is perceived by the other actor(s).



#### 1.2 Learning Outcomes

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

- i. Define conflict and Environmental conflict
- ii. Describe the various types of conflict
- iii. Explain the effects of conflict



#### 1.3 Conceptualization of Conflict

The term ‘conflict’ refers to an incompatibility in a multi-party or multi-issue situation, or a state of affairs in which two or more irreconcilable views or options are posited towards the solution of a particular problem. Conflict refers to the violent expression of incompatibility of irreconcilability. It

can also be described as a state of tension which exists when one party perceives its goals, needs, desires or expectations as being blocked by another party. Conflict is the struggle over values, claims to status, power and scarce resources in which the aims of the opposing parties are not only to gain the desired values but also to neutralize, injure or eliminate rivals.

Conflict is a confrontation between one or more parties aspiring towards incompatible or competitive means or ends (which) may either manifest, through actions or behaviours, or latent in which case it remains hidden for some time as incompatibilities are unarticulated or built into systems or such institutional arrangements as governments, corporations or even civil society.

In everyday life, we are all involved in one conflict or the other be it small (for example, a person may ignore us while we are talking) or more serious (for example, two persons behaving violently toward each other). Conflict may occur within (intra-group conflict) and among groups (inter-group conflict), communities or nations; which may be triggered by ethnic, economic, racial or religious differences; differences in attitudes, beliefs and values as well as environmental problems. Conflict does not only occur at the personal level, but also at the national and even international level. Apart from external conflicts between individuals or groups, there can also be internal conflicts within an individual.

Changes in the social environment, such as contestable access to new political positions or perceptions of new resources arising from development in the physical environment, are fertile grounds for conflicts involving individuals and groups who are interested in using those new resources to achieve their goals. Conflict can be viewed as a way of settling problems emanating from opposing interests and from the continuity of society. This led to Park and Burgess' argument that "conflict is designed to resolve divergent dualism and achieve some kind of unity even if it is through the total annihilation of one of the conflict parties". It is difficult to differentiate between good and bad conflict, since there is no measure or framework against which it can be evaluated. If the result of a conflict is positive, then the conflict is considered "good" and if the result is negative, then the conflict is considered "bad". Conflict is a conscious act involving personal or group contact and communication, together with, though distinct from competition, struggle, and contests, etc. Conflict is a normal process of interaction particularly in complex societies in which resources are usually scarce.

Although, conflict may generally exist whenever incompatible activities occur and may result in a "win-lose" situation, the resolution, transformation and management of conflicts may produce a

"win-win" situation. The location of sites and facilities such as markets, grazing lands, as well as water spots for animals and pasture-routes are sources of conflicts and when these are not resolved or transformed, their negative consequences are felt beyond the immediate environment of the parties in conflict. A conflict is a dynamic phenomenon, which consists of five stages: initiation, escalation, controlled maintenance, abatement, and termination/resolution. Sometimes, the aim of an individual or group in a conflict may not necessarily be achieved but it may be subdued by the conflict through negotiated settlement.

Economic resources are scarce especially in many developing countries, such as Nigeria, and the competition for them between groups and individuals is an open source of conflict. It is difficult to establish the precise causes of conflict largely because conflicts differ from each other in terms of the combination of factors that give rise to them, and also because conflicts are social phenomena relating to human beings and do not undergo rigid scientific explanations. Conflicts generally revolve around four important issues namely - *identity, participation, distribution and legitimacy* (Stedman, 1993).

- i. **Identity:** - This involves the self-conception and self-definition of an individual with respect to his/her membership in, and loyalty to, a particular community, which may be defined in social, political, economic or territorial terms (Dokubo and Oluwadare, 2011). The issue of identity will establish the extent to which an individual sees himself as being a member or non-member of a community and the extent that the individual identifies with a particular community, gives that individual some psychological (if not material) gratification. Also, the perception of identity sets parameters to the extent of sacrifice that individuals and groups make for the benefit of the community (Stedman, 1993). The issue of identity has been a major cause of violent conflicts on the African continent.
- ii. **Participation:** - This issue refers to the voluntary actions and choices that are open to the individual for making demands of government and expressing support, or lack of it, for government policies (Stedman, 1993). Participation can become problematic and can lead to conflict when individuals or groups attempt to control all available avenues for meaningful political participation to the leaving out of others. The recent pro-democracy agitation that culminated in the return to democracy in Nigeria was, in part, a reaction against the prolonged monopolization of power by the military and a faction of the Nigerian political elite.

- iii. **Distribution:** - The issue of distribution refers to the differential spread of and access to values and resources in society (Stedman, 1993). If politics can be defined in terms of “who gets what, when and how”, then the distribution of values and resources may be said to lie at the heart of politics. The manner in which values and resources are distributed determines the amount of justice, fairness, and equity that are attributable to a government. Conflicts that develop as a result of perceptions of inequality and relative deprivation are linked to the manner in which values are distributed in the society (Gurr, 1974). The on-going wave of violence in the oil-rich Niger Delta region of Nigeria is a result of the inequality in the distribution of Nigeria’s revenues which is obtained from that region.
- iv. **Legitimacy:** - This involves the individual’s belief in the relevance of the rules governing political struggle within a society (Stedman, 1993). The issue of legitimacy determines the extent to which a government is seen as acceptable or not, either by opposing groups or the population in general. Indeed, for conflicts to occur, either between groups or against the state, there must be deep-seated perceptions that the configuration of power within the country is unacceptable.

Another school of thought states that economic decline is strongly associated with violent conflicts by arguing that, the nature of politics that is associated with a dwindling economy tends to be caustic and conflictual than the politics that is associated with a growing or buoyant economy. Thus, competition for increasingly scarce resources leads to serious conflict which is usually violent in nature. The economic bases of countries like Sierra Leone and Liberia, have been practically destroyed as a result of conflicts.

According to a recent UN study, Africa has the largest refugee population of over 8 million, excluding internally displaced people (IDPs) with environmental factors such as flood, drought accounting for some of the refugees.

### Self-Assessment Exercises 1

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

1. \_\_\_\_\_ refers to the voluntary actions and choices that are open to the individual for making demands of government and expressing support, or lack of it, for government policies a. Participation b. distribution c. Legitimacy d. none

2. \_\_\_\_\_ is a confrontation between one or more parties aspiring towards incompatible or competitive means or ends (which) may either manifest, through actions a. peace b. conflict c. balance d. friendship



#### **1.4 Conceptualization of Environmental Conflict**

The issue of scarcity of resources, resulting from the interaction of economic modes/forces and the ecosystem, or as a result of the pressures of overpopulation on shrinking resources and the implications for global (western) security, has dominated the discourse on environmental conflict in recent times (Obi, 1997, p. 2). Environmental conflict in recent times has been associated with how struggles over shrinking environmental resources-as a result of overuse, unfair distribution, misuse or degradation - build up the stresses which trigger conflict. According to Homer-Dixon (1996, p. 359), Scarcities of environmental resources particularly cropland, fresh water, and forest are contributing to mass violence in several areas of the world. While these “environmental scarcities” do not cause wars between countries, they do sometimes aggregate stresses within countries, helping stimulate ethnic clashes, urban unrest, and insurgencies. The other strand of the environmental scarcity thesis is neo-Malthusian, which links conflict to situations in which population growth surpasses the local resource base. Rapid population growth beyond the limits of the carrying capacity of the ecosystem or “resource threshold”, leads into stresses which directly or indirectly provoke conflict (Klare, 1996). Looking at the social perspective on the environment, Saurin, (1996), exposes some of the limitations of the views of environmental scarcities. Rather than seeing environmental crises or scarcities as natural (Bush, 1997, p. 503), or the outcome of natural population increase (as if everyone had equal access to resources) it perceives the environment as being “socially constructed”, as a “process rather than a form, as the result of a set of relationships between physical space, natural resources and a constantly changing pattern of economic forces” (Redclift, 1989, p. 79). Here, attention is drawn to the relationship between man and the ecology as resource base, and locates environmental conflict as the outcome of struggles between socio-economically defined groups for the control of resource(s) for profit, use, or distribution (Bookchin, 1992). This makes it possible for a tiny fraction of the population to control a large share of the

resources to the exclusion of the majority who have to struggle for the little share left. The situation in Africa has become worrisome in view of the failure of structural adjustment and the deepening of environmental conflict in the continent (Bush, 1997).

#### **1.4.1 Types of Conflict**

In our everyday life, we are involved in a number of conflicts some which are often not resolve easily. It is a usual process in human relation which exist whenever and wherever people have contact. Five principal types of conflict exist which include the following:

#### **1.4.2 Relational Conflicts**

Relational conflicts occur as a result of the presence of strong negative motions, misperceptions, poor communication or miscommunication or repetitive negative behaviours. Relationship problems frequently fuel disputes that lead to unnecessary destruction. Relational conflicts are usually preceded by a breakdown in communication like in any other conflict. Communication is the means through which people interact, exchange information and relate with one another which takes place whenever two or more persons come in contact with each other and express their ideas, thoughts and feelings. A break in this communication chain often leads to doubting the sincerity of the opposite party which eventually results to conflict. Supporting the safe and balanced expression of the perspectives and emotions for acknowledgement is an effective approach of managing relational conflict.

#### **1.4.3 Data Conflicts**

This type of conflict occurs when necessary information needed to make wise decisions are lacking leading to misinformation, disagreement on which data is relevant, misinterpretation of information, and have competing assessment procedures. Some data conflicts may be unnecessary since they are caused by poor communication between the people in conflict while others may be indisputable incompatibilities associated with data collection, interpretation or communication. Most data conflicts usually have data solutions.

#### **1.4.4 Interest Conflicts**

Competition over perceived or real incompatible needs or goals leads to interest conflict which results when one or more of the parties believed that in order to satisfy his or her needs, the needs and interests of an adversary must be sacrificed. In interest based conflicts, a variety of interests and

intentions underlie and motivate positions in negotiation which must be addressed in order to achieve maximum resolution of the conflicts. Interest conflicts could occur over substantive issues (such as money, physical resources, time, etc.), procedural issues (the way the dispute is to be resolved), and psychological issues (perceptions of trust, fairness, desires for participation, respect, etc.). To resolve this type of conflict, parties must be assisted to define and express their individual interests in a way that all the interests could be jointly addressed. Interest conflicts are best resolved through the maximization of integration of the parties involved irrespective of interests, positive intentions and desired pragmatic outcomes.

#### **1.4.5 Structural Conflicts**

This type of conflict is caused by forces external to the parties in the dispute. Limited physical resources or authority, geographic constraints (distance or proximity), time (too little or too much), organizational changes, can make structural conflict look like a crisis. For example, in some patriarchal societies, women and girls are required to be submissive to men and boys and experience pressure from their communities, not to speak out or push themselves forward either legally or socially. In addition, many communities believe that decision-making is the role of men with women often forced to leave decisions affecting their lives and those of their children in the hands of their husbands, fathers and male community leaders. These constraints both legally or socially, constitute structural violence against women in such communities and with time could lead to conflict between the women and system. It will be helpful to assist parties in such conflicts to appreciate the external forces and constraints behind the cause as parties' appreciation of the external forces could come together to jointly address the imposed difficulties. Structural conflicts would have structural solutions.

#### **1.4.6 Value Conflicts**

Value conflicts are caused by perceived or actual incompatible belief systems. Values are beliefs that people use to give meaning to their lives. Values explain what is “good” or “bad”, “right” or “wrong”, “just” or “unjust”. Differing values need not cause conflict because people can live together in harmony with different belief systems. Value disputes arise only when people attempt to force one set of values on others or lay claim to exclusive value systems that do not allow for

different beliefs. For example, attempts by the *Boko Haram* sect in northern Nigeria to force the adoption of Islam on the people could erode the value system of the Christians in these areas sparking off religious disputes between the Muslims and Christians. There is no need in trying to change value and belief systems during relatively short and strategic mediation interventions. It would be useful to support each participant's expression of their values and beliefs for acknowledgement by the other party. Other types of conflict include the following:

*a) Task Conflict*

Members of a group may disagree about facts or opinions from authorities. The explanation of the evidence may be questioned. Disagreement about the substance of the discussion is called “task conflict”. Therefore, this type of conflict can be productive by improving on the quality of decisions and critical thinking processes.

*b) Interpersonal Conflict*

The term interpersonal conflict refers to the disagreement most people call a “personality clash” which may take the form of antagonistic remarks that relate to the personal characteristics of a group member or disregard any organizational goals to provoke a particular group member. This type of conflict is expressed through more subtle non-verbal behaviours which include icy stares, or an avoidance of eye contact. Interpersonal conflict may be inevitable and must be managed for optimal group maintenance.

*c) Procedural Conflict*

Procedural conflict which may be productive exists when group members disagree about the procedures to be followed in achieving the group’s goal. New procedures may be formulated and a new agenda recommended. Even the group may be modified. .

*d) Institutional Conflict*

This type of conflict refers to the disharmony that takes place within and between the sub-systems in the course of governance, within and among the levels and arms of government. This is influenced by the non-availability of, and/or non-adherence to institutional channels clearly selected as the proper forum for the articulation and reconciliation of competing demands.

*e) c conflicts*

Communal conflicts in Nigeria, are common as it usually emerges in the form of demands, which may be horizontal (one group or community on another), or vertical (one group or community on the

state), or both. When these demands are not swiftly and convincingly addressed, they lead to open confrontation.

## **1.5 Effects of Conflict**

Conflict is usually assumed to have negative effect but not all conflicts are destructive. Hence, conflict can be beneficial, even though it may be harmful to individuals or groups.. In other words, some types of conflicts are not beneficial, while some could be productive and have positive effects on individuals and groups.

### **1.5.1 Positive Effects of Conflict**

Conflict may define, maintain, and strengthen group boundaries, contributing to the group's uniqueness and increasing group's solidarity. Conflict which could promote the formation of groups can also destroy groups, terms of realignment resulting from shifts in the distribution of power and in the extermination of a futile party to conflict. Conflict can improve the quality of decisions as expression or conflicting news generates need for additional information that is imperative to the decision-making process. Such conflicts tend to make possible the readjustments of norms and power relations within groups in accordance with the felt needs of its individual members or subgroups.

Past conflicts could also have either positive or negative effects on present and future conflicts. Conflict may create bonds between individuals or groups as they unite to fight a common cause. For example, in a debate session, two groups can agree to disagree on an issue, or vice versa. Conflict can also improve the quality of decisions; stimulate involvement in the discussion, and build group cohesion.

Other positive effects of conflict include the following:

- 1) Conflict may help define and sharpen community issues to improve decisions.
- 2) Conflict may help gain recognition for a group.
- 3) Conflict may increase unity, cohesion, and solidarity within a group.
- 4) Conflict may strengthen group boundaries.
- 5) Conflict may help in the formation of a new group.
- 6) Conflict could result in the restructuring of a group
- 7) Conflict could lead to alliances with other groups.

### 1.5.2 Negative Effects of Conflicts

Conflict is potentially destructive because it is usually characterized by violence. Destructive conflicts threaten rather than consolidate governance process and are also a threat to security and national development. Their effects are usually disastrous. Nigeria had witnessed and is still witnessing cases of destructive conflict, leading to destruction of lives and property. The losses are irredeemable. For example, the menace of *Boko Haram* and the Jos crisis. Conflict also increases bitterness, alienation and divisiveness within or among groups and may have long lasting effects on future cooperation among individuals and groups holding opposite views. Conflict impacts negatively on the social, economic and political sectors of both the people and the society. The Negative Social Effects of Conflict according to Abolurin (2010, p. 60) include the following:

1) Physical Maltreatments: This involves the following: -

- (a) Maiming
- (b) Injuries
- (c) Air pollution
- (d) Land mines
- (e) Desecration of land
- (f) Kidnapping.

2) Sexual Harassment in form of rape can result to:-

- (a) Unwanted pregnancies
- (b) Deformation
- (c) Separation by husbands, children and relations
- (d) Stockholm syndrome
- (e) Torture
- (f) Death
- (g) Psychological Torture which can lead to post-traumatic stress disorder (PTSD). .
- (h) Education: Access to good education is denied, as this sector suffers a great deal during conflicts.
- (i) Health Services: Facilities are destroyed, medical attention is inaccessible, and medications are diverted, looted and destroyed. Thus, victims end up losing their lives or contracting diseases.

The Negative Economic Effects of Conflict are:

- (a) Food insecurity
- (b) Nutritional problems
- (c) Restriction of access to humanitarian aids
- (d) Loss of revenue from agricultural sector, energy sector, tourism
- (e) Abandoned investment and places of work leading to loss of revenue
- (f) Decrease in population
- (g) Scarcity in the availability of goods and services
- (h) High level of poverty
- (i) Resource competition
- (j) Unequal development, etc.

The Negative Political Effects of Conflict include -

- (a) Revisiting Territorial Disputes
- (b) Population displacement/movement resulting to internally displaced persons (IDP) and refugees
- (c) Competition for Power
- (d) Competition for resources
- (e) Creation of multiple factions
- (f) Hard power high-handedness
- (g) Weakening of political/traditional structure of authority
- (h) Proliferation of arms

Conflicts can also disrupt normal channels of cooperation among various segments of the community. Conflict within a group can allow dissatisfied members to voice their complaints. And the group may restructure itself to deal with internal dissension and dissatisfaction. However, conflict within a group often leads to internal tension and disruption resulting to the diversion of members' attention from the goals of the group to focus on the conflict.

## Self-Assessment Exercises 2

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

3. \_\_\_\_\_ conflict refers to the disagreement most people call a “personality clash” which may take the form of antagonistic remarks that relate to the personal characteristics of a group member  
 a. *Procedural* b. *Institutional* c. *Institutional* d. *Interpersonal*

4. Value conflicts are caused by perceived or \_\_\_\_\_ incompatible belief systems  
 a. demand b. confrontation c. value d. actual



## 1.6 Summary

Most definitions of conflict embody the element of struggle, strife, or collision thereby distinguishing it from competition. Some definitions further suggest that conflict entails the struggle for mutually exclusive rewards or the use of incompatible means to a goal. Conflict is an ever-present process in human relations which are rarely resolved easily. The potential for conflict exists whenever and wherever people have contact because as people are organized into groups to seek a common goal, the probability of conflict arising greatly increases. All conflicts are not the same as it has negative implications for many people. For a conflict to exist, the people or groups who are involved must perceive the situation as a conflict. If no one is aware of a conflict, it is generally agreed that no conflict exists. Therefore, whether a conflict exists or not is a perception issue. The effects of conflict are many, varied and unpredictable, depending on the dimension it takes. In as much as it can be harmful to individuals and groups, the result at times can be positive. Individual or group members should try as much as possible not to allow conflict to erupt to violence. It is important to have a positive approach to conflict because this ensures that conflict is managed in a constructive way, as conflict itself is inevitable. There is need for dialogue, change, development, friendship, improved communication among others, between and among group members.

In this unit, we have discussed the conceptualization of conflict and environmental conflict. We also examined the various types of conflicts and their effects. Since most times the effects of conflicts are negative, there is no appropriate technique to resolve the conflict and if un-resolvable, be able to manage the conflict to decrease the odds of unproductive escalation.



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## **1.8 Possible Answers to SAEs**

### **Self-Assessment Exercises 1**

1. a. Participation
2. b. conflict

### **Self-Assessment Exercises 2**

3. d. *Interpersonal*
4. d. actual

## **UNIT 2 THEORIES OF CONFLICT**

### **UNIT 2 CONTENT**

- 2.1 Introduction
- 2.2 Learning Outcomes
- 2.3 Theories of Conflict

2.4 Summary

2.5 References, Further Readings, Web Sources

2.6 Possible Answers to Self assessment exercise



## 2.1 Introduction

A theory is an idea or belief about something arrived at through assumption and in some cases a set of facts, propositions or principles analyzed in their relation to one another and used, especially in science, to explain phenomena (Ademola, 2011, p. 35). A theory is more than a collection of facts. But not all statements that go beyond facts are theories. For a theory to have value, it must explain or suggest ways of explaining why a subject matter has certain characteristics, that is, it must have an explanatory, predictive, and problem-solving value and not just an intellectual exercise that simply seeks to provide new sets of categories or paradigms. The main objective of any theory is to explain something which has occurred with a view to dealing with problems which arose or may arise as a result. There are various theories which have attempted to provide the frameworks for understanding the causes of conflict, the conditions under which conflicts occur and the conditions for their resolution.



## 2.2 Learning Outcomes

By the end of this unit, the student should be able to:

- i. Understand some of the theories of conflict developed by conflict scholars
- ii. Present unique ideas that will help in the understanding of conflict
- iii. Try to make sense of the phenomena from the variety of approaches of enquiry in this field
- iv. Explain conflict as it occurred with a view to dealing with the problem which arises from it



## 2.3 Theories of Conflict include the following; -

### 2.2.1 Structural Conflict Theory

This theory which is similar to transformative theory in addressing the reactions of individuals, groups, cultures, institutions and societies to change has two main sub-orientations. The first is the radical structural theory represented by the Marxist dialectical school and the second is the liberal structuralism represented by Ross (1993), Scarborough (1998) and the famous work of Johan Galtung (1990) on structural violence. The structural conflict theory argues that conflict is built into the ways societies are structured and organized by looking at social problems like political and economic exclusion, injustice, poverty, disease, exploitation, inequity as sources of conflict.

Structuralists maintain that conflicts occur because of the exploitative and unjust nature of human societies, domination of one class by another, etc. Radicals such as Friedrich Engels, Karl Marx, Joseph Lenin and Mao Tse Tung blamed capitalism for being an exploitative system based on its relations of production and division of society into the proletariat and the bourgeoisie. The exploitation of the proletariat and the lower classes under capitalism creates conflict. To the Marxists, the capitalist conflict will be resolved through revolution where the bourgeoisie will be overthrown in a socialist revolution led by workers, bringing about the establishment of a socialist order led by the working people. Also, there will emerge “capital internationalism” where workers all over the world will unite and not limited by state boundaries since the state itself is an artificial creation of the bourgeoisie to dominate others. Johan Galtung, a liberal structuralist propounded the theory of negative peace and positive peace to buttress how structural conflicts can occur in the society. The liberal structuralists propose the elimination of structural defeats with policy reforms.

Structural theory emphasize on how the competing interests of groups tie conflict directly into the social, economic and political organization of the society as well as the nature and strength of social networks within and between community groups. While structural theory presents a large number of common factors (such as economic and social factors) that make the emergence and escalation of internal conflicts possible, the political and institutional factors (such as the structure of the state, discriminatory political institutions, intergroup politics and elite cohesion or fragmentation); security factors (like national security dilemma, regional military environment, refugee regimes, cross-border criminality and civil-military relations); as well as the ethnic facts (such as demography and physical geography) are also critical. In most cases, the problem of overpopulation, economic underdevelopment, un-integrated social and political institutions and demographic factors put pressure on human settlement and available resources are the main factors responsible for the emergence of internal conflicts.

### **2.3.2 Realist Theory**

This theory highlights inherency and argues that the root cause of conflict is as a result of flaw in human nature which is seen to be selfish and engaging in the pursuit of personalized self interest defined as power. The realist theory originates from classical political theory as both argue that the starting point of a conflict is the individual level. It has three component parts: the Descriptive Realism which sees the world as an arena of conflict; Explanatory realism which shows that there are genetic defects which push humans into behaving negatively and that wars become inevitable because there is no mechanism to stop them from occurring and Prescriptive Realism which builds on both the descriptive and explanatory realisms to believe that decision makers (individual, groups or nation) have a moral justification to defend their basic interests and ensure self-preservation using any means necessary. Morgenthau (1973, p. 4) argues that realism is a departure from idealism, because idealism believes that human nature is malleable and good. He argued that the imperfection in the world (namely conflict) has its roots in the forces that are inherent in human nature; that human nature is selfish, individualistic and naturally conflictive; that such interest will come into conflict with those of others leading to the inevitability of conflict. Thus, actors should be prepared to deal with the outcome and consequences of conflict since it is inevitable. Realism however, has impacted on conflict at the international level immensely.

### **2.3.3 Biological Theory**

This theory gave rise to the innate theory of conflict which contends that conflict is innate in all social interactions and among all animals including human beings. It believes that humans are animals (though higher species of animals) and would fight naturally over things that they value. Theologians and the religious people also believe in the innate theory because they see the inner flaw in humankind by way of sin that brings forth bitterness, violence and conflict. Hence, conflict is inherent in man that can be explained from man's inner properties and attributes, and hormonal composition. It is this aggressive instinct in that will be provoked when he is threatened and challenged. They also believe that the whole purpose of religion is to regulate this sinful nature in the relationship between men and men and between men and God. Sigmund Freud in trying to understand the high level of aggression and destruction that happened during World War I, described the destructive tendencies in human beings as a product of a dialectical struggle between the instinct

associated with life and survival (Eros) and those associated with death (Thanatos). He argues that both instincts are always seeking for release and the one that wins the contest of domination is therefore, released. He concludes that war and conflict is a necessary periodic release that helps men preserve themselves by diverting their destructive tendencies to others. This informs the argument that failure to express anger results in heart disease, stress and high blood pressure. Hence, many theories of conflicts resort to human nature to explain the occurrence of conflict.

#### **2.3.4 Frustration-Aggression Theory**

Frustration-Aggression theory was initially developed by John Dollard and his research associates in 1939. It appears to be the most common explanation for violent behaviour arising from the inability to fulfill needs. In explaining aggression, the arguments point to the difference between what people feel they want or deserve, to what they actually get i.e. “the want-get-ratio” (Feierabends, *et al* 1969, p. 256) and the difference between “expected need satisfaction” and “actual need satisfaction” (Davis, 1962). This implies that where expectation does not meet attainment, the tendency is for people to confront those they hold responsible for frustrating their ambitions. This is corroborated by Ted Robert Gurr’s (1970, p. 24) relative deprivation thesis, whose central argument is that “the greater the discrepancy however marginal, between what is sought and what seems attainable; the greater will be the chances of anger and violence to result. Central to the frustration-aggression theory is that aggression is not just undertaken as a natural reaction or instinct as realists and biological theorists assume, but that it is the outcome of frustration and that in a situation where the legitimate desires of an individual is denied either directly or by the indirect consequence of the way the society is structured, the feeling of disappointment may lead such a person to express his anger through violence that will be directed at those he holds responsible or people who are directly or indirectly related to them. When the populace is feeling frustrated because they are getting less than they deserve, it is advisable that the leaders should find out what the expectation of the individual or group are and negotiate with them. But those in position of authority feel that giving in to public demands or going into negotiation is a sign of weakness. It is usually not true but rather it will make the people believe that something is being done about the issue. The Niger Delta area is an example of how frustration can lead to aggression. The people peacefully agitated for what they feel is a fair share of the oil wealth that is exploited from their land. When they waited and nothing was done, the

youth took the law into their hands by vandalizing oil pipelines, kidnapping oil workers for ransoms and creating problems generally for those they believe are responsible for their predicaments.

### **2.3.5 Physiological Theory**

This theory shares the biological and hormonal origins of aggression and conflict in individual with the realists, theologians but further provided the condition under which this happens. The argument is that even though humans have the capability to be aggressive, this capability remains idle until stimulated by necessity or encouraged by success. The physiological sources of aggressive behavior are a function of several factors including human nature and the environment. Humans are naturally capable of being aggressive but do not display violent behaviour as an instinct so when violence occurs, there is the possibility that it is manipulated by a combination of factors within and outside the individual's control.

### **2.3.6 Economic Theory**

Since people in conflict are assumed to be fighting over something that is material, economists try to provide an economic explanation for the existence and endurance of conflict. But the issue is whether conflict is as a result of greed (intention to corner something) or of grievance (anger arising from injustice). Collier (2003, p. 4) noted that some conflict entrepreneurs benefit from chaos while majority of the population are affected by the negative impacts of conflict. Leaders of armed formations perpetrating violence, benefit from the chaos, as war the crisis stage of internal conflicts, has become a huge profit-making venture. Bredal and Malone (2000) argue that even though issues in conflict are as a result of ideological, racial or even religious differences, they represent a contest for control over economic assets, resources or systems. Therefore, economic theories' emphasis is on resources.

### **2.3.7 Psycho- Cultural Conflict Theory**

This theory highlights the role of culture in inducing conflict and contends that even though there are different forms of identities (the one that is based on people's ethnic origin and the culture that is learnt on the basis of that ethnic origin) is one of the most important ways of explaining violent conflict. Identity is therefore seen to be the reason for social conflicts that take long to resolve. This

theory argues that conflicts that take long to resolve become possible when some groups are discriminated against or deprived of satisfaction of their basic (material) and psychological (non-material) needs on the basis of their identity and sees the recognition and protection of identity as the most important even though there are other important needs for physical security, food, belonging, political and economic empowerment, and self-esteem. Conflicts that are caused by crisis of identity are very dangerous and violent as events which threaten to remove the feelings of safety are tied to different forms of identity and lead to defensive reactions aimed at avoiding both physical and or physical exposures. The sense of security and safety that people need for normal development include the need for love and self-esteem among other non-material need. Therefore, when people feel threatened, the reaction is usually unpredictable.

### **2.3.8 Human Needs Theory**

The argument of this theory is similar to that of Frustration-Aggression and Relative Deprivation theories. It assumes that all humans have basic human needs (comprising of physical, psychological, social and spiritual needs) which they seek to fulfill and the denial and frustration of these needs by other groups or individual can affect them immediately or later leading to conflict (Rosati *et al*, 1990). Needs theorists like Maslow in his *Motivation and Personality* identified physiological needs, safety needs, belongingness and love, esteem and self-actualization, while Burton lists response, stimulation, security, recognition, distributive justice, meaning, need to appear rational and develop rationality, need for sense of control and the need for role defense as some of the needs which when deprived could cause conflict. Burton also notes that human needs such as recognition, identity, security, autonomy and bonding among others are not easily given up and frustration from the political or social system to suppress them, will either fail or cause more damage on the long run. To resolve a conflict situation caused by the denial of basic needs, or to prevent it from occurring, these needs have to be met.

### **2.3.9 Systemic Theory**

This theory provides a socio-structural explanation for the emergence of violent conflicts arguing that the reason(s) for any social conflict lie in the social context within which it occurs. The systemic

causes of conflict that lead to changes in peoples' material comfort include environmental degradation that reduces access to sources of livelihood, uncontrolled population growth especially in the urban centres, resource scarcity and its allocation through lopsided political process and competition, the negative effects of colonial and Cold War legacies, breakdown of cherished values and traditions that play crucial social control functions, widespread poverty in the midst of plenty, the domination and marginalization of minority groups by those in the majority, and ethnicity. These sources of conflict are found in every aspect of life affecting large numbers of people. Since these factors bear directly on the less privileged, preventive strategies meant to support social and political stability, initiate people-friendly economic and political reforms, and state policies that genuinely seek to prevent or reduce conflicts between individuals and groups by seriously addressing the underlying issues, often yield positive results in the long as the people will see and feel the impacts of the actions as soon as they begin to yield fruit. This theory also explains the relationship between modernization and political disorder arguing that the movements between different economic and political periods contain pull factors, tensions and crises that create condition of internal conflict and instability. In addressing the different challenges and crises of modernisation, most governments that do not have legitimate support from the people always resort to undemocratic means and force rather than legal processes in order to suppress the legitimate demands of the people.

### **2.3.10 Relational Theory**

This theory provides explanations for violent conflict between groups by exploring the sociological, political, economic and historical relationships between such groups. Sociologically, the differences between cultural values are a problem to either individual or group identity formation processes. Thus, there is the tendency to see others as intruders that need to be prevented from encroaching on established cultural boundaries. From the political economic perspective, power is a major source of tension between different interest groups within a political system. Conflicts can also develop out of past history of conflict between groups. Examples of conflicts arisen from past history of conflict include groups like the Hausa/Fulani, Igbo and the Yoruba in Nigeria; the Hausa, Djerma, Fulani, Tuareg and Arabs in Niger and the Bambara, Malinke and Sarakole of Mali etc.

### **Self-Assessment Exercises 3**

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

5 \_\_\_\_\_ theory provides explanations for violent conflict between groups by exploring the sociological, political, economic and historical relationships between such groups. a. Relational b. Systemic c. Human Needs d. all of the above



## 2.4 Summary

These theories have their limitations but they still offer some useful perspective to the understanding of conflict. The explanations of the arguments by those who developed these theories are important because there are similarities among the various theories. For example, all the theorists recommend approaches that recognise the needs and interests of all the parties, the non-confrontational strategies and strategies that remove feelings of bitterness. Thus, each perspective only adds to the pool of available knowledge on conflict resolution processes and one or two viewpoints can be used in analyzing conflicts or in developing conflict resolution policies for political leaders.

In this unit we discussed the various theories which can be used to explain something which has occurred with a view to dealing with problems which arises or may arise. The nature of theories has direct linkages with the nature of the problem that they create or sometimes make their development a necessity. Conflict theories tend to be typically classified under the broad category of analytical theories which are logical in their approach and seek to link relationships between variables.



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## 2.6 Possible Answers to SAEs

### Self-Assessment Exercises 3

5. a. Relational
6. b. hormonal

## UNIT 3 CONFLICT RESOLUTION TECHNIQUES

### UNIT 3 CONTENTS

- 3.1 Introduction
- 3.2 Learning Outcomes
- 3.3 Conflict Resolution Techniques
- 3.4 Summary
- 3.5 References, Further Readings, Web Sources
- 3.6 Possible Answers to Self assessment exercise



### **3.1 Introduction**

Conflict represents a condition of disharmony in an interactional process. Conflict is the direct result of a clash of interests by the parties involved in an interactional process which arises usually as a result of the pursuit of incompatible ends or the use of incompatible means to pursue desired goals by the parties involved in an interactional process. For a conflict situation to exist, four conditions are necessary: (1) There must be sets of individuals exhibiting some level of organization. For example, voluntary groups, religious groups, families, communities, nations or some other collections of individuals. (2) There must be some level of interaction among group members. Without contact and communication, there can be no conflict. The contact could be merely propaganda about other people, culture, or group hence, it may not be personal. (3) There must be different levels of positions to be occupied by group members - a hierarchy of relationships as all individuals cannot occupy the same positions at the same time. (4) There must be scarcity of needed or desired resources and a general satisfaction among members about how these resources are being distributed. When there is dissatisfaction, conflict can erupt. Hence, conflict is inevitable in the interactions between human beings, either individually or in groups as all human societies, communities, organizations and interpersonal relationship experience conflict at one time or another in the process of their regular interactions.



### **3.2 Learning Outcomes**

Given the importance of conflict resolution techniques, your objectives in this unit include the following:

- i. Define conflict Resolution
- ii. Describe the conditions necessary for conflict situation to exist
- iii. Identify the stages of responses to conflict resolution
- iv. Explain the various conflict resolution techniques.



### **3.3 Conflict Resolution Techniques**

Miller (2003, p. 8) states that conflict resolution is seen as a variety of approaches aimed at terminating conflict through the constructive solving of problems different from management or transformation of conflict. It signifies a sense of finality where the parties to a conflict are mutually satisfied with the outcome of a settlement and the conflict is resolved in a true sense (Shedrack, 2010, p. 94). It is a complicated exercise involving lengthy negotiations and patience to achieve lasting result. Breakthroughs in negotiations are not usually as dramatic as in the case of the deployment of a peace-keeping force to stop fighting. The slowness that has characterized most conflict resolution exercises has often led to the prolongation of most peace keeping missions. For instance, a number of the peace keeping missions embarked upon by the United Nations have gone on infinitely due to the failure to effectively resolve them. For example UNTSO in the Middle East and UNMOGIP in the Indo-Pakistani border. The general interest shown in conflict management has led to the development of a number of techniques for the resolution of conflict. Conflict resolution process begins with the direct negotiation or interaction between the parties involved in the conflict but a third party involvement becomes necessary when there is a deadlock in the negotiation between the parties or when the level of escalation has reached a stage of near collapse or complete collapse of effective communication between parties to the conflict. Third party intervention is however, necessary from the outset where the parties are traditionally non-communicable adversaries. The various conflict resolution techniques include:

#### **3.3.1 Direct Negotiation Techniques**

Negotiation which is defined as the process whereby parties involved in a conflict seek to settle or resolve their conflicts takes place between at least two parties who are faced with a conflict situation. Here, parties realize that they have a problem and know that by talking to each other, they would find solution to the problem. *Communication* is important in this process as it can only take place when there is communication between parties. Negotiation takes place during the early stages of conflict when communication between parties is still existent and good or at the de-escalation point when communication has been restored. These techniques are:

- a) Coercive bargaining technique
- b) Non-coercive or mutually beneficial bargaining technique.

The techniques adapted by the parties depend on the specific goals they want to pursue at the negotiating table. Some parties to a conflict perceive the bargaining exercise as a “win-lose” game. Thus, parties are usually more attracted to competitive and coercive bargaining techniques rather than the overall objective of promoting peaceful relations. The parties primarily interested in promoting peaceful relations are usually more disposed to exploring non-coercive and mutually beneficial techniques that lead to “win-win” outcome. Coercive bargaining techniques are meant to exert pressure on the opponent, to demonstrate determination and create problems in the possibility of retreat for the party applying them. They are meant to transfer the responsibility of saving the negotiations and avoiding a disaster to the opponent. Coercive bargaining techniques commonly used are:

- a) Burning bridges.
- b) Making irrevocable commitment, like that of Uganda's Idi Amin during the conflict with Britain over Dennis Hill.
- c) Publicizing one's commitment, like the ultimatum given by Nigeria's Minister of Foreign Affairs to South Africa during the deportation incident in 2012.
- d) Giving the impression of irrationality.
- e) Crossing threshold, moving from one level of bargaining to another such as breaking up peaceful negotiations to announce a partial mobilization.

The problem of coercive bargaining techniques is that they are only useful when they are applied by only one party. Because bargaining techniques amount to pressuring the opponent to make most of the concession in order to achieve a settlement. They frequently do not result in any lasting resolution. The party that made all the concessions will always look for an opportunity to reverse such an imposed settlement.

Mutually beneficial techniques are those bargaining techniques which if adopted by both parties would lead to mutually acceptable outcomes. These include:

- a) Gaining an understanding of the opponent's fear and concern.
- b) Preparedness to compromise.
- c) Avoidance of gaining too much since the opponent cannot afford to lose too much.
- d) Building golden bridges behind the opponent to facilitate retreat. This is necessary where the opponent has to make most of the concessions, a safety valve should be provided to

smoothen the process. A good example is what happened during the Cuban Missile Crisis between the United States and Soviet Union in 1962.

### **3.3.2 Third-party Mediation Techniques**

The third-party mediation techniques involve three broad categories - the legal or judicial, the power politics and the conciliatory techniques.

#### **a) Judicial Method**

This method tries resolving a conflict through some legal framework in which a third party assumes the responsibility of reaching an effective decision concerning the resolution of the conflict in accordance with pre-existing societal or international norms. The decision of the mediation may be binding or may not. Variants of the judicial method include the use of arbitration panel, resort to the International Court of Justice, and the use of legislation or conference resolution, especially within an international organization. The Judicial method does not always lead to an effective resolution of a particular conflict because it usually ends up with a win-lose outcome. Thus, decisions resulting from this method are usually ignored by the parties that are not favoured by the decision. The standard for judgment rarely reflects universally accepted norms while decisions are taken on the basis of right or wrong.

#### **b) Power Politics Method**

This method attempts to resolve conflict where the main concern is how the outcome would affect the existing balance of power between the parties and their allied groups instead of responding to the genuine needs and aspiration of the parties involved in the particular conflicts. This technique was used in the management of conflicts during the period of the Cold War when the patterns of responses by the United States and Soviet Union to conflicts in the Third World were largely influenced by their expectations as to how the different outcomes would affect the east-west strategic balance. Arms balancing were adopted by the super powers as a basic technique in their responses to conflicts in different regions of the world. Arms balancing have its economic reward for these big powers who try to exploit the relative technological backwardness of most of the developing countries by capitalizing on the various conflict situations in these developing countries. An example is the Middle-East crisis, where arms are sold to both sides in the Arab-Israel conflict and other conflicts arising from intra-Arab rivalries in the region. Other options of the power politics method include the use of threats, blackmail and coercive physical force to keep the parties in conflict

restrained, neutralised, or to impose an unpalatable settlement on both or either one of the parties. The problem with the method hinges on the likelihood of ignoring the salient issues of that particular conflict in favour of the pursuit of strategic advantages. Arms balancing simply postpone the doomsday rather than address the basic problem at the root of that particular conflict. It has, not been able to address the fundamental problems affecting the Middle-East or in the Horn of Africa and in the other conflict areas of the world. While it impoverishes the parties in conflict and complicates their internal security problems, arms balancing served as an avenue for rich financial harvests for the arms manufacturers. The power politics techniques usually lock its operators in a vicious circle in which the main concern is an unending struggle to gain strategic advantage, or restore threatened hegemony. Since the basic issues affecting the relevant conflicts are hardly addressed, these conflicts have usually remained unresolved. In a situation where there have been settlements, such settlements have been short-lived because the party in the disadvantageous position in the power balance was forced into making the necessary concessions. Under such circumstances, the urge to overturn the strategic balance is an overriding preoccupation of the inferior party so as to regain what it bargained away due to its inferior position in the power balance. The only type of coercive physical intervention which does not fall into the straightjacket of the power politics method is the use of peace-keeping forces, especially by international organisations to play what could be regarded as a “hold-on” role while efforts are directed towards finding a diplomatic solution to the particular conflict.

### **c) Conciliatory Method**

This is an informal process in which a third party tries to bring the parties involved in the conflict to agreement through the improvement of communications between them, through helping to interpret the salient issues involved in the conflict and through the exploration of possible options that would help to bring about a peaceful resolution of the conflict. The goal of the conciliatory method is to facilitate contact between the parties in the conflict in order to provide them the opportunity to bring forward their fears and concerns and seek mutual understanding of their respective positions, Conciliation is therefore an attempt by a third party to create an atmosphere of trust and cooperation that is conducive for a fruitful negotiation. The variants of this method are appeasement, need satisfaction and the joint problem-solving technique. Appeasement, for instance, hinges on the proposition that conflicts usually become intractable and escalate into wars because of the failure to redress legitimate grievances. In other words, if those in an interactional process are committed to

redressing legitimate grievances, there will be no basis for conflict. The basic weakness of appeasement is the determination of legitimate grievances because people view their interests and needs in a subjective manner; it is difficult to agree on what constitutes legitimate grievances. Besides, appeasement is prone to abuse, especially when used against an opponent with an insatiable appetite, as was the case in Europe in the late thirties, when it was applied to Germany during Hitler's regime. Due to its woeful failure when it was applied to Hitler, appeasement acquired some negative overtones, and has since remained a rather unpopular technique. Appeasement in a way seeks to get to the root of the conflict by trying to find out the basis for compliant or deviant behaviour in order to remove it through what could be regarded as a policy of accommodation. However, because there is the possibility of appeasement being abused, it needs proper care in its application as well as some supportive element in the form of deterrence against reckless demands.

Human needs satisfaction, as a conflict resolution technique, is not basically different from appeasement. According to John Burton, its leading exponent, the human being has certain needs that are human and not malleable, which must be satisfied if there is to be development and conforming behaviour. In this sense, any policy that neglects human needs cannot but generate protest behaviour and conflict - it does not matter how coercive that policy may be. As far as the human need theory goes, these needs represent inherent drives of the human person which cannot be bargained away or completely suppressed. This means that until they are satisfied in one way or the other, they remain a source of discord between the parties affected. Like the theory of appeasement, human needs theory seeks to get to the root of the conflict by responding to the reason for protest and deviant behaviour which tend to generate conflict. The basic assumption of the theory is that the fundamental root of conflict is traceable to the failure to satisfy human needs, which in the theory of appeasement, represent legitimate grievance. What the two theories are saying, in effect, is that to ensure societal harmony and resolve conflict situations, it is necessary to identify the relevant legitimate grievances, needs, desire, or interest involved in order to satisfy them. More importantly, the satisfaction of a particular need simply leads to the urge for another hence, like appeasement, human needs, as a conflict resolution technique could come to woeful failure as a result of the insatiability of the human appetite.

The problem-solving technique, seeks to get to the root of the conflict in order to effect a lasting solution. Like the need's satisfaction technique, it assumes that conflict is generally a response to frustrated needs. In this method, the following three processes are necessary:

- a) identification of the frustrated needs to be satisfied;
- b) identification of the various options available for their satisfaction; and

c) selection of the options that are mutually acceptable to the parties in conflicts. This problem-solving technique provides the parties in the conflict the opportunity to discover some issues of mutual interests which they could explore, to arrive at a mutually acceptable solution to their conflict. And also provides a better opportunity for the parties in the conflict to explore a win-win outcome as distinct from a win-lose outcome at the bargaining table. The problem-solving technique encourages the cultivation of positive attitudes toward conflict and the exploration of ways by which the needs, fears and concerns of the parties to a conflict can be addressed to their mutual satisfaction. As Dean Pruitt remarked, problem-solving entails an effort to identify the issues dividing the parties to a conflict and to develop and move towards a solution that appeals to both parties. Problem-solving techniques also seek to alter the conditions that breed friction and unrest in human and societal relations. Hence, the problem-solving techniques provide a far greater opportunity than any other conflict resolution techniques for a comprehensive analysis of the issues involved in a conflict. Admittedly, the application of the problem-solving technique has been so variegated that it is difficult to hold on to any one pattern. Problem-solving workshops, two track or multi-track diplomacy, needs satisfaction, interests' harmonization and third party facilitation are among the specific methods that have been evolved for realizing the objectives of the problem-solving technique of conflict resolution. Irrespective of the specific method applied to achieve its objective, the problem-solving techniques lead the conflict managers to the resolution of all the fundamental issues involved in the conflict and offer a better chance for affecting a lasting solution to the conflicts.

### **3.3.3 Religious Approaches**

Religion and languages are two major components for the growth of human civilization as they unite people together for cooperative action. The importance of informal conflict resolution practices is reflected by the need of people to exist and share the same space. For example, festivals such as Yam Festival in Eastern Nigeria (religious rites), provide a public space and an occasion to reconcile relations by visiting each other's houses, exchanging gifts and good wishes, receiving blessings from

elderly persons and assuming local responsibility. This helps in a way to improve communication, renew relationship and build confidence.

Conflicting parties observe cease fire during great Hindu-Buddhist festival and New Year celebration of various communities. Religious figures play important role in conflict management/resolution. In many traditional societies of the Horn, religious men are somewhat dissociated from the larger society. They are considered separate from warriors and are repository of traditional wisdom and also vehicle of religious judicial systems, such as Sharia law. This special place in society makes them an ideal link between feuding groups who might be unable to establish a dialogue.

### **3.3.4 Community Mediation**

Community members such as the traditional authorities (elders and chiefs), women's organizations, local institutions and professional associations are involved in conflict resolution process. The elders function as a court with broad and flexible powers to interpret evidence, impose judgments, and manage the process of reconciliation. The mediator leads and channels discussion of the problem. Parties do not address each other thereby eliminating direct confrontation and interruptions are not allowed while parties state their case. Statements are followed by open deliberation which may integrate listening to and cross-examining witnesses, free expression of grievances, discussing with both groups, reliance on indirect evidence, visiting dispute scenes, seeking opinions and views of neighbours, reviewing past causes, holding private consultations, and considering solutions.

Mediation mechanism is more compassionate and participatory in resolving disputes. The mediator involves all parties to the dispute/conflict, listens to their grievances/grudges, encourages them to focus on long-term interest, convinces them to be reasonable about their power and weakness, and examines options for reaching a mutually acceptable solution. The elders or other traditional mediators use their judgment and position of moral superiority to find an accepted solution to the problem. Decisions may be based on consensus with the elders' or chiefs' council and could be rendered on the spot. Resolution of conflict may involve forgiveness and communal official discharge of the problem, and, if necessary, arrangement for restitution.

Local dispute resolution mechanisms can be promoted by international agencies to ensure that local actors participate in conflict management by partnering with existing local institutions.

External players such as humanitarian organisations, UN officials, peacekeepers and official delegations can empower local mediation groups by:

- a) Acknowledging their relevance, meeting with them when visiting an area and securing their input into planning.
- b) Building on traditional structures for peace and conflict resolution, and using those structures in dealing with ongoing conflicts.
- c) Helping local partners to evaluate some of the traditions and approaches in peacemaking that worked in the past, and thinking through how they can be helpful today.
- d) Providing an opportunity for NGOs and government personnel to explore applying community-based conflict mitigation by learning from the experience of practitioners in the field.
- e) Paying attention to traditional customs, cultures and roles, and learning the community structure in areas where external actors are operating programmes, including the role of elders, women and other leaders, especially non-military leaders.

Community mediation can bridge the gap of resolving conflict to some level as it is better structured and takes into consideration human rights values. Local conflict mediators possess moral status, neutrality and respect of the community. They exhibit good leadership and are also acceptable to all the parties.

### **3.3.5 Disarmament as a Measure of Conflict Resolution**

Here, appeal is made to the warring factions to submit their arms and ammunition at organized centres in the warring areas or zones, with genuine promises to address issues that led to the conflict. However, doubt of sincerity is a challenge to conflict resolution. For example, the Niger Delta Amnesty Programmes (government versus the militants), the fear of government's failure to honour its own part of the agreement was a challenge to total disarmament. Unserviceable arms were presented at the collation centres, so that as soon as there is any failure to honour the agreement, the warring factions will fall back on the arms which they did not submit.

### **3.3.6 Formal Approaches of Conflict Resolution**

In the formal approach of conflict resolution, the courts are the major points of conflict resolution. Decisions of the court are based on a “majority formula” and verdicts can be contested. The lack of judicial independence, corruption, delay in justice, and poor enforcement of court decisions among others, have undermined the fairness of the judicial process. Political parties sometimes misuse power to influence the judicial process in their favour with attempts to influence judges. In the formal system of conflict resolution, majority of the poor, weak, illiterate, women and marginalized sections of society do not have access to this approach. When powerful people reactivate their cases, the weaker party usually loses. As courts are overloaded with cases and with several adjournments, parties get discouraged and never attend courts sessions.

#### Self-Assessment Exercises 4

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

7. Community mediation can \_\_\_\_\_ the gap of resolving conflict to some level as it is better structured and takes into consideration human rights values. a. mend b. resolve c. construct d, bridge



8. \_\_\_\_\_ sometimes misuse power to influence the judicial process in their favor with attempts to influence judges. a. political parties b. government c. masses d. victims

Conflict

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that conflict resolution will address and resolve deep rooted sources of conflict, where behaviour is no longer violent or attitudes hostile. In principle, conflict resolution connotes a sense of finality where parties to the conflict are mutually satisfied with the outcome of the settlement and the conflict solved in a true sense. A conflict is resolved when the basic needs of parties are met and their fears allayed. Conflicts over resources are permanently resolvable, while those over values may be non-resolvable but at best can be transformed, regulated or managed.

In this unit, we have discussed conflict resolution. We also examined the conditions necessary for a conflict situation to exist. A wide range of methods of resolving conflict are available at the individual, family, group, community, national and international levels. Conflict is seen as the pursuit of incompatible goals or interests by different groups and individuals. It is also a social necessity considered as an obstacle to progress, political stability, economic prosperity and overall

socio-economic development due to its destructive impact. It has the capacity to severely hinder development activities by destroying infrastructure, interrupting production processes and diverting resources away from productive uses.



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### **3.6 Possible Answers to SAEs**

Self-Assessment Exercises 4

7. d. bridge

8. a. political parties

## **UNIT 4 CONFLICT MANAGEMENT**

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4.1 Introduction

4.2 Learning Outcomes

4.3 Conflict Management

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#### 4.6 Possible Answers to Self assessment exercise



### **4.1 Introduction**

Conflict management as called conflict regulation, which involves using peaceful and non-violent methods, has been in existence for a long time. It is a process of reducing the negative and destructive capacity of conflict through a number of measures and by working with and through the parties involved in that conflict. Conflict management includes the efforts made to prevent conflict which covers conflict limitation, containment and litigation (Shedrack, 2011, p. 94). But according to Burton (1990), conflict management may also include conflict prevention, where collaborative and valued relationships control the behaviours of parties to the conflict. The term conflict management admits the fact that conflict is inevitable and not all conflicts can be resolved, hence, the need for conflict management and regulation.



### **4.2 Learning Outcomes**

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

- i. Identify the various methods of ending conflict
- ii. Identify the different processes of conflict management



### **4.3 Conflict Management**

Conflict management is based on the belief that all conflicts cannot necessarily be resolved, but can be managed to decrease the chances of unproductive escalation. Conflict management is therefore, defined as the measures that limit, mitigate, and/or contain a conflict without solving it. It involves acquiring skills related to conflict resolution, self-awareness about conflict modes, conflict communication skills, and establishing a structure for management of conflict in the environment, organisation or community. The strategies involved in conflict management are bargaining and

negotiation. The skills for effective management of conflict include: listening, oral communication, interpersonal communication, and team work. In managing conflict, the critical element is communication, which involves the ability to gather information and make contacts. Communication is the key to the knowledge of what the other party is doing. Any piece of information will enable one to know the feelings and the intentions of the other party in the conflict. Also, the amount of information helps to determine the level of tension the conflict generates. To get more information, the parties involved in the conflict need to continually talk. When in a conflict situation and there is no information; the conflict could degenerate into war. Thus, increased communication is crucial to resolving conflict. To manage conflicts, one of the first steps is to recognise the fact that a conflict situation exists. It cannot be ignored or avoided, as avoidance of conflicts often leads to intensified hostility and may later cause greater problems for the group. According to Boulding (1962):

The biggest problem in developing the institutions of conflict control is that of catching conflicts young. Conflict situations are frequently allowed to develop to almost unmanageable proportions before anything is done about them, by which time it is often too late to resolve them by peaceable and procedural means.

In some situations, conflict avoidance might be the best option, but the step of avoiding conflicts should be made only after conflict is clearly recognised and possible ways to manage it are examined. He identified several methods of ending conflicts to include:

- (i) Avoidance;
- (ii) conquest; and
- (iii) procedural resolution which includes reconciliation, and/or compromise, and/or award.

Procedural resolution by reconciliation and/ or compromise is generally the most appropriate in community development programmes. There are several means to reach a compromise. In reality, the means for conflict resolution by reconciliation is dependent on the situation. No one type can apply to all situations. Compromise involves adjustments and modifications with regard to the territories, values, goals, and/or policies of the involved parties. For example, a possible strategy for reducing conflict over how to reach an agreed-upon goal might be to redefine the situation in terms of new means towards the acceptable goals - a new bond issue rather than depleting existing funds. Territories may also be redefined and made less exclusive in order to diminish conflict. Other possible means of managing conflict within and among community groups as identified by Ohio State University Fact Sheet in Abolurin (2010, p. 85) include the following:

(1) Recognise and acknowledge that conflicts exist.

(2) Analyse the existing situation

Know exactly what the conflict is about.

Does it involve values, goals, and means to goals, territory or a combination of these?

Analyse behaviour of involved parties: members of the group(s).

Determine if the conflict approach is being used by the concerned party. Find out how other similar conflicts have been resolved.

(3) Facilitate Communication

Enhance communication. Open the lines for free discussion and involve all members.

Encourage accurate communication and feedback because negotiation depends on good communication.

Listen and raise questions.

Allow free expression. Constructive disagreement should not be suppressed. Supply information and facts.

Maintain an objective level (not emotional). Stay on issues, not people.

Provide the fact needed to 'save face' for parties.

(4) Negotiate

(5) Make necessary adjustments, reinforce, confirm.

(6) Live with conflict: All conflicts cannot be resolved

The following processes of conflict management were also identified by Wali (2008, p. 245) in Abolurin (2010):

- (i) Early Warning System (EWS): A mechanism set up by the United Nations and some regional organisations with a mandate to monitor activities of conflict situations. It is a system or procedure designed to warn of a potential or an impending problem. Its application is to keep a close watch over the activities that could lead to conflict (pre-conflict) situation, those that could escalate an existing conflict (on-going conflict) and also to monitor activities during and after (post-conflict) ceasefire.

- (ii) **Conflict Prevention:** This is the application of necessary tools that would help avert conflict in any given situation. Processes such as mediation, conciliation, persuasion and negotiation can be applied by the bodies involved in the intervention processes.
- (iii) **Conflict Resolution:** This is necessary in order to remove the major cause(s) of conflict.
- (iv) **Peace Building:** A post-armed conflict activity intended for prevention and resumption of hostilities. This mechanism was initiated by the former United Nations Secretary-General, Boutros Boutros-Ghali.
- (v) **Peace Making:** This entails creating enabling environment for the four key terms popularised by Boutros Ghali in his Agency for peace to be realised.
- (vi) **Conflict Transformation:** This is a process whereby the local actors made up of the middle level leaders found in the academics, religious bodies and humanitarian duties, are involved in bringing about peace in post-conflict situations.
- (vii) **Peace Education:** This entails inculcating peaceful methods in the people. Peace education rests on an active vision of peace where skilled individuals, who have been trained in the ways of non-violence, intervene in conflict situations to manage them without using violent force.
- (viii) **Peacekeeping:** This is a form of cease fire mutually reached by warring factions to stop war. It is used to dissuade potential actors from getting involved in violent conflicts.

### Self-Assessment Exercises 5

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

9. \_\_\_\_\_ is defined as the measures that limit, mitigate, and/or contain a conflict without solving it. a. Peace Making b. peacekeeping c. Conflict Resolution d. Conflict management

10. Peacekeeping is a form of cease fire mutually reached by warring factions to stop \_\_\_\_\_. a. peace b. conflict c. war d. agreement



### 4.4 Summary

Conflict management covers the entire spectrum of handling conflicts positively at different stages and involves also those efforts made to prevent conflict by being proactive. And since conflict brings about tension and is indeterminable, it is important to generally manage conflict to reduce tension and prevent it from escalating. With better understanding we can make informed choices about how we engage in conflict management generally.

In this unit we discussed the various methods of ending conflict and the different processes of conflict management. In managing conflict, the critical element is communication. When in a conflict situation and there is lack of information, the conflict may degenerate into war.



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#### 1.6 Possible Answers to SAEs

##### Self-Assessment Exercises 5

9. d. Conflict management

10. c. war

## **GLOSSARY**

### **Conflict**

Conflict represents a condition of disharmony in an interactional process. It is the direct result of a clash of interests by parties involved in an interactional process which arises usually as a result of the pursuit of incompatible ends or the use of incompatible means to pursue desired goals by the parties involved in an interactional process.

### **Conflict Resolution**

this can be said to be the variety of approaches aimed at terminating conflict through the constructive solving of problems different from management or transformation of conflict.

Conflict management is therefore, defined as the measures that limit, mitigate, and/or contain a conflict without solving it. It involves acquiring skills related to conflict resolution, self-awareness about conflict modes, conflict communication skills, and establishing a structure for management of conflict in the environment, organisation or community.

### **Identity**

This refers to the self-conception and self-definition of an individual with regards to his/her membership in, and loyalty to, a particular community. This may be defined in social, political, economic or territorial terms.

### **Theory**

A theory is an idea or belief that is arrived at through assumption and in some cases a set of facts, propositions or principles. It is analyzed in their relation to one another and used, especially in science, to explain phenomena.

### **End of Module Question**

1. Conflict can be said to be a confrontation between one or more parties caused by the pursuit of \_\_\_\_\_ goals.
2. environmental conflict has been driven in recent time mainly because of scarcity of \_\_\_\_\_.  
a. food; b. water; c. grazing area; d. resources
3. Biological theory gave rise to the \_\_\_\_\_ of conflict which contends that conflict is inborne in all social interactions and among all animals including human beings. a. innate theory; b. realist theory. c. Power theory; d. social theory.

4. Frustration-Aggression theory was first developed by \_\_\_\_\_ and his research associates in 1939. a. John Smith, b. Adam Smith, c. John Dollard, d. None of the above.
5. Which of the following is not a third-party mediation technique? a. judicial approach, b. power politics, c. conciliatory techniques, d. none of the above.

### **Answers**

1. Incompatible or irreconcilability.
2. d. Resources
3. a. innate theory
4. c. John Dollard
5. d. none of the above

## **MODULE 5**

Unit 1 Defining Environmental Conflict and Environmental Security

Unit 2 Linking Environmental Threat to Conflict

Unit 3 Environmental Challenges

Unit 4 Natural Resources and Conflict

### **UNIT 1 ENVIRONMENTAL CONFLICT AND SECURITY CONTENT**

#### **UNIT 1 STRUCTURE**

1.1 Introduction

1.2 Learning Outcomes

1.3 Defining Environmental Conflict in Relation to Environmental Security

1.4 Summary

1.5 References, Further Readings, Web Sources

1.6 Possible Answers to Self-assessment exercise



## 1.1 Introduction

The field of environmental security has come to represent a way for scholars and policy makers to interrogate the concepts of security and the environment. For some observers, geo-political changes since the end of the Cold War, have created space for new concerns such as the environment, to be incorporated in security discussions, presenting an opportunity for environmental issues to be considered in the realm of “high politics” and thus to be given higher priority in international relations (Deudney 1990, p. 461; Buzan 1991). Within academia, scholars have linked security and the environment in several different ways resulting to two distinct discourses linking security and the environment - environmental conflict and environmental security. Though there is overlap between the two discourses, each focuses on particular elements of security and its relationship to the environment with each providing distinct understandings of the security implications of environmental degradation.



## 1.2 Learning Outcomes

At the end of this unit, it is expected that the student should be able to:

- i) Connect environmental issues to security concerns.
- ii) Understand the distinct views of both environmental conflict and environmental security.



## 1.3 Environmental Conflict in Relation to Security

The environmental conflict discourse is characterized by a relatively narrow view on the relationship between security and the environment. This discourse clearly links traditional security concerns to the environment in that the central focus is on the possibility that groups within society will engage in violent conflict as natural resource stocks diminish due to environmental degradation. There are several broad strands that are identified as increasing the likelihood of environmentally-induced conflicts, including population increases, migration, and resource scarcity (Barnett, 2001). Resource scarcities can be potentially severe, that they can seriously undermine human well-being.

From this perspective, some types of scarcity, coupled with other factors, can contribute to violent conflict. Additionally, the state plays a central role within the environmental conflict discourse.

Large-scale internal conflict over resources is seen to put the security of the state at risk (Homer-Dixon, 1999). This focus raises issues dealing with the differences between national security and global security, and which concept is better suited for thinking about global environmental problems (Allenby, 2000:5). Homer-Dixon (1994, p. 5, 1999) has argued that adaptation is an essential move for states if they want to effectively deal with environmental conflict. States that are best able to adapt will reduce the likelihood of large-scale environmental conflict within their borders. The environmental security discourse highlights the negative impacts of environmental degradation for human beings. While the environmental conflict discourse can be linked directly to traditional understandings of military security and the security of states, the environmental security discourse is much more closely linked to the notions of “human security” in which the protection and insurance of human welfare is of central concern. A 1994 United Nations Development Programme (UNDP) report outlines seven areas of human security: (1) economic security, (2) food security, (3) health security, (4) environmental security, (5) personal security, (6) community security, and (7) political security (Smith 2005). The defining characteristic of the environmental security discourse, is its emphasis on the security implications of environmental degradation for all human beings (rather than simply the state). People will experience environmental change differently depending on current and historical patterns of resource allocation and the complex feedbacks inherent in human-environment systems (Detraz and Betsill, 2009, p. 103). The main argument in this discourse includes the environmental impact of accelerating globalization, concerns over population increases, the spread of disease, and the potential for sustainable development. In general, the environmental security discourse is broader than the environmental conflict discourse, because of the former’s concern with issues concerning all of humanity and the latter’s more focused concern with those susceptible to environmental conflict and the implications for the state. Some may view a broader discourse as a negative and fear that the concept is so encompassing that it becomes unusable. This is a similar line of reasoning to those who wish to maintain a fairly narrow definition of security in general (Deudney, 1990). Once everything becomes a security issue, then it loses its uniqueness. However, this does not necessarily have to be the case. The environmental security discourse specifically looks at those environmental issues that present a security risk for human populations.

### **Self-Assessment Exercises 1**

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

1. Environmental conflict discourse is characterized by a relatively narrow view on the relationship between security and the \_\_\_\_\_. a. environment b. conflict c. perspective d. management
2. The 1994 United Nations Development Programme (UNDP) report outlines of how many areas of human security? a. eight b. six c. two d. seven



## 1.5 Summary

The issue of environment-related conflict can be incorporated into the environmental security discourse as it affects several areas of human well-being. However, from this perspective, conflict is just one of a host of security issues related to environmental degradation, and the central concern is with its effects on a wider variety of actors - including states, sub-state actors, and supra-state actors. The argument within this discourse focuses on protecting humans from environmental insecurity. From this perspective, the state can be seen as both helping to ensure security and as an institution that can often act in ways to make environmental insecurity worse. Because the state remains the primary form of political organization in the international system, it is a necessary actor to incorporate into environmental security analyses. From the environmental security perspective, both human behavior (such as high consumption patterns and high population levels) and natural processes (such as changes in precipitation levels, the growth or decline of species populations, or changes in levels of pathogenic microorganisms), contribute to environmental insecurity for humans. It is important to note that many of these natural processes can also be worsened by human behaviour such as consumption and population growth. However, despite the potential contributions that humans make to processes that lead to environmental insecurity, there is a different degree of intentionality in the environmental security discourse when compared with the environmental conflict discourse. In the environmental conflict discourse, humans have a high degree of intentionality. This means that segments of society knowingly come into violent contact with each other because of the presence or absence of a resource. From an environmental security perspective, humans are rarely seen as intentionally contributing to the insecurity of others.

The environmental security and environmental conflict discourses represent two distinct ways of conceptualizing the relationship between security and the environment. Environmental conflict discourse is more than simply a part of the broader environmental security discourse as each has its

own distinct views about these issues. Those who use an environmental security discourse introduce a broad range of threats and vulnerabilities into their analysis of environmental change, focus on the negative effects to human populations. In contrast, the environmental conflict discourse uses a narrower set of argument to describe the connection between security and the environment (emphasizing conflict), privileges the security of the state over human populations.



## 1.6 References, Further Readings, Web Sources

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## 1.6 Possible Answers to SAEs

### Self-Assessment Exercises 1

1. a. environment
2. d. seven

## UNIT 2 LINKING THE ENVIRONMENT TO CONFLICT CONTENT

### UNIT 2 STRUCTURE

- 2.1 Introduction
- 2.2 Learning Outcomes
- 2.3 Linking the Environment to Conflict
- 2.4 Summary
- 2.5 References, Further Readings, Web Sources
- 2.6 Possible Answers to Self assessment exercise



## 2.1 Introduction

Past and modern events have confirmed that environmental stress often results in conflict, frequently along ethnic lines (for examples Rwanda, Somalia, and Darfur). This is exacerbated by population pressure, resource shortages, environmental change, and natural hazards. It is obvious that this trend will persist because recent impact of environmental change (such as flood) will continue to stress marginal environments, especially in places with weak governance, making clear the relationship between stability and environmental factors (Homer-Dixon and Levy, 1995:189). Non-sustainable environmental practices, migration, and resource shortages, which are common in developing states, may further de-stabilize states with weak governance (Gleditsch *et al*, 2007). Conflicts with an environmental component coupled with divisive ethnic dimensions, such as those observed in Rwanda, have increased pressure on the West and the U.N to commit resources to stability efforts (Drapeau and Mignone, 2007). The environment first became an issue in the U.S. National Security Strategy in 1991, when the National Security Council (NSC) pointed out that, “stress from environmental challenges is already contributing to political conflict” (NSC, 1991). By 2005, the Department of Defense (DoD) identified environmentally related instability as a fundamental strategic concern because evidence suggested that environmental stress is an important contributor to contemporary conflicts. Therefore, with continued environmental destabilization in weaker states and the exploitation of ungoverned spaces by violent international actors, governments, non-governmental organizations and intergovernmental bodies will have to deal with humanitarian disasters and ethnic violence.



## 2.2 Learning Outcomes

At the end of this unit, the student should be able to

- i. Describe the linkage between environment and conflict.
- ii. Highlight the key findings in linking environment and conflict
- iii. Explain the framework for analysis of environmental conflict in Africa.



### **2.3 Linking the Environment to Conflict**

To understand exactly how environment and conflict are linked, the most prominent work in this field is that of Thomas Homer-Dixon and Jay Blitt. In their 1998 book titled *Ecoviolence*, the authors postulated the following eight key findings:

- Scarcities of renewable resources produce civil violence and conflict.
- The degradation and depletion of renewable resources causes environmental scarcity.
- Powerful groups capture valuable resources while marginal groups migrate to ecologically sensitive areas.
- Environmental scarcity constrains economic development and produces migration.
- Existing distinctions between social groups is sharpened by environmental scarcity.
- Environmental scarcity weakens governmental institutions and states.  
The above can in turn cause ethnic conflicts, insurgencies and putsch.
- The International community can be indirectly affected by these conflicts generated by environmental scarcity.

Linking environmental degradation and conflict especially in Africa is self-evident due to the negative impact that has been experienced by the people. Problems like global warming, ozone layer depletion, pollution and deforestation are global in nature; but desertification, soil erosion, water shortage and degradation arising from the activities of the multi-national companies (MNCs) by way of exploration and exploitation of the environment for either oil (in the Niger Delta) or precious stones (in Liberia and Sierra Leone) are linked to conflict in the continent. Desertification which is a process of land degradation in arid, semi arid and dry sub-humid areas resulting from various factors

including climatic variations and human activities contributes to other environmental crisis such as the loss of biodiversity and global warming. Desertification has been identified as one of the triggers for armed conflicts in Africa as it engenders political instability, starvation and social breakdown in Niger, Somalia and in Darfur. Since desertification reduces the land available for farming and grazing, conflicts inevitably erupt in the pursuit of space. Soil erosion which is caused by over-cultivation exhausts the soil and overgrazing removes vegetation cover thereby causing soil erosion. For many decades, the south eastern region of Nigeria has been facing erosion problem. Trees that bind the soil together when logged for heating and cooking leads to soil erosion. Soil erosion causes increase in siltation of rivers and dams for example in Sudan where the Reseieres Reservoir which generates 80 percent electricity for the country has decreased by 40 percent in the past 40 years as a result of silting of the River Nile. There is a nexus between siltation of rivers and availability of fresh water. In Africa, 28 percent of the people have no access to fresh water and about 3 million people die annually due to water related diseases. And so, both soil erosion, desertification and deforestation force the people off the land turning them into environmental refugees, and they in turn pose a serious threat to the stability of the societies they enter.

Conflicts arising from environmental degradation in Africa in particular are on the increase and pose serious challenges to African governments in term of development, foreign policy, the environment and security. These activities are also found in Europe as the amount of land degradation through overgrazing, deforestation and agricultural mismanagement in Europe exceeds what is found in Africa and Asia as a whole (Bakut, 2011, p. 245). Sub-Sahara Africa is currently the driest region of the developing tropics and the effect of global warming will exacerbate the situation making it drier. Hence Africa is on the brink of environmental disaster with drought remaining a major problem especially in the Horn of Africa. Drought in the Horn has resulted in famine, causing death of millions of people and rendered hundreds of thousands as environmental refugees in both Ethiopia and Darfur in the late 1980s. During the period, the Darfur region of Sudan become a battle ground between farmers and the nomadic population due to the decreasing availability of land for both farming and grazing. Also in Nigeria, the conflicts occurring between grazers and farmers in the north east are directly linked with the narrowing of both farming and grazing land due to the pressure of desert encroachment. The greatest threat linked to the environment is water scarcity especially in Africa. Rivers are overused already with severe implications as potential conflict sources considering that several countries use the continent's major rivers. Nine countries share the

Nile, eight shares the Zambezi, while ten the Niger. Smaller rivers like River Senegal run through Senegal and Mauritania. Hence, they are potential areas of conflict. It is projected that by 2025, Nigeria, Ethiopia, Somalia, Tanzania, Malawi, Lesotho and Zimbabwe will suffer absolute water scarcity (Bakut, 2011). Therefore, it is observed that future wars in Africa will be over water and not necessarily oil. Even in Nigeria, there are a number of environmental degradation related problems that have resulted to flooding which tend to wash away farmlands, crops and roads. The scarcity of farmland leads to conflict among the people. Also in the Chad Basin water level has dwindled thereby affecting supply and constituting a threat to continuity of farming activities which is the source of livelihood of the people relying on the Chad Basin water supply. All these are directly linked to the impact of the degradation of the environment and constitute threats to the people living in these regions.

### Self-Assessment Exercises 2

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

3. \_\_\_\_\_ is a process of land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors including climatic variations and human activities contributes to other environmental crisis such as the loss of biodiversity and global warming. a. degradation b. irrigation c, erosion d. desertification
4. Scarcities of renewable resources produce civil \_\_\_\_\_ and conflict a. violence b. crisis c. warning d. none



### 2.4 Summary

Is there a nexus between environment and conflict? There is actually a relationship between the environment and conflict globally. Before the recognition of the danger that environmental degradation posed as a new threat to humanity, other forms of threat such as slavery, war and colonialism had dominated the discourse on conflict. Following industrial revolution, the issue of degradation of the environment and its associated dangers to humanity emerged. It is indeed a source of conflict to humanity and a serious global threat to all life on earth. The linking of environmental

degradation to this discourse is self-evident due to its negative impact on society. And it has been established that if environmental degradation is not checked, it will lead to serious conflicts especially in Africa.



## 2.5 References, Further Readings, Web Sources

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## 2.6 Possible Answers to SAEs

### Self-Assessment Exercises 2

- 3. d. desertification
- 4. a. violence

## UNIT 3 ENVIRONMENTAL CHALLENGES

### CONTENT

- 3.0 Introduction
- 3.2 Learning Outcomes
- 3.3 Global Environmental Issues
- 3.4 Environmental Problems in Nigeria
- 3.5 Summary
- 3.6 References, Further Readings, Web Sources

### 3.7 Possible Answers to Self assessment exercise



#### **3.1 Introduction**

It was predicted by a Swedish scientist Svante Arrhenius in 1896 that human activities would interfere with the way the sun interacts with the earth. And this prediction had become real as environmental changes especially climate change, is now disrupting global environmental stability. Global environmental issues have raised fundamental existential posers, as natural conditions which make human existence and life possible, have changed on a large scale and the aftermath of these dangerous conditions destroy life and nature from their very foundation. Following the industrial revolution, man has increasingly improved his ability to alter nature, which on one hand has liberated man from natural constraints and established a technological base that would make best use of human potential; while on the other hand, situations that risk our survival have constantly resulted from this unbalanced development of new technology (Ueta, 2007, p. 4).

An environmental problem arises whenever there is a change in the quality or quantity of any environmental factor which directly or indirectly affects the health and well-being of man in an adverse manner. Climate change, the depletion of the ozone layer, desertification, deforestation, the loss of biodiversity and the trans-boundary movements of hazardous wastes and chemicals are all environmental problems that touch every nation and adversely affect the lives and health of their populations.



#### **3.2 Learning Outcomes**

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

- i. Describe the various environmental challenges facing humanity
- ii. Describe those environmental problems facing Nigeria as a country
- iii. Explain the most important global environmental problem facing humanity



### **3.3 Global Environmental Issues**

#### **3.3.1 Climate Change**

It is widely acknowledged that climate change is engendered by human activities which releases greenhouse gases into the atmosphere and consequently increases global average sea level and poses a threat to human existence. As a result, the earth is getting warmer. Global warming as a result of climate change will greatly exacerbate the range, frequency and intensity of natural disasters like flooding, droughts, torrential rains, ice-storms, tornadoes and hurricanes; cause sea levels to rise due to the expansion of warming waters and the thawing of polar icecaps and other glaciers, which in turn may produce deadly flooding in many low-lying areas and Small Island States; displacing millions from their homes; increase the number of environmental refugees resulting from weather-related disasters; augment the risk of disease migration and disease outbreaks; and render large areas of the world “uninsurable” due to the magnitude of property damage from disasters. It is widely recognized that human induced climate change is the most important global environmental challenge facing humanity with implications for food security, natural ecosystems, freshwater supply and health (Oladipo, 2010, p. 147).

#### **3.3.2 Ozone Layer Depletion**

Ozone present in the atmosphere’s upper layers (the stratosphere) protects humans, animals and plants from the damaging effects of UV-B radiation from the sun without which all life on earth would cease to exist. However, the increasing emissions of ozone-depleting substances (ODS) result in increases of ultraviolet radiation reaching the earth’s surface which can pose several health problems such as increase of melanoma and non-melanoma skin cancers; cause an acceleration of eye cataracts development; reduction in effectiveness of the immune system; impact on nutrition (e.g. reduced plant yield); damage to ocean ecosystems and reduction in fish yield (by killing microbial organisms in the ocean). Skin cancer is the most worrisome health impact of ozone depletion.

#### **3.3.3 Desertification**

Desertification is a significant threat to the arid, semi-arid and dry sub-humid regions of the world – which account for 40 per cent of the earth’s land surface. The effects of desertification include - reduction of the land’s natural resilience to recover from climatic disturbances; reduction of soil

productivity; damage to vegetation cover; increased downstream flooding, reduced water quality, sedimentation in rivers and lakes and siltation of reservoirs and navigation channels; aggravated health problems due to wind-blown dust, including eye infections, respiratory illnesses, allergies and mental stress; undermined food production; and loss of livelihoods compelling affected people to migrate.

### **3.3.4 Deforestation**

Deforestation strip lands of their tree cover resulting in - erosion, which degrades fertile lands and silts waterways, lakes, rivers and coastal waters, thereby degrades water quality for human consumption and disrupts ecosystem processes by choking fish hatcheries, coral reefs, etc.; decreased groundwater recharge because the barren soils do not infiltrate water as effectively; increased malaria transmission; and desertification and drought. The major causes of deforestation and forest degradation include the need to create agricultural land and to harvest fuel wood for food and energy. Approximately, half of the wood harvested in the world is used as fuel wood and charcoal, mostly in developing countries. Removal of trees reduces the ability of soils to absorb and retain water, thereby contributing to the depletion of the groundwater aquifers that supply about one-third of the world's population.

### **3.3.5 Loss of Biodiversity**

Flora and fauna have depleted 50 to 100 times more than the natural rate, due to various activities such as the large-scale clearing and burning of forests, over-harvesting of plants and animals, indiscriminate use of pesticides, draining and filling of wetlands, destructive fishing practices, air pollution and the conversion of wild lands to agricultural and urban uses. This species loss and ecosystem disruption is causing a complex range of circumstances with consequences to human health. The loss of biodiversity also obstructs the discovery of new medicines to treat various diseases.

### **Self-Assessment Exercise 3**

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

5. \_\_\_\_present in the atmosphere's upper layers (the stratosphere) protects humans, animals and plants from the damaging effects of UV-B radiation from the sun without which all life on earth would cease to exist.  
a. stratosphere b. ozone c. atmosphere d. earth
6. The loss of \_\_\_\_ obstructs the discovery of new medicines to treat various diseases. a. medicine b.sun c. species d. biodiversity



## **3.4 Environmental Problems in Nigeria**

### **3.4.1 Urbanization**

This is caused by high population growth rate and rural- urban migration. In Nigeria, urbanization is characterized by growth of city slums with serious environmental implications, which demonstrate the inability of development keeping pace with population growth. Problems of sewage and refuse disposal are quite serious due to high rate of generation of non-biodegradable materials such as plastics. Environmental conditions in cities have gradually deteriorated due to the rapid growth of the cities and the attendant inability of the overstretched social services and infrastructure to cope with the rate of growth. Inadequate storm drains, dumping of refuse into drainage lines and construction of houses on water channels, have led to increased cases of flooding in the urban centers. Thus, environment problems associated with the increasing growth of urban slums, including - overcrowding in dirty housing conditions; poor sanitation; unavailability of basic infrastructures and social services such as water, sewage facilities and even lack of access routes (NEST, 1992, p. 152)

### **3.4.2 Overpopulation**

Population is a major factor in all environmental - related issues. Overpopulation causes stress on the environment. Before now, Nigerians regard their “large population size” as a symbol of greatness, power and prestige and tend to resist attempts to reduce it. Over-population has now forced traditional societies to abandon age old production systems and resources management techniques that allowed them to produce enough food for themselves at minimal impacts on the environment. Under increased production and enhanced productivity in the country, Mabogunje (1988, p. 17) stated that it will be easy for people to become so exigent, worrying only about what to get out of the environment for their own immediate needs and uses, without caring very much for the consequence, especially for succeeding generations. The Federal Government of Nigeria (1988) National Policy on population for development did observe that the present high rate of the country’s population growth is already contributing significantly to the degradation of the ecology and that land

fragmentation, over-farming and over-grazing, have led to soil erosion and desertification, all of which could be exacerbated if the present population growth continues (NEST, 1992).

### **3.4.3 Deforestation**

Forests which are large areas of land with trees visible in area with sub-equatorial and monsoon types of climates, act as safe haven for rare and/or endangered animal species. Forests also act as storm breaks, thereby protecting the towns and villages from destruction. They provide useful products such as wood and charcoal for fuel; fibre for paper and textiles; medicine from the bark and leaves of some plant; breeding ground for animals; act as check to erosion and supply of food and materials for building houses (Omofonmwan and Osa-Edoh, 2008, p. 53). But with the rise in domestic consumption of timber due to increased rate of building construction resulting from the rise in population and income, it would take less than 15 years to exhaust the forest of timber resources (NEST, 1992). Deforestation which is a process whereby trees are felled for several purposes without replanting to replace the felled ones, is dangerous to man, animals and properties because it leads to erosion of the soil and storm which can cause destruction of properties, crops and animals. Generally, exploitation of the forest (as a result of agricultural development, urban growth, industrial expansion and increasing population) has reduced the extent, diversity and stability of the Nigerian forest thereby resulting to worsening environmental problems in the country such as soil erosion and infertility, desertification and flooding.

### **3.4.4 Desertification**

Deserts are barren lands, waterless and treeless and often sand covered such as the Sahara desert which spread across African continent. So, desertification which is the encroachment of the desert on land that was once fertile, can be engendered either by natural process or by the action of man, and is more obvious in the northern part of the country where the Sahara Desert has eaten deep into the once fertile land. Desertification is dangerous to man because it leads to famine; diseases; destruction of crops, livestock and man. It further contributes to the incidents of diseases like heat-stroke, cerebro-spinal meningitis, Severe Acute Respiratory Syndrome (SARS) and avian flu (Aliyu, 1997).

### **3.4.5 Pollution**

Environmental pollution can be classified into three groups - air or atmospheric pollution, aquatic or water pollution and land or surface area pollution. Air pollution is the contamination of the air by the discharge of harmful substances that can endanger mankind. Man's activities on the surface of the

earth have seriously degraded the quality of the atmosphere because the growth and development of industries and urbanization has contributed greatly to the excess carbon monoxide produced by combustion and other human activities. Presently in Nigeria, several rural towns that had in the past enjoyed fresh and dry air are experiencing air pollution problems (Obajimi, 1998). This is as a result of industrialization and expansion in human activities. Aquatic or water pollution is the discharge of unwanted biological, chemical and physical materials into water bodies from man's environment that affect the natural condition of water. This incidence is responsible for the wide spread water contamination in most Nigerian cities. Land or surface pollution is the occurrence of unwanted materials or waste on land. The commonest pollutant on land is the waste products that are often scattered on land area in the cities. Most environmental problems are due to the production or consumption of goods whose waste products transform easily into pollutant (Onwioduokit, 1998).

#### Self-Assessment Exercise 4

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

7. Environmental pollution can be classified into \_\_\_\_ groups. a. four b. three c. five d. six
8. \_\_\_\_\_ is a process whereby trees are felled for several purposes without replanting to replace the felled ones. a. Desertification b. pollution c. Deforestation d. Overpopulation



### 3.5 Summary

One of the most important characteristics of environmental change is that it affects all humans on a global scale without regard to any particular country, region, or race. Whether these environmental changes take place in Europe or Africa; or whatever form the pollution takes in any part of the globe – be it toxic pollutants from Asia, Europe, or North America contaminating the Arctic, the consequences are felt all over the world (Agwu, 2010, p. 237). Thus, the whole world is a stakeholder on what should be done to combat these environmental changes.

This unit generally described the various global environmental issues and those experienced in Nigeria in particular. All of these environmental issues have long-term effect on the people and the societies and are either difficult or impossible to reverse over the period of one generation. Unless global actions are taken early, we will end up plundering our future in an unprecedented way.



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### 3.7 Possible Answers to SAEs

### Self-Assessment Exercises 3

- 5. b. ozone
- 6. d. biodiversity

### Self-Assessment Exercises 4

- 7. b. three
- 8. c. Deforestation

## UNIT 4 NATURAL RESOURCES AND CONFLICT CONTENT

### UNIT 4 CONTENT

- 4.1 Introduction
- 4.2 Learning Outcomes
- 4.3 Natural Resources
- 4.4 Renewable and Non-renewable resources
- 4.5 Summary
- 4.6 References, Further Readings, Web Sources
- 4.7 Possible Answers to Self assessment exercise



#### 4.1 Introduction

Conflict over natural resources is not part of everyday life, but access to resources cannot be taken for granted. We use energy to heat our homes, cook food, light our streets, use processed timber to form desks, pencil, paper etc. Access to these natural resources cause conflict or is used to fuel conflict. For example, Paul Collier estimated that about fifty armed conflicts in 2001, had strong links to natural resource exploitation, by either helping to trigger, intensify or sustain those violence. In Pakistan and Bolivia, violent protest broke out over the distribution of water. In the Middle East, disputes over oil fields in Kuwait led to the first Gulf war. And in Nigeria, oil exploration also resulted to insecurity in the Niger Delta region. Some resources like water and land are used locally and may not have impact beyond the local area but others such as timber, minerals and oil which are used to produce revenue cause serious problems. Thus, conflict over natural resources is often part of and exacerbates a larger struggle over political, economic, cultural or religious issues in the society.



## **4.2 Learning Outcomes**

At the end of this unit, the student is expected to:

- i. Explain what natural resources are
- ii. Describe the various categories of natural resources
- iii. Link these resources to conflict.



## **4.3 Natural Resources**

Natural resources are those materials that occur in nature such as water, air, land, forests, fish and wildlife, topsoil and minerals and are essential or useful to humans. They have broad categorization but could be categorized as renewable and non-renewable resources. The renewable resources such as cropland, forests and water can be replenished over time by natural processes and if not over-utilized, are indefinitely sustainable, while the non-renewables such as diamonds, minerals and oil are found in finite quantities and their values increase as supplies decrease.



## **4.4 Renewable and Non-Renewable Resources Water**

Water is a necessity of life as it can be used for drinking, washing, agriculture and industry. It is considered as an abundant resource since it covers nearly three quarters of the globe but potable water could be very scarce. Presently, due to the impact of climate change, drought affects almost every continent and appears to be growing worse as the percentage of the earth's land stricken by serious drought has doubled since the 1970s (United States Institute Peace document, 2007). Furthermore, water is increasingly becoming scarce through pollution and restricted access, as 1.1 billion people live without clean potable water and 3,900 children die every day from water-borne diseases. Thus, as the global population continues to increase, water scarcity will become a serious problem. Water scarcity causes and sustains conflicts globally for example China – Shandong and Guangdong Provinces (2006); Ethiopia (2006); India (2004); Kenya (2005) and Yemen (199) (Gleick, 2006). Bodies of water such as oceans, seas, lakes and rivers are linked to conflict due to their roles in transportation, development and culture. Dependence on sources of income within the bodies of water such as fisheries and offshore oil fields can lead to conflict. For example, the

disputes over fishing led to the “cold war” between Britain and Iceland in the 1950s and 1970s (World Water Council document, undated)

### **Land**

Due to population growth and environmental degradation, land is becoming increasingly scarce. Possession of land which holds a high economic value means access to other resources such as minerals, timbers and animals. Communities also have strong emotional and symbolic attachments to land and the resources on it. This is why competition for control of valuable land can cause or sustain conflict. For example, violent conflicts over land have occurred in several parts of the world, in China, East Timor, Kosovo, Rwanda, Tajikistan and Nigeria.

### **Timber**

Timber which functions as a primary source of income is becoming increasingly a scarce resource as population growth and industrialization are destroying the rainforest and causing environmental degradation. Since timber is used for construction and development, it plays an important role in conflict. For example, conflict over timber occurred in Burma, Cambodia, the Democratic Republic of Congo and Liberia.

### **Oil and Gas**

Oil (petroleum - a flammable liquid that can be refined into gasoline) and natural gas (a combustible gas used for fuel and lighting) are the two primary sources of fuel. Access to fuel, is one of the greatest concerns for developing and developed countries because of their dependence on energy sources. Many of the world’s largest petroleum reserves are located in areas suffering from political instability or conflict, such as Iran, Iraq, Nigeria, Venezuela, and Sudan. Thus, the value and demand for fuel, especially petroleum, allows conflicts in these areas to have an impact on the global economy. As with rivers, oil fields and pipelines frequently cross borders, and contribute to tensions or conflict. For example, after East Timor separated from Indonesia in 2002, it renegotiated the agreement Indonesia had made with Australia over oil and gas rights in the disputed areas of the Timor Sea.

## Minerals

Minerals are naturally occurring substances obtained usually from the ground. Valuable minerals become conflict minerals when their control, exploitation, trade, taxation or protection contributes to, or benefits from, armed conflict (USAID document, undated). Conflict minerals have varied commodity values and occur in many geographical locations: for example, diamonds in Western Africa, amber in Russia, and gold in Indonesia. Despite the fact that minerals such as gold and diamonds hold significant value as gems, all minerals generate revenue and power for governments, rebel groups, or whoever owns the land or has the ability legally or illegally to extract them. Conflicts over minerals do stay within boundaries; neighboring countries sometimes compete for resource wealth and thus exacerbate conflict or prevent peace building in the area for example the dispute on the Bakassi Peninsula between Nigeria and Cameroun. Diamonds are the conflict minerals that have received the most attention, because they have been used by several rebel groups in Africa (e.g. groups in Angola and Sierra Leone) as a source of income, (Collier, 2003:38). Other examples of conflict minerals include coltan (tantalite, used in cell phones, computers, and game consoles) in the Democratic Republic of Congo and copper in Papua New Guinea.

### Self-Assessment Exercises 5

Attempt these exercises to measure what you have learnt so far. This should not take you more than 5 minutes.

9. Conflicts over minerals do stay within \_\_\_\_\_. a. area b. boundaries c. national d. international
10. Natural resources could be categorized as \_\_\_\_ and \_\_\_\_ resources. a. used and unused b. artificial and man-made c. renewable and non-renewable d. all of the above



### 4.5 Summary

Developing countries are more dependent on natural resources as their primary source of income, and their populaces depend on these resources for their livelihoods. Some natural resources play important roles in the well-being of the local communities as some are used for trade purposes. Both

renewable and nonrenewable natural resources that are controlled by the state especially in developing countries are used as exports by the government to make profit and attain power. Developed countries rely heavily on imports of these natural resources for their industries, especially from resource endowed developing countries. Natural resources do not only serve as a commodity in the local or global economic structure, they also play a prominent cultural role for many local communities and may even be a source of pride for the nation as a whole. This one of the reasons many developing nations want to control their natural resources. Resources such as land, water, and timber (forests) usually have historical and cultural significance, serving as the home of ancient civilizations, historical artifacts, and cultural practices. Since natural resources are necessary for life and industrial growth and its demand is increasing, it is not surprising that resource scarcity and unsustainable consumption of these resources could contribute to or cause violent conflict.

This unit described those natural resources that are common causes of conflict or those involved in the escalation of conflict. A nation's access to natural resources often determines its wealth and status in the world economic system. Thus, natural resources often underlie the struggles over territory which has been the most prevalent form of conflict.



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#### **4.6 Possible Answers to SAEs**

Self-Assessment Exercises 5

9.b. boundaries

10. c. renewable and non-renewable

## **GLOSSARY**

### **Climate Change**

This is a phenomenon that is widely acknowledged to be engendered by human activities, which releases greenhouse gases into the atmosphere and consequently increases global average sea level and poses a threat to human existence.

### **Natural resources**

These are the sum of the materials that occur in nature such as water, air, land, forests, fish and wildlife, topsoil and minerals and are essential or useful to humans.

### **End of Module Question**

1. The fact that environmental concerns can often result in devastating conflicts along ethnic lines is exemplified by the following cases except \_\_\_\_\_. a. Somalia, b. Darfur; c. Rwanda, d. Namibia).
2. States with weak governance may be further de-stabilize by non-sustainable environmental practices including migration, and resource shortages. a. True; b. False; c. Maybe; d. Not sure.
3. Problems like global warming, ozone layer depletion, pollution and deforestation are global in nature. List the problems that are unique to Africa.
4. One of the main consequences of climate change is that the earth is \_\_\_\_\_. a, getting greener; b. getting more humid; c. getting warmer; d. none of the above.
5. The function of ozone layer in the the atmosphere's upper layers (the stratosphere) is to \_\_\_\_\_.
6. What are the three main classification of environmental pollution?
7. can be classified into three groups -.

### **Answer**

6. d. Namibia.
7. a. True.

8. i. desertification, ii. soil erosion, iii. water shortage and iv. Degradation
9. c. Getting warmer
10. Protects humans, animals and plants from the damaging effects of UV-B radiation.
11. Air pollution, water pollution and land pollution.