AN OVERVIEW OF SUSTAINABLE DEVELOPMENT IN AFRICA

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Summary

Despite the fact that Africa is relatively rich in natural resources, development strategies pursued in the continent have not always been in harmony with the objective of ensuring decent living conditions for the population and maintaining a high level of environmental quality. Over the past four decades of political independence, most African countries have witnessed serious socio-economic and environmental crises (Kaniaru, 1998). For example, rapid population growth and man-made and natural disasters have seriously bruised the quality of Africa's environment and the life of its population. The environmental crisis facing Africa is a real threat to the very existence of the continent: famine, starvation, floods, epidemic diseases, deforestation, desertification, and unmanageable mountains of waste are common environmental problems in most African countries. About two-thirds of Sub-Saharan Africa's (SSA) agricultural lands are already seriously degraded. One of the greatest challenges facing Africa today is the increasing incidence of HIV/AIDS. In the social realm, there is a big gap between economic and social well-being. There is therefore an urgent need to critically re-examine the development strategies that have been pursued in Africa and to adopt approaches that have a real potential to put Africa on the road to sustainable development (SD).

This chapter reviews the challenges facing Africa in its determination to achieve SD in the new millennium. To set the background for an objective discussion of the SD process in Africa, a number of principal environmental initiatives, conventions and programs adopted by the continent are first briefly reviewed. The continent's key environmental concerns are then identified and the strategies that have been adopted in redressing them assessed in order to establish their appropriateness and effectiveness.

Finally, viable strategies are recommended for effectively tackling the environmental and SD crisis in Africa.

1. Introduction

Since the Second World War, economic development in the world has witnessed a tremendous evolution and a welter of theories and approaches. A basic objective of the different development theories and approaches that have been adopted is to aim at increasing the living standards of the world's population without much concern for the environment. Early theories of development concentrated more on maximizing output and economic growth. The industrial sector was particularly regarded as the motor of economic progress. Large-scale modern manufacturing plants were constructed to produce abundance of goods and to provide a basis for a brighter future.

However, today, most people are questioning the rationale and capacity of these development approaches to deliver the expected higher standards of living. More than 1 billion of the world's population, especially in Africa and Asia, are still living under abject poverty. The phenomena of economic recession, galloping inflation, high unemployment rates, in both the industrialized and developing countries, and the skewed distribution of the world's riches are still fundamental problems in the world.

Specific problems emanating from the implementation of these approaches to development include the over-exploitation of the world's resources, the phenomenon of mass consumerism, especially in the industrialized countries, pollution, and the mountains of domestic and industrial wastes. The automobile industry, for example, heavily pollutes the environment and kills thousands of people through accidents each year. The rapid depletion of the world's natural resources is facilitating the destruction of the life-support system of the planet. Also, millions of hectares of productive dry land become desert each year, while acid rain in Europe destroys forests, water systems, and the artistic and architectural heritage of many countries. The emission of toxic substances from industry into the atmosphere and the depletion of the ozone layer are some of the consequences of economic gigantism and globalization of the world economy. Clearly, there has been an over-expectation with regard to the ability of economic growth and output maximization development strategies to significantly improve upon human welfare without impairing the quality of the environment.

As result of the ineffectiveness and inappropriateness of these strategies, since the 1970s a number of new development strategies have been proposed to redress development problems, to improve the living conditions of the world's population, and to prevent a further degradation of the environment. These new strategies include the basic needs approach; employment creation and income distribution; sustainable development (SD); and human development (HD).

2. The concept of sustainable development

Sustainable development (SD) was propounded as an alternative development strategy for improving the living conditions of the human population without degrading the quality of the environment. The concept came into being following the realization that

economic development and environment are closely linked. The findings of the World Commission on Environment and Development (WCED) entitled *Our Common Future* (1987) and known as the Brundtland Report actually popularized the concept. SD aims to build a more prosperous, just and secure future and to sustain and expand the environmental resource base.

Sustainable development may be described as a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs. It is a vector of development characteristics that should be non-decreasing over time and embraces wider concerns of quality of life. Therefore, to promote SD, we must at least endeavor to maintain the existing level of the natural capital stock. In other words, the pursuit of development activities implies a non-negative change in the stock of natural resources and the quality of the environment over time. It requires maintaining essential ecological processes and life support systems, preserving genetic diversity, and ensuring a sustainable utilization of species and ecosystems. The concretization of the objectives of SD therefore requires new forms of natural resource management systems and international co-operation. It is also important that individuals, organizations, and nation-states properly understand the concept and pledge their commitment to translating it into reality.

As the existing stocks of natural resources are considered to be far below what is considered optimal, it is crucial that measures are instituted to prevent any further over-exploitation of these resources. However, it is necessary to mention that the determination of what is considered to be the optimum level of the natural resource stock is not easy in any given geographical area. Nevertheless, there is an urgent need to adopt a risk-aversion strategy in the exploitation of natural resources for the following reasons:

- The multi-functionality of natural resources; for example, the relationship between afforestation programs and the availability of land for other purposes.
- The existing imperfect understanding of the life support functions of natural environments.
- The lack of capability to provide substitutes for the life support functions.
- Most natural resource losses are often irreversible.

The conservation of the natural capital stock is considered to be an effective strategy. The economic and social benefits of natural resources should be distributed both within current generations and between current and future generations: so-called intra- and intergenerational equity. T. A. Aina cites a very authoritative definition of SD proposed by the Nigerian Environmental Study Action Team in 1991.

Sustainable development is a notion, a movement and an approach which has developed into a global wave of concerns, study, political mobilization, and organization around the twin issues of environmental protection and economic development. The approach embodies the notion and ideal of a development process that is equitable and socially responsive, recognizing the extensive nature of poverty, derivation, and inequality between and within nations, classes and communities. It also seriously advocates that

the world be seen as one ecosystem and that the economic development process should include ecological and environmental issues as an essential component.
(Aina, 1996)

3. Sustainable Development Challenges in Africa

Africa is a very large continent located in the tropics and has an area of 27,961,000 sq. km (Kaniaru, 1998). The continent has a diversity of climatic conditions and marked features and a range of natural resources. It has a low population density of fifty people per sq. km. However, in spite of the fact that most African countries gained political independence about forty years ago, most of them, especially in Sub-Saharan Africa (SSA), are facing serious economic, social, political, and environmental crises. Some of the critical problems that contribute to hinder economic development in Africa are:

- ineffective policies for addressing the African economic crisis
- obsolete laws and incapacity in enforcing them
- inappropriate land tenure system
- lack of broad-based development
- declining agricultural production
- inappropriate production techniques in agriculture, livestock, mining, and industry
- impacts of demographic changes and population pressures
- resource outflow from Africa
- high dependency on primary commodities
- declining commodity prices and unfair international trade practices
- the huge external debt burden
- high costs of dealing with trans-national corporations
- negative impacts of natural and man-made disasters
- inadequate education and lack of information flow.

The environmental problems of Africa have been analyzed by many writers from different perspectives. For some, colonialism is the main cause, while others blame the irresponsible behavior of Africans towards their environment. The high population growth rate is also regarded as a major cause of environmental problems in the continent because of the pressure it puts on its limited structures, resources, and services. Environmental problems in Africa are caused by an interplay of a mixture of factors. Therefore, blaming the international community alone for marginalizing the continent is not good enough. The international community can only facilitate initiatives taken by African countries to solve their own problems and in terms of their needs and resources.

4. The Evolution of Sustainable Development in Africa

To put into perspective the environmental problems in Africa, Kaniaru (1998) suggests that the evolution of the problem should be traced from the pre-independence era to the colonial and the post-independence periods.

4.1. The pre-colonial period

During the pre-colonial period, African societies had well-founded institutional arrangements for the management of common resources on behalf of the community. Institutions organized in the form of kingdoms, chiefdoms, and customs, provided both men and women access to living and non-living resources. Cultural taboos, norms, beliefs, and ethics guided resources management considerations that were in harmony with the environment. The indigenous institutions were part of the community, and the resource users and the decision-makers were one and the same, working and collaborating in partnership for the common good of the communities. Checks and balances were put in place to guard against over-exploitation of natural resources and to maintain a good resource balance. Conservation of wildlife was governed by traditional taboos and customs which succeeded in preventing indiscriminate killing of animals, especially the rare species.

4.2. Colonial administration and the emergence of nation-states

The institution of colonialism and the emergence of nation-states put African institutions, customs, and taboos in a crisis. Traditional resource management systems were replaced by commercial interests. The resource users were separated from the decision-makers. Institutions that fitted the traditional communities and their needs were destroyed in the colonial administrations. Conflicts between African traditional customs and colonial values became the order of the day. Development strategies were based on Western models and geared to serve the colonial master rather than the subjects. In a nutshell, development during the colonial period was dictated by the political and economic considerations of the colonizers who regarded the natural environment as a free good; their major preoccupation was to control and exploit it for their own gains.

4.3. The post-independence period

At the time of independence, African governments did not succeed in changing the status quo left by the colonial administrations. Colonial institutions found their aspirations in the independence constitutions as well as other legal and institutional arrangements in most African countries. Environmental considerations were divorced from economic development initiatives and this resulted in grave environmental problems: endemic diseases and epidemics, deforestation and desertification, severe and long periods of drought, shortage of water and fuel, in particular fuel wood, pest infestations and invasions, floods and general environmental degradation (Kaniaru, 1998).

Internal political instability and trans-border conflicts, with their consequent destabilizing effects such as mass population movements and increasing number of refugees, have further exacerbated the existing environmental difficulties in Africa. Unrealistic socio-economic policies and strategies, often uncoordinated and, at times, competitive donor support constitute significant threats to the SD process in Africa. The low prices Africa gets for its export commodities, the high costs of imports from the developed countries, the rising external debt, and the neglect by governments to develop

the rural areas continue to exacerbate the situation. A number of these key problems are explored further in the subsections below.

4.3.1. *High population pressure and land degradation*

The high population increase in Africa is a major environmental problem facing the continent. For example, the population of Africa increased from 233 million in 1950, to 399 million in 1980, to 633 million in 1990, and to 744 million in 1995. It is estimated that by the year 2025 the population will reach 1.5 billion (WRI and UNEP, 1996–7). At this rate of increase, in the next twenty-five years or so, the population would double. The high population growth rate is one factor causing the general poverty in SSA.

Overpopulation has put severe pressure on the land and has accelerated its rate of degradation. Land degradation comprises all the processes that lead to a reduction in the quality and productive capacity of the land. The quality of land is a complex attribute that acts in distinct ways to influence the suitability of land for specific uses (Benneh and Agyepong, 1984). The forms of land degradation caused by overpopulation include deforestation, range-land deterioration, wildlife depletion, soil erosion, declining soil fertility, salinization, pollution, urban land degradation, non-agricultural land dereliction, coastal degradation, and desertification.

For example, the population-land resource relationship in Ghana shows three elements that influence the rate of land degradation: the present levels of technology, infrastructure, and land use systems lead to localized pressure on land, which in turn gives rise to land degradation. The north-east and north-west savannas, the central coastal plains, the central forest areas, and the south-east of Ghana are the areas suffering most from land degradation. In these areas, population density is above 100 persons per sq. km. Around the urban centers, the population density rises above 500 persons per sq. km.

4.3.2. *Deforestation and desertification*

Statistics show that in Africa alone, almost 70 percent of forest changes in the 1980s occurred through the degradation of closed forest to open and fragmented forest (UNDP and WB, 1996). Between 1960 and 1970, SSA lost 5.8 percent of its tropical forest through deforestation, between 1970 and 1980, it lost 6.9 percent, and during 1980–90, it lost 7.5 percent. The increase in demand for land for agriculture and trees for fuel wood has resulted in widespread deforestation and a degradation of the life support system. It was estimated in 1980, that 70 percent of deforestation in Sub-Saharan Africa was caused by forest clearance for agricultural purposes. Seventy percent of the total energy consumed and 90 percent of the household energy are still derived from fuel wood (UNEP et al., 1997). The inability of African countries to generate adequate amounts of foreign exchange to import petroleum products has led to the increase use of wood and charcoal for fuel. The rate of forest loss due to wood and charcoal fuel production rose to more than 34 percent between 1981 and 1993, compared with the global average of 19 percent (UNEP et al., 1996, p. 209).

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Biographical Sketch

Emmanuel Kwesi Boon obtained his B.A. in Economics and Geography at the University of Ghana in 1979. He also has a Master's in Industrial Location and Development from the Free University of Brussels. After obtaining an M.B.A. Degree from the University of Antwerp (UFSIA), he received his Ph.D. in Economic Sciences from the Free University of Brussels (VUB) in 1986. He lectures at the School of Administration of the University of Ghana in Accra and is a visiting professor to several universities and institutions in Africa, Asia, Europe, and South America. Currently, he teaches three courses to the postgraduate students of Human Ecology at the VUB: "Environment and Development," "Communication, Leadership Skills, Multi-media, and GIS," and "Issues on Gender, Youth, Age, Culture, and Ethnic Groups." He is also actively involved in research, consultancy, and extension projects. He is the founder and chairman of the International Centre for Enterprise and Sustainable Development (ICED) based in Accra, Ghana.