

# Towards effective environmental



Introduction The people in rural and urban areas rely on the environment for their livelihood and survival strategies and are affected by the way others around them use environmental resources.

Moreover, because most natural resources are exhaustible or degradable, improved management of environmental resources is needed for both rich and poor populations, which continue to grow in numbers and consumptive habits. One of the most important developments of recent times is the increasing appreciation of the linkage between environment and development. Questions related to environment and development were central to debates at the United Nations conference on Environment and Development in Rio de Janeiro (1992), the World Conference on Human Rights in Vienna (1993), the International Conference on Population and Development in Cairo (1994), the Conference on Small island Developing States in Barbados (1994), the World Summit for Social Development in Copenhagen (1995), the Fourth World conference on Women in Beijing (1995), and the United Nations Conference on Human Settlements in Istanbul (1996). But unfortunately, the link between poverty and environment is often mechanically characterised as a “vicious circle” or “downward spiral.” Population growth and inadequate resources are presumed to force poor people to overuse the environment. In turn, the degradation of these resources further impoverishes them.

While this can does happen, as an overarching model it is highly simplistic. In fact, various experiences show that: 1. Poverty does not necessarily lead to environmental degradation. The links between poverty and the environment are complex and require locally specific analysis to be understood.

There is no simple causal link. 2. Population growth does not necessarily lead to environmental degradation. While initially degradation can occur as population increases, what happens next is context-specific and can be influenced by policy. Based on experience from around the world, there are win-win options that can build partnerships with the generality of the people especially the poor for creating both more robust livelihoods and healthier environments.

These options simultaneously pursue two goals: 1. reduced poverty and better social equity; and 2. enhanced environmental quality. It is against this background and in the context of the contemporary situation in our state, Delta that this paper attempts to answer three questions as follows. 1.

What are the major contemporary environmental problems, challenges and issues in Delta State? 1. What are the major contemporary environmental problems, challenges and issues in Delta State? 2. What are the underlying causes of the contemporary environmental problems in Delta State? 3. What are the policy issues and options for effective environmental management in Delta State? Environmental and urban development problems of Delta State A critical component of good environmental planning is clear problem identification. It requires a review of the broad range of issues that come under the umbrella name “ environment.” The review process must consist of assessing existing data and reports and in this era of democracy and participation in decision-making by the generality of the people must also entail the articulation of the assessment and views of key stakeholders.

In Delta State the participation of stakeholders in the identification of environmental problems is particularly important because of the political nature of many environmental issues, as well as, the relative scarcity of sound scientific data from which to make such evaluation. The World Bank in a recent survey and evaluation of the environmental problems of Delta State and other parts of the Niger Delta region categorised the environmental problems into three major classes; land resource degradation, renewable resource degradation and environmental pollution. The World Bank ranking of the major environmental problems in Delta State is developed by experts scoring selected factors related to the environment. In this case, these factors include: current environmental significance, current health significance, potential intervention benefits, and potential intervention costs. Table 1 indicates the problems that received the highest overall priority. From the perspective of the stakeholders in the state, the findings from the Niger Delta Environmental Survey (NDES) sponsored stakeholders workshops showed the viewpoint of Delta State residents with respect to key environmental problems confronting them.

The major environmental problems identified by the stakeholders are as follows.

- Flooding and coastal erosion- Related to deforestation, poor engineering construction, sea encroachment, dredging, canalisation, excavation, and inappropriate land use along riverbanks and within urban areas.
- Sedimentation and Siltation – Related to narrowing of creeks, reduction in creek depth, increase in inter-tidal zones.
- Degradation and depletion of water and coaster resources -Relation to industrial effluents, oil

pollution, salt intrusion, industrial wastes, watershed degradation, invasion of aquatic weeds, farming and dam construction.

- Land Degradation -Related to inappropriate waste management, quarrying, oil spillage, bush burning, urban and industrial pollution, erosion and improper agricultural practices.
- Oil Pollution -Related to spills, leakage, well blowouts, and seepage.
- Air Pollution -Related to gas flaring and gaseous emissions from a variety of sources
- Land Subsidence -Related to oil exploration and other mining activities such as sand mining
- Biodiversity Depletion -Related to air pollution, deforestation, population pressure, urbanisation, over-exploration, and introduction of exotic species.
- Noise Pollution and Light Problem – Related to gas flaring and seismic operation.
  
- Lack of Community Participation – Related to general ignorance, inadequate enlightenment, illiteracy and poor capacity to implement programmes.
- Health Problems – Related to gaseous emission and poor management of hazardous waste.
- Housing Problems- Related to inadequate housing and poor planning of housing provision especially in urban areas.
- Low Agricultural Production – Relation to over-exploitation of resources, poor farm yields and general disincentives for farming operations and unsustainable agricultural practices.
- Socio-Economic Problems – Related to joblessness, poverty, loss of farm land, inappropriate compensation measure, poor housing and human settlement difficulties, lack of sustained commitment to rural development programmes and deficiencies in existing system of programme implantation, coordinating and resource assessment.
- Weak or Non-existent Laws and Regulations – Related to weakness and biases in the political and legal frameworks which govern

economic and environmental policies and actions, including failures in regulatory and enforcement capabilities.

There is some convergence in many of the environmental issues developed by the World Bank with those identified at the NDES Stakeholder Workshops. Findings of studies conducted by independent researchers in rural communities in Delta State in the late 1990s show that rural inhabitants identified soil fertility, declining crop yield, shortened fallow, conflict over land, overhunting, unemployed, and crime as well as poverty as key factors affecting environmental quality in rural communities. These were found to be sources of pressure on natural resources and in the communities, especially among the poor. Recently the submissions of the various oil producing communities with respect to projects to the Government of Delta State Committee on 13 per cent derivation revenue provide further insight into grassroots stakeholders' perception of their development needs. It is instructive to note that over 70 per cent of the submissions made so far focused on providing solutions to their environmental problems, which they identified as follows:

- Land degradation in rural and urban areas due mainly to oil exploration
- Pollution/solid waste disposal
- Flooding of urban and rural communities
- Blockage of river channels which are transportation channels
- Shoreline devastation
- Environmental devastation of communities which require complete rehabilitation
- Housing shortage in both urban and rural communities
- Water supply

It is on the basis of these four sources that the key environmental problems of Delta State can be identified as indicated in Table 2.

The Causes of Environmental degradation in Delta State Identifying underlying causes of environmental problems is crucial for formulating appropriate policies and for targeting interventions by the Delta State Government. It requires understanding the links between causes and effects of environmental issues. The major underlying causes of environmental problems in Delta State are: inequity, population growth, migration, poorly defined sectoral policies and national political instability. The sectoral policies that negatively affect the environment are those of industry, fisheries, forestry, transportation, urban planning and infrastructure. A major factor is the feeling of inequity, which is seldom explicitly seen as a criterion because perhaps it is hard to measure. Inequity influences the mode of production and wealth of groups affected by environmental problems.

Thus the root causes of such problems are reflected not only to industrial development but also to patterns of resource exploitation and use. Some of these causes are discussed in some detail below. Although the environmental problems of the Delta State are complex, interconnected and caused by many factors, the exploitation of the natural resources of the Niger Delta over the last forty years without reference to any sustainable environmental management strategies has contributed to the escalation of these problems. Public attention has tended to focus on the appropriation of oil from the region. The source of these problems include natural invents like flooding and erosion, and socio-economic circumstances.

The problems from oil-related activities include oil spills, refinery operations and transportation. Thus land degradation, direct loss of land to habitation and cultivation are caused by erosion and flooding while the most common

environmental problems related to the oil industry are oil spills, gas flaring, dredging of canals. A number of environmental laws geared towards protecting the environment exist but are poorly enforced. The economic importance of petroleum to national development is such that environmental considerations are given marginal attention. Yet, both economic and social evaluation of resource exploitation and development activities are key to the objective of Sustainability.

National legislation affecting oil-bearing lands and the skewed patterns of resource ownership are also of deep concern to communities of Delta State. Closely related to the issue of resource control is the absence of appropriate methods for resource valuation in the oil producing communities of the region. One of the fundamental issues in the frequent conflict between the oil companies and the local communities is dissatisfaction with the determination of the value of damaged natural resources. The current approach is based primarily on basically unjust and skewed economic considerations.

The approach attaches monetary value to any damaged or destroyed resource, with no consideration of what may accrue from the resource over the years, if it were not destroyed. This, no doubt, has several limitations; for, there is always a social and cultural dimension to resource damage or destruction. This lack of an acceptable valuation method has been a contentious issue as far as the local communities are concerned. Indeed, it could be argued that where these resources are appropriately valued, the wanton destruction of such resources might be reduced. Any optimal and equitable valuation of resources in the communities of the state must reflect



different forms of economic value attached to it including; direct, indirect, option, existence and bequest values. Delta State, as other parts of the Niger Delta Region, has also borne the negative effects of upstream developments along the Niger River.

Various upstream infrastructural developments and activities affect the environment and people of the Niger Delta Region. It has been shown that there are 26 existing and proposed dam projects on the River Niger before it empties into the Delta. All these reduce river flow through increased evaporative loss of water from the reservoirs and associated irrigation schemes. They also trap the sediments, which settle out in the reservoirs rather than contribute to the coastal sediment equilibrium and fertilize the Niger Delta floodplain. The reduced flood also affects floodplain fish nursery areas in the Delta.

Furthermore, industries such as sawmills and metal plating plants including the Ajaokuta Steel Plant (when it becomes functional), discharge waste materials into the River Niger thereby pollute the water for fisheries and human consumption. Finally, the rapid increase in urbanisation in the settlements bordering the River Niger and River Benue has led to increased generation of domestic and industrial wastes most of which are discharged into the rivers. The impact of urbanisation on the people and economy of the Niger Delta Region will surely increase given the fast pace of physical development of the Federal Capital Territory (Abuja). The area covered by the territory is 8, 00? km<sup>2</sup>. Large population concentrations are also beginning to develop at the points where road bridges have been built

across the river including Jebba, Lokoja/Koton Karfe, Ajaokuta, Onitsha and Patani.