

Environmental Resources Development in Developing Countries: The Means for Achieving Built and Sustainable Environment in Nigeria.

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ABSTRACT

Environmental resources are vital for sustainable development, especially in developing countries where there is rapid urbanization and population growth which poses significant challenges. This journal explores the intricate relationship between the environment resources and the creation of built environment that are both resilient and sustainable focusing on challenges and strategies. Experience over recent years indicates that environmental resources problems are increasingly threatening sustained growth in developing countries. They are also caused by pervasive activities and not solely due to large scale development project. Although concern with individual projects remain important, it is therefore necessary to compliment this concern with the integration of environmental management into planning at all levels. In many developing countries, the key obstacle is poor governance: Consequently, renewable resources continue to be mined, non-renewable resources are depleted irresponsibly, and reductions in pollution intensity lag. Certainly, developing countries face unique challenges and opportunities in achieving built environments that are both developed and sustained.

Keywords: Environmental Resources, Sustainable Development, Environment, Sustainability, Developing, Sustainability, Development.

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I. INTRODUCTION:

Environmental Resources development refers to the sustainable management and utilization of natural resources in a way that promotes environmental conservation, economic growth and social equity. It involves strategies and practice aimed at harnessing natural resources such as water, land, minerals, forest and biodiversity while minimizing negative impact on the environment and maximizing benefits for present and future generations. Key aspect of environmental resource development includes:

- Resources management: implementing policies and practices to ensure the sustainable use of natural resources.
- Conservation and Preservation: Protecting and preserving ecosystem, habitats and biodiversity to maintain ecological balance and resilience.
- Renewable energy Development: Expanding the use of renewable energy source such as solar, wind etc.

The others include Water Resources Management, Sustainable Agriculture and forestry and Waste Management and pollution control etc.

Wikipedia defined the term “Built Environment” as human made condition and is often used in architecture, landscape architecture, urban planning and among others. It impacts the environment and how the society physically functions. There are multiple different component that make up the built environment which include the buildings (Physical structures), infrastructure (Bridges, Roads etc.), Land Use and Planning, Design and Architecture, Environmental Considerations etc. Understanding the built environment is important for urban and regional planning, sustainable development, and improving quality of life in communities. Effective management and designs of the built environment requires collaboration among urban planners and community stakeholders to create livable and inclusive cities and settlement.

Sustainability as define by Oxford Dictionary refers to the ability to meet the need of the present without compromising the ability of future generation to meet their own need. In this article, we discuss about the Environmental Sustainability which is ensuring the natural resources and ecosystem are managed responsibly to

minimize environmental impact and preserve biodiversity. These include practices such as conservation of resources, reduction of pollution and waste and promotion of renewable energy sources with Sustainable cities and communities being part of the 17 goals of Sustainable Development Goal (SDGs) by the United Nation.

Environmental resources in developing countries are often underutilized or mismanaged leading to environmental degradation, loss of biodiversity and adverse socio-economic impacts. Sustainable development requires a balance between use and conservation to ensure long-term benefits for both the environment and human societies.

II. LITERATURE REVIEW:

The development of environmental resources is critical for achieving sustainable built environment particularly in developing countries. This focuses on how effective resources management contributes to economic growth, social well-being and environmental sustainability.

Conceptual Framework: Environmental resources include water, soil, forest, minerals and biodiversity. The sustainable management of these resources is key to supporting human activities and maintaining ecological balance.

Water Resource Management in Efficient Utilization and Conservation: Lenton and Muller (2009) emphasize the importance of integrated water resource management in ensuring water availability for agriculture, industry, and domestic use. They approach in countries like Nigeria have led to improved water governance and resource sustainability. Muller (2007) highlights successful community-based water management projects in Africa demonstrating how local participation and technology adoption can enhance water resources efficiency and conservation.

Soil and Land Management in Soil Conservation Techniques: Lai (2015) discusses the critical role of soil conservation in achieving food security and sustainable agriculture. They therefore provides evidence of the benefits of sustainable land management practices in reducing soil erosion and maintaining soil fertility which are essential for long term agricultural productivity. Practices such as terracing and agroforestry have shown positive impacts on soil health and productivity.

On Sustainable Forestry Practice, FAO (2010) reports on the multiple benefits of forest, including carbon sequestration, biodiversity conservation, and support for local livelihoods, emphasizing the need for sustainable forest management policies in developing countries.

Hilson (2002) on mineral resources explores sustainable mining practices that minimize environmental degradation and promote economic development in mining communities. Case studies from Nigeria and Ghana highlight the role of corporate social responsibility and regulatory frameworks in achieving sustainable mining outcome.

The Importance of Environmental Resources

Environmental resources encompass a broad spectrum of natural assets including water, minerals, forest and biodiversity. For developing countries, these resources are important not only for economic development but also for maintaining ecological balance. The sustainable use and management of these resources can lead to enhance food security, increased employment opportunities, and improve public health.

Challenges of Environmental Resources Development in Developing Countries

Developing countries face several challenges in achieving sustainable environmental resources development which includes

- **Economic Constraints:** Limited financial resources can hinder the implementation of sustainable practice. Barbier (2005) identifies economic constraints and weak institutional framework as major barriers to sustainable resource development and management in developing countries.
- **Technological Gap:** Access to modern technology is often restricted affecting efficiency and sustainability.

- **Institutional Barriers:** Weak governance structures can impede effective resources management. Strengthening institutions, promoting transparency and ensuring community participation in decision-making processes are essential for effective resources development in developing countries.
- **Climate Change:** Developing countries are particularly vulnerable to the impacts of climate change, which can exacerbate resources scarcity and environmental degradation

Strategies for Sustainable Environmental Resources Development

Environmental Policies and Framework: Effective policies and regulatory framework are very important for sustainable environmental resource development and management which include:

- **National Policies:** How national government can create policies that promote sustainable resource use and ensure compliance with environmental regulations.
- **Community Involvement:** The importances of engaging local communities in decision-making processes to ensure practice align with ecological and social need to a sustainable outcome(Agrawal &Gibson 1999)
- **Integrated Resource Management:** Coordinating the management of water, land and other resources to optimize their use and sustainability.
- **Sustainable Agriculture:** Promoting sustainable agricultural practices such as agroforestry and conservation agriculture can improve food security and protect natural ecosystem.
- **Climate adaptation and mitigation:** Implementing measures to adapt to and mitigate the effects of climate change can enhance the resilience of communities and ecosystem

Benefits of Sustainable Environmental Resource Development in developing countries can offer numerous benefits are

- **Economic Growth:** Environmental resources development can drive economic growth by creating green jobs, enhancing productivity to achieve a sustainable environment.
- **Resilience and Adaptation:** Building resilient systems that can adapt to environmental changes ensures long term sustainability and reduces vulnerability to disasters in developing countries.
- **Environmental Protection:** Conservation and sustainable management of resources help preserve biodiversity reduce pollution and mitigate climate change impact.

III. METHODOLOGY:

This section outlines the methodology used to investigate the relationship between environmental resources development and the achievement of built and sustainable environment in developing countries. The methodology includes a multi-faceted approach qualitative research method to ensure a comprehensive analysis. The research objectives are to:

- To assess the current state of environmental resources management in developing countries
- To identify the best practices and challenges in managing water, soil, forest and minerals
- To evaluate the impact of sustainable resources management on built environment.
- To propose policy recommendation for enhancing sustainability in developing countries.

Data collection Method was by conducting an extensive review of academic journals, books and reports from international organizations (FAO, SDGs) to gather secondary data on environmental resource development.

IV. RESULTS

Research showed that several developing countries mostly countries in Africa like Kenya has successfully implemented strategies to develop their environmental resources to achieve a sustainable environment. Findings reveal that they made significant strides in renewable energy and it has contributed to the country's energy mix and reducing carbon emission to reduce the depletion of the ozone layers.

V. CONCLUSION

The development of environmental resources is vital for achieving a built and sustainable environment that supports the economic, social and environmental well-being in developing countries. By adopting strategies like investing in renewable energy, promoting sustainable agriculture and implementing climate adaptation, these nations can pave the way for a sustainable future. The success of these initiatives highlights the potential for developing countries to lead in sustainable development and contribute to global environmental goals.

VI. RECOMMENDATIONS

Environmental resources development in developing countries involves a strategic approach to utilizing and conserving environmental resources which include:

1. Developing and implementing policies that integrate economic and social aspects to ensure sustainable development.
2. To promote smart urban planning that reduces sprawl and conserve natural habitat.
3. To invest in renewable energy sources such as solar to reduce dependence on fuels.
4. Develop training programs for architect and other professionals in built environment on sustainable building practice and environmental management.
5. Enlighten the public about the benefits of sustainable development.
6. Foster partnership between the government, private sector and international organization to fund and implement sustainable development projects.

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