



Environmental Protection and Management: An Option for Achieving Sustainable Development in Nigeria

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Abstract

In recent times, the concept of sustainable development cannot be overemphasized. Since the early 1980s, the term sustainable development has been used widely and indiscriminately. The concept started gaining popularity when it became increasingly relevant to use it as a way of responding to global environmental concerns, biophysical issues and equity. This paper is a study on environmental protection and management: An option for achieving sustainable development in Nigeria. The authors adopted survey design approach, data collection was through the use of structured questionnaires. Data collected were analyzed using descriptive data analysis system where each response was weighted against responses from respondents using frequency and percentages. Results obtained from the analysis showed that environmental protection and management strategies have very significant influence on the achievement of sustainable development goals in Nigeria, there is average awareness about environmental protection and management strategies put in place by government with the support of other agencies, partners and donors. There are dire consequences if these environmental protection and management strategies are not put in place to enhance sustainable development in Nigeria. The authors among others recommended that government should empower, overhaul and strengthen the agencies involved in environmental protection and management within the country to enable them live up to their responsibilities of protecting and managing our resources for sustainable development in Nigeria..

Keywords: *Sustainable development, Environmental protection, and Environmental management*

Introduction

The environment is very important to the living condition of man anywhere in the world, for man rely heavily on the natural resources that exist in his environment to promote his happiness and well being. Today, due to numerous human activities arising from the exploitation of natural resources, the environment has been discovered to be on the gradual deterioration, hence the need for its protection and management. The concepts of environment and development are quite inseparable. In the wake of improved technologies came increased environmental problems and the consequence of this is that man is putting himself on the platform of extinction. These environmental problems range from industrial pollution, depletion of the ozone layer, deforestation, desertification and drought, erosion and flooding, biodiversity loss, air and water pollution, gas flares, oil spillage and a host of others. The general depletion of the environment and poverty has equally contributed

their own lots to the evolution of some problems. Furthermore, the rapid increase in human population coupled with inadequate capital base has forced many communities to over use our fragile and marginal lands to survive today at the cost of destroying the vestige of the resources that will support our survival of tomorrow (Aligba, 2005; Eneji, Qi, Jian, Oden and Okpiliya 2009a; Eneji, Qi, Okpiliya, Aniah, Eni, and Afanghideh, 2009b).

The topic has been deliberately chosen to discuss how sustainable development can be achieved in Nigeria through the adoption of environmental protection/management. In the discourse, the work commences with the setting of objectives for the study. This is followed with conceptual clarifications of the key concepts and a review on sustainable development goals, overview of environmental protection strategies and policies in Nigeria. Furthermore a review of the plan implementation of the World Submit on Sustainable Development is carried out in the work. The aim of this study is to examine how the adoption of environmental protection and management can enhance the achievement of sustainable development in Nigeria. Specifically, the objectives are:

- ✚ To investigate how environmental protection and management can enhance the achievement of sustainable development in Nigeria.
- ✚ To suggest strategies for the adoption of environmental protection and management in Nigeria.
- ✚ To establish whether environmental protection and management is given the required attention it deserves by the agencies concerned.
- ✚ To ascertain the extent to which environmental protection and management is considered as being imperative to the attainment of sustainable development goals
- ✚ To identify and assess the likely problems hindering the adoption and implementation of environmental protection and management as a strategy for achieving sustainable development.

Conceptual clarification

The term Environmental Protection and Environmental Management are used interchangeably in this work. Environmental protection is the practice of protecting and control of the natural environment by individual, organization or governmental levels for the benefit of both the environment and humans. It is the strategy by which human activities that affect the environment are organized so as to maximize social well being and mitigate potential hazards by tackling their root causes (Anijah-Obi 2001; Mwangi, Meinzen-Dick and Sun, 2011). The importance of environmental protection and management cannot be overemphasized because man-made disruptions to ecosystems can cause extinction, as pollution creates dangers for both man and animals, and mankind owes the natural world a moral obligation. Environmental issues are complex and so should not be seen in isolation, such issues must be addressed together with the process of development, especially as relating to population growth rate, the industrialization, urbanization, agricultural expansion, use of natural resources etc(Doss, 2001; Dalton, 2008). Protecting or managing the environment is one of

today's most serious issues because it is not a secret that our planet earth is in danger. On daily basis, we hear about one problem or the other. The list seems to be endless ranging from acid rain, pollution, green house effect, climate change, rainforest destruction and extinction of thousands of biodiversities (Mwangi, Meinzen-Dick and Sun, 2011; Eneji, Mubi, Husain and Ogar, 2015).

Sustainable Development: The concept of sustainable development although far from achieving definitional consensus, but the key idea common to all definitions concerns resource exploitation at a rate that would not prove detrimental to future generations (U.N. 2007; Dalton, 2008; Wikipedia 2014). The Brundtland Commission cited in Eni (2005) defined sustainable development as “meeting the needs of the present without compromising the ability of the future generations to meet their own needs” To Akpofure (2009), it is a process of change in which the utilization of resources, the direction of investment, the orientation of technological innovation and exchange and institutional change reflect both present and future needs.

According to the Doss, (2001) sustainable development means a better quality of life now and for generations to come”. It means not using up resources faster than the planet can replenish. To Eneji, Qi, Jian, Oden and Okpiliya, (2009a) found that the definitions of sustainable development requires that we see the world as a system – a system that connect space, and a system that connects time. When you think of the world as a system over space, you grow to know that air pollution in South America affects air quality in Lagos (Nigeria), and that insecticides or pesticides used in Australia could harm fish stocks off the coast of Lagos Bar beach and vice versa. The emphasis in all the definitions reviewed so far is that the environment should be seen as “an asset, a stock of available wealth, but if the present generation spends this wealth without investment for the future, then the world will run out of resources,(Ogunjobi, Meduna, Oni, Inah and Enya, 2010)..

A Review of the plan implementation of the world summit on Sustainable Development

Adejumo and Adejumo (2014) catalogued eleven (11) key issues out of the 170 issues of sustainable development as:

- ✚ Commitment at all levels to the United Nations millennium declaration held in Rio de Janeiro in 1972. The effort will promote the integration of the three components of sustainable economic development, social development and environmental protection as interdependent and mutually reinforcing pillars
- ✚ Good governance within each country at all levels and the formulation of sound policies on social, environmental and economic issues, democratic institutions, responsiveness to the needs of the people and the rule of law, anti corruption measures, gender equality and an enabling environment for investments basis for sustainable development and full participation of the developed and developing countries in global decision making.

- ✚ Access to health care services by rural and urban dwellers, good education for all children especially primary schools and at all levels of schooling, combat desertification and mitigate the effects of drought, floods, land and natural resource management, increase access to clean water, and adequate sanitation, transfer basic sustainable agricultural techniques and knowledge including natural resource management.
- ✚ Improve access to reliable and affordable energy and services, strengthen the contribution of industrial development to poverty eradication, improve the people living in slums by 2020 and eliminate the worst forms of child labour.
- ✚ Ensure that peace, security and respect for human right and fundamental freedoms including the right to development and ensuring that the benefits of development are felt by the children, women and the youths. Specific actions on consumption and production patterns to achieve sustainable development from using governments and institutions in a way that will promote a framework in support of social and economic development policies.
- ✚ Promotion of good transport systems at all levels; prevent and minimize waste and maximize recycling and use of environmentally friendly alternative materials.
- ✚ Initiate specific actions aimed at protecting natural resource base of economic and social development; development of strategies to protect the ecosystem, financial and technical assistance to achieve the MDGs on safe drinking water, promote the conservation and management of the oceans, enhance maritime safety, risk assessment and disaster management, promote sustainable tourism and eco-tourism as well as preservation of biological diversities and forest management.
- ✚ In other to achieve good health and sustainable development, the specific objectives include poverty reduction so as to avoid high prevalence of debilitating diseases, strengthen the capacity of health care services to all in efficient, accessible and affordable manner, reduction of HIV/AIDS prevalence among young men and women (aged 15-25) in most affected countries.
- ✚ Ensuring participation and equity among all especially developing nations and strengthen the regional trade and cooperation agreement in a globalizing world.
- ✚ With particular reference to sustainable development in different regions, the African Perspective include welcoming of New Partnership for African Development (NEPAD) and other existing development framework that are owned and driven nationally by African countries and to also provide financial and technical support of African's effort to implement land and natural resources management practices.

A Review of Nigeria Case on Sustainable Development

Lele (2008) cited in Adejumo and Adejumo (2014) describes sustainable development as “A new way of life and approach to social and economic activities for all societies, rich and poor,

developed or developing which is compatible with the preservation of the environment. In Adejumo and Adejumo (2014) observed that sustainable development implies efficient exploitation and management of resources for human survival taking into consideration both the present and future generations. Some specific factors have been identified as obstacles to achieving sustainable development in Less Economically Developed Countries (LEDCs) like Nigeria and they include:

- ✚ Lack of awareness about finite resources as people do not know or appreciate the implications of over use of resources.
- ✚ Corrupt practices that make it difficult and impossible to prioritize long term issues.
- ✚ Lack of qualified personnel to develop and implement alternative technologies due to poor educational systems and the associated “brain drain” syndrome.
- ✚ The priorities of LEDCS government are often short term, for instance, meeting the basic needs of population today without recourse to tomorrow. For example providing shelter, food, fresh running water, education and health care.

It is also known that many LEDCs are experiencing internal conflicts such as it is currently happening in Nigeria with the militant activities and insurgencies by Boko Haram in the Niger Delta and the North eastern parts of Nigeria respectively. There are also incessant cases of natural disasters and huge amount of resources and money are spent on the military and provision of relief to the internally displaced persons (IDPs), rather than on the long term sustainable initiatives (Shackleton, Paumgarten, Kassa, Husselman and Zida, 2011).

Strategies for Effective Environmental Protection and Management in Nigeria

Federal Government of Nigeria following the examples of the American legal framework on environment (USA National Environmental Policy Act, 1970, established the Federal Environmental Protection Agency (FEPA, 1989), promulgated a National Environmental Policy (2004) and the National Guidelines and standards, including Environmental Impact Assessment (EIA) (1998).

Federal Environmental Protection Agency (FEPA)

FEPA was established on the 30th of December, 1988/1989 with a mandate to oversee, control and protect the Nigerian environment. Its major functions were:

- ✚ Responsibility for monitoring and helping to enforce environmental protection measures.
- ✚ Cooperation with Federal and State ministries, local Government Councils, Statutory bodies and research agencies on matters and facilities relating to environmental protection. Other functions include:
 - ✚ To establish water quality standard and effluent limitation.
 - ✚ Ensure ozone layer protection
 - ✚ To control hazardous substances

- ✚ Promote air quality, noise and atmospheric protection and
- ✚ To enforce regulations, including the power to search, seize as well respond in respect of suits against the agency.

With the creation of the Federal Ministry of Environment by the Obasanjo administration in 1999, the functions of FEPA were taken over by the new ministry. It is imperative to note that FEPA and currently Federal Ministry of Environment have made commendable efforts by way of protection and management of natural resources for sustainable development in Nigeria (Aluko, 2010).

Environmental Impact Assessment (EIA) Decree No 86 of 1992.

This is another important and effective strategy of environmental protection and management. EIA is a valuable tool for assessing the environmental impact of new projects and policies. The objective is to determine the potential socio-economic, environmental and health effects of any proposed development project or business activity and identify measures to minimize them (Umeh and Uchegbu, 1997). By the mandate of the Decree, Federal Ministry of Environment uses the strategy to compel industries and companies to abide by the decree. Beside these strategies, there are several other national and international legislations and agreement that guide the rational use of environmental resources in Nigeria (Shackleton, Paumgarten, Kassa, Husselman and Zida, 2011).

Materials and methods

Study Area

Nigeria lies between latitudes 4⁰N – 14⁰N of the equator and longitudes 3⁰E – 15⁰ E of the Greenwich meridian, with estimated land mass of about 932,768 km² and a population of over 180 million persons based on 2006 National Population Census figure projected to 2017 with over 250 ethnic groups. Its greatest length from North to south is 1,040km² and from East to west is over 1,120km², bounded in the North by the Niger republic, northeast by Chad republic, on the south by the Atlantic Ocean, to the East by Cameroon Republic and to the West by Benin Republic. The capital city is Abuja, while the major rivers are Niger and Benue and located wholly within the tropics. The country is aptly described as the “Giant of Africa” and is richly endowed with natural, ecological and cultural resources.

Research design

Survey research design was adopted for this study. This method is adopted because it is best suited for the study of a large population, where a representative fraction can be sampled and given an in-depth study where results there from can be used to make a valid generalization about the entire population. This was considered appropriate because it can be used to effectively investigate problems in realistic settings, through the administration of questionnaires to sample the opinions of

people with planning knowledge and or people involved in development activities. The population of the study was centered on environmental planning and protection practitioners and lecturers of the Departments of Geography and Environmental Science, Environmental Protection and Resources Management, Environmental Education, Forestry and Wildlife and Urban and Regional Planning Departments, from the ten institutions of higher learning in Nigeria, 6 universities across Nigeria: University of Calabar, Modibbo Adama University of technology, Yola, Ahmadu Bello University Zaria, University of Lagos, University of Nigeria, Nsukka, and the University of Jos. Four other higher institutions were also sampled for the study. Two polytechnics and two Colleges of Education, Federal Polytechnic Bida, Okoh Polytechnic, Federal College of Education, Obudu and Federal College of Education, Omoku. Using purposeful sampling technique, a sample of 400 respondents was selected for the study from the 10 institutions of higher learning across the country. Forty respondents were chosen from each institution making a total of 400 respondents selected for the study.

The major instrument for data collection was a structured questionnaire divided into five sections. The researchers personally administered the instruments and collected same back 100% Descriptive statistics was used to analyze data generated from the field, where each respondent was weighted against responses on the instrument using frequency and percentages.

Result and discussion

A total of 400 questionnaires were administered to respondents and there was a 100% return rate. The data collected were presented according to research questions as follows:

Research question 1: To what extent does environmental protection and management strategies influenced the achievement of sustainable development in Nigeria?

Table 1: Response on the extent to which environmental protection and management strategies enhances the achievement of sustainable development in Nigeria

Responses	Frequency	Percentage
Very high	344	86%
Average	36	9%
Low	20	5%
Total	400	100

Source: Authors' field work, 2016. N = 400.

The analysis in table 1 reveals that 344 respondents, representing 86 % of the respondents feel that environmental protection and management has highly influenced the enhancement of sustainable development in Nigeria, 36 respondents representing 9% of the respondents believed that environmental protection and management strategies have an average influence on sustainable development in Nigeria, while 20 respondents, representing 5% were of the view that the influence of environmental protection and management strategies is very low in terms of the enhancement of

sustainable development in Nigeria.. The implication of this result is that environmental protection and management has a very high significant influence on the achievement of sustainable development in Nigeria.

This result is in line with the finding of Aligba, (2005) who reported that the whole essence of sustainable development is geared towards using the available resources to meet the need of today's generation, while not compromising the needs of tomorrow's generation. Furthermore, this resources exploitation has been further exacerbated by the rapid increase in human population coupled with inadequate capital base which forced many communities to over use our fragile and marginal lands to survive today at the cost of destroying the vestige of the resources that will support our survival of tomorrow. This is also in line with the earlier finding of Mwangi, Meinzen-Dick and Sun, (2011) who found in their study the importance of environmental protection and management cannot be overemphasized because man-made disruptions to ecosystems can cause extinction, as pollution creates dangers for both man and animals, and mankind owes the natural world a moral obligation of protecting and managing these pristine and fragile ecosystems for sustainability.

It is therefore very pertinent to understand that for sustainable development to take place in any nation, the issues surrounding environmental protection and management should be taken very seriously, especially as every activity carried out by humans are circled round the environment and its resources. Hence there must be the need for urgent and concerted effort to the tailored towards environmental resources conservation and management in Nigeria.

Research question 2: What is the extent of awareness about environmental protection and management strategy in Nigeria?

Table 2 shows the level of awareness of environmental protection and management strategies in Nigeria.

Responses	Frequency	Percentage
High awareness	310	77.5
Average awareness	72	18
Poor awareness	18	4.5
Total	400	100

Source: Authors' field work, 2016. N = 400

Table 2 above shows that 310 respondents representing 77.5% agree that they were highly aware of some environmental protection and management strategies, while 72 respondents, representing 18 % also indicated that they have average level of awareness about environmental protection and management strategies in Nigeria and their contribution to sustainable development in Nigeria. 18 (4.5%) respondents claimed poor level of awareness and its contribution to sustainable national development. The implication of this result therefore is that an overwhelming majority of the

respondents are aware of some environmental protection and management strategies within their institutional structures and how these strategies contribute to sustainable development in Nigeria.

This result has come to confirm the earlier findings of Eneji, Mubi, Husain and Ogar, (2015) who found that for issues concerning the environment to be resolved in the best possible ways, it must crave more on the extent of environmental awareness and education the people have attained. Most scholars who were respondents in the study have very high level of environmental protection and management awareness, hence they strongly hold that the strategies adopted for environmental protection and management can go a long way to enhance sustainable development in Nigeria. This has further buttressed Eni (2005) assertion that for there to be any sustainable development of any country, there must be functional environmental protection and management strategies which should be embraced by all concerned.

Research question three: Assuming there were no environmental protection and management strategies in Nigeria, what would be the consequences on sustainable development in Nigeria? The analysis of research question three is presented in table 3 below:

Table 3: Analysis of the consequences of the absence of environmental protection and management strategies on sustainable development in Nigeria

Respondents	Frequency	Percentage
There will be severe consequences on sustainable development in Nigeria	336	84
There will be no consequences on sustainable development in Nigeria	54	13.5
Undecided	10	2.5
Total	400	100

Source: Authors field work 2016, N= 400

Table 3 captures responses revealing the consequences of the absence of environmental protection and management strategies on sustainable development in Nigeria. 336 respondents representing 84% of the respondents agreed that there will be very serious consequences on sustainable development, 54 respondents representing 13.5% disagreed that there will be no consequences if there were to be no environmental protection and management strategies in Nigeria. 10 respondents (2.5%) were undecided as to the consequences of the absence of environmental protection and management strategies in Nigeria. This implies that environmental protection and management are veritable tools for the achievement of sustainable development in the country.

Where resources are not properly managed and our environment treated with levity, there is bound to be serious environmental consequences especially now that we have began the enjoying of harsh environmental conditions as a result of global climate change orchestrated by our actions and

inactions. It is in predicting these consequences that Akpofure (2009) posited that sustainable development has assumed a new dimension of change in the process of utilization of resources, the direction of investment, the orientation of technological innovation and exchange and institutional change reflecting both present and future needs. The finding of this study is also a confirmation of Adejumo and Adejumo (2014) position that there cannot be any meaningful development with planning for a sustainable future, one major strategy to plan for a sustainable future is to look at possible ways of sustainably managing our resources, technology and economy.

Research question Four

To what extent has the government of Nigeria given attention to environment protection and management issues in the country?

Table four: Government’s attention to environmental protection and management issues

Responses	Frequency	Percentage
Very high	114	28.5
Average	258	64.5
Very low	28	7.0
Total	400	100

Source: Author’s field work, 2016 N= 400.

From table 4, the result of data analysis shows that 114 respondents representing 28.5% of the respondents observed that government’s attention towards environmental protection and management is very high, 258 respondents (64.5%) ticked that government is only showing average attention towards issues of environmental protection and management, while 28 respondents , representing 7.0% ticked that government is showing very poor attention towards environmental protection and management issues towards enhancing sustainable development in Nigeria. The implication of this result based on the data shows that government had not really shown the required attention towards environmental protection and management issues as it ought to have done, hence their attention is said to be on the average. This is an indication that Government has not been paying serious attention to environmental protection and management issues in the country.

Based on the data analyzed, there is every indication that government has not directed its attention to environmental protection and management issues; hence there is reality that we are far from achieving sustainable development in Nigeria. This position was held by Aluko, (2010), who was of the view that for sustainable development to be achieved in all facets of our public and private live, government must live up to its responsibility by providing all the enabling environment for agencies, partners and donors to actively participate in environmental protection and management issues.

One major concern raised by Eneji, Mubi, Husain and Ogar, (2015) was that of community active participation in the management of our resources. This is more so as women play a central role

in resources exploitation, hence their active participation in environmental protection and resources management will go a long way to conserve these resources, thereby guaranteeing sustainable development in Nigeria (Ezebilo, and Mattsson, 2010a; Ezebilo, and Mattsson, 2010b).

Conclusion

Based on the result of the analysis of data collected from the field, the following deductions have been made regarding the study objectives and research questions posed to guide the study. Environmental protection and management strategies can be an indispensable tool for the realization of sustainable development goals in Nigeria if it is properly handled. So far, the level of environmental protection and management is high, but the near lack of serious commitment on the part of government has made its effect less serious. Furthermore, environmental protection strategies are in place in the country, more so, these strategies need to be strengthened and over hauled for the realization of their roles and mandates, this can only be achieved if government pays serious and committed attention to the tenets of environmental protection, proper implementation of the designed strategies and commitment to monitor these implementations..

Recommendations

For Nigeria to achieve the goals of sustainable development through environmental protection and management, the following recommendations are made;

- Nigeria needs to take conscious effort towards the achievement of the goals of sustainable development as stated in this work
- In addition, the issue of sustainability must be a concern to all parastatals (public and private), and individuals. This will require educating everyone on the need for sustainable development and as a result work towards its actualization
- Finally, the environmental protection and management strategies in place should be strengthened and empowered with the enforcement mechanisms to enhance their constitutional roles.

References

- Adejumo, V.A. & Adejumo, O.O. (2014). Prospects for achieving sustainable development through the millennium Development Goals in Nigeria. *European Journal of Sustainable Development* 1(1): 33-46.
- Akpofure, R. (2009). *Environmental Science: An introduction*. Ibadan: Kraft Books Limited.
- Aligba, A. (2005). Legal mechanism for the protection of the nation's resources and environment. *The African Journal of Environmental Law and Development Studies*. 1(2): 77-97.

- Aluko, O. (2010). Rule of law, planning and sustainable development in Nigeria. *Journal of Sustainable Development in Africa*.12 (7):90-92
- Anijah-Obi, F. (2001). *Environmental protection and management: Planning, process and strategies* Calabar: University of Calabar Press.
- Dalton R.J. (2008). Citizenship norms and the expansion of political participation. *Political Studies*, 56: 76–98.
doi: 10.1111/j.1467-9248.2007.00718.x. [Cross Ref], DOI: 10.1080/13504501003749992
- Doss, C .R, (2001). Designing agricultural technology for African women farmers: lesson from 25 years of experience, *World Dev.*, 29 (11): 2075-2092.
- Eneji C. V. O., Mubi M. A., Husain M. A. and Ogar D. A. (2015). Factors Influencing Gender Participation in Forest Resources Management in the Cross River National Park Enclave Communities, Nigeria. *Journal of Environment Protection and Sustainable Development*; 1(5):234-244
- Eneji, V.C.O, Qi G., Jian X., Oden S. N and Okpiliya F. E., (2009a). A Review of the Dynamics of Forest Resources Valuation and Community Livelihood: Issues, Arguments and concerns, *Journal of Agriculture, Biotechnology and Ecology*,2(2):201-231
- Eneji, V.C.O. Qi G., Okpiliya, F.I., Aniah, E.J., Eni, D.D. and Afanghideh, D., (2009b). Problems of Public Participation in Biodiversity Conservation: the Nigerian Scenario, *Journal of Impact Assessment and Project Appraisal*, 27(4): 301-307,
- Eni, D.D. (2005). *Philosophy and methodology of environmental science*. Calabar: Ultimate Index Book Publishers.
- Ezebilo, E.E. and Mattsson, L., (2010a). Contribution of non timber forest products to livelihoods of communities in southeast Nigeria, *International Journal of Sustainable Development & World Ecology*, 17(3): 231-235.
- Ezebilo, E.E. and Mattsson, L., (2010b). Socio-economic benefits of protected areas as perceived by local people around Cross River National Park, Nigeria, *Forest*
<http://www.aiscience.org/journal/jepsd>
- Mwangi, E., Meinzen-Dick, R. and Sun, Y. (2011). Gender and sustainable forest management in East Africa and Latin America. *Ecology and Society*16(1):
- Ogunjobi, J.A., Meduna, A.J., Oni, S.O., Inah, I.E., and Enya, D.A., (2010). Protection Staffs' Job Perception in Cross River National Park, Southern Nigeria, *Middle-East Journal of Scientific Research* 5 (1): 22-27.
- Oyeshola, D.O.P. (2008). *Sustainable development issues and challenges for Nigeria*. *Journal of Sustainable Development* 6(7) 1-8
- Shackleton, S., Paumgarten, F., Kassa, H, Husselman, M and Zida, M., (2011). *Opportunities for Enhancing Poor Women's Socioeconomic Empowerment in the Value Chains of Three African*

Non-Timber Forest Products (NTFPs). International Forestry Review Commonwealth Forestry Association, pp 136-151.

United Nations,(2007). Sustainable Development guide and methodologies (3rd edition). Achieving environmental protection through the vehicle of human rights: Some conceptual, legal and Third world problems. *University of Benin law Journal*.

URL: <http://www.ecologyandsociety.org/vol16/iss1/art17/>

Wikipedia, (2014). *Sustainable development*. Retrieved online from www.wikipedia.org.