

# Enhanced Traditional Livelihoods: Alternative to the Oil Economy in Niger Delta

CHINYERE I. ERONDU (PhD)

Department of Sociology, University of Port Harcourt, Port Harcourt, Rivers State Nigeria. chinyere.erondu@uniport.edu.org and chi\_erondu@yahoo.com

#### **ABSTRACT**

The need to shift the national economy from sole dependence on oil to a diversified one has long been advocated by many authors. However, there has not been a constructive and determined effort towards achieving this objective. Government pronouncements have not been backed with policy frameworks to effectively implement policies in this direction. Where there are, full implementation has not been achieved. In the Niger Delta area, that is largely aquatic with extensive natural resources, the traditional economy of the natural communities have been abandoned and there are no serious efforts to exploit these resources maximally and sustainably to attract international markets so as to contribute significantly to the national economy. It is posited that enhanced traditional livelihoods such as fishing, farming, aquaculture, crafts and trading (with private and government participation) will bring about growth and development of the economy. A diversified economy will ensure adequate and full utilization of existing assets (natural, physical, human and social), reduction of poverty and unemployment. This will also mitigate population drift and restiveness in the region and invariably assuage feelings of marginalization and its fallout. This paper critically evaluates the traditional livelihoods and their prospects in transforming the economy through international trade and tourism. The role of government in making proactive policies with supportive framework that will enable effective implementation is advocated.

**KEY WORDS:** Enhancement, traditional livelihoods, oil economy and agriculture.

# INTRODUCTION

There has been a litany of discourse on Nigeria's dependence on the oil resource and the need to diversify her economy. In spite of several alarm raised, we seem to be unconcerned with the state of the economy. The recent down trend in the price of oil is bound to affect adversely the economy, more so on Nigeria which operates seemingly a mono economy. The unpleasant effects will no doubt trickle down to the personal economy of individuals. This, therefore, makes it imperative to respond to the needs of the moment by looking at the possibility of enhancing our traditional livelihoods; thereby strengthening them and making them viable enough to support the ailing oil economy. Ibekwe-Uche (2014) captured this aptly when he argued thus: "As the price of this commodity drops due to a supply glut, mono-product economies like Nigeria will feel the pinch but will also be forced into out—of-box thinking necessary to diversify, protect and ultimately save their economies."

The Niger Delta region of Nigeria is the world's third largest wetland, according to UNDP Report (2006), and is rich in biodiversity. It has presently remained the central focus of attention both in national and international discourse. This is understandable given its strategic role in the economic growth of Nigeria. Despite the challenges of her environment, this region is endowed with enormous resources such as oil deposits, natural gas, and a variety of aquatic and forest resources due to its rich biodiversity. According to FAO (2002) more than 90% of coastal communities of the Niger Delta are basically dependent on fishing and related activities for their livelihood. However, the area has progressively been underdeveloped over the years. This stems from the fact that the natural economy of the rural communities has been typified by poor performance arising from neglect and a major shift of successive governments of the nation to mono economy (oil-based economy). The consequence is that agriculture, which has the inherent capacity to offer opportunities for employment, raising incomes and food security of the natural communities has not delivered expected dividends.

Igboeli (2000) had opined that agriculture is Nigeria's most assured engine of development and a reliable key to industrialization, notwithstanding the huge revenue derived from oil. This according to Nworgu (2006) stems from the fact that Nigeria is an agrarian society with about 70% of its estimated population living in rural areas, where 90% of the total food production takes place. Also, 80% of Nigerians are involved in subsistence farming. Furthermore, it has been reported that the country's economy rests on agriculture (including forestry, livestock and fisheries), petroleum, wholesale and retail trade, finance and insurance, and manufacturing, which contribute 39.34, 12.44 12.20, 9.19 and 6.88%, respectively to the Gross Domestic Production (GDP) (CBN, 1995). It is thus obvious that it is agriculture and not petroleum that is the cornerstone of Nigerian economy. Over the years, attention has been focused largely on the exploitation of oil in the Niger Delta. The resultant neglect of other key resources in this region and other sectors of the economy in Nigeria have impacted on the traditional economy of Nigeria adversely. The current practice of largely using revenue from petroleum to drive development in Nigeria has been the basis of her development crisis. Added to this strain, conflicts, youth restiveness, terrorism (Boko Haram insurgency for instance) and other crisis situations are known to have erupted in and transversed the



nooks and crannies of Niger Delta and Nigeria as a whole. This is primarily due to corruption, mismanagement of accruing revenue, pollution and exclusion of indigenous communities from participation as stakeholders in the industry. The cost has been enormous and has translated to the under development of the Niger Delta. There is pervasive poverty in the midst of abundant resources, feeling of marginalization and deprivation among the local populace. This situation calls for a new framework for developing the Niger Delta in particular and Nigeria as a whole.

The current discourse on Niger Delta beyond the oil economy is a very crucial one and timely too, at this point in Nigeria's history. The crude oil deposit is a finite and exhaustible resource that is largely non renewable. There is already the fear that its depletion may be nearer than imagined. Much concern has even been expressed about the fate of Nigeria when the oil wells finally dry up. The concerns variously expressed are understandable given that the sectoral economic growth has been lopsided and no significant institutional and infrastructural developments have taken place. Furthermore, other resources capable of driving the economy have not been developed and harnessed

It is against this backdrop that in this paper I elucidate the importance of revitalizing and enhancing the once neglected traditional economy, with a view to advancing alternative and complementary (to oil) drivers of the Niger Delta economy.

## The Need to Transform Traditional Livelihoods in Niger Delta

The concept of traditional livelihoods as used in this paper means those indigenous economic activities that are based on the available resource base of the people which has served as means of their living over a long period. However, according to Zoomers (2008) "a livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living..."

Traditional livelihoods have always played an important role in sustaining the rural populace and beyond. Prior to the oil economy, the economy of Niger Delta has been sustained by a range of economic activities associated with her traditional livelihoods. These traditional livelihood activities are fishing, farming, harvesting of forest resources for sustenance and commercial purpose, food processing and trading, especially in products of agriculture. However, the discovery and relevance of oil in the national economy made less attention to be accorded to other sectors. Also akin to the thesis of Rosa Luxemburg, the natural economy of the people has been disarticulated due to displacement of labour from traditional livelihoods to the oil economy. This has for years truncated the development of Niger Delta and slowed down the pace of her economic growth. Ogon (2006) shares the view that oil exploration in Niger Delta helped to destroy the livelihood support systems of oil producing communities, thereby generating communal disempowerment which has left in its wake, severe stress and underdevelopment in the environment and livelihood patterns of indigenous population. He further states, "Today hunger in the region is widespread as non-inclusive political decisions and policies by the various governments have hampered sustainable livelihood and have led to the emergence of social movements and ethno-nationalist groups organized around demands for self-determination and resource control".

The above remark which aptly describes the current state of events in the Niger Delta calls for urgent attention, more so as the oil economy has failed to adequately address the multiple challenges facing this region.

The UNDP Report (2012) acknowledges the need to transform the agricultural sector of Nigeria and states that through her Agricultural Transformation Agenda (ATA) "Nigeria is already learning from the successful experience of how some countries developed their agricultural sectors, feed themselves and drive economic growth by creating jobs in the sector." This realization makes the option of revitalizing the traditional economy, especially with respect to sustained livelihoods a preferred alternative to the sole reliance on the oil economy.

The essence of enhancing traditional livelihoods is to improve and make them more viable and sustainable enough, to contribute sufficiently to National development. It would also ensure a sustained source of wealth. Enhancing traditional livelihoods of Niger Delta will ensure a more equitable, balanced and integrated approach to development and social justice which ensures that no sector of the Nigerian economy is compromised. Also, it could form the basis for rural industrialization, where the majority of Nigerians still reside and languish under the weight of unemployment and poverty.

Enhanced and transformed traditional livelihoods of the Niger Delta are her hope for future development and that of Nigeria in general.

## Identifiable Traditional Livelihoods in the Niger Delta and their Current Status

As diverse as her resource base is, so also are her traditional livelihoods. However, the ones considered prominent and of great potential will be discussed here. Agriculture is an important economic activity associated with Niger Delta traditionally. It is based on the availability of key natural resources such as land and water. According to Canadian International Development Agency (CIDA) (2003), "Agriculture is defined as the entire system that links the producers and consumers of food and non-food agricultural (farm related) products. It incorporates dimensions such as the production, storage, processing, trade and use of these products, the natural



resource base and the policy and regulatory environment that supports the system". The above definition is indicative of the diversity associated with agriculture related activities.

In Niger Delta, most traditional livelihoods are tied around agriculture. Crop cultivation, fishing and aquaculture are some of them. Crop cultivation is the primary traditional livelihood of upland communities of Niger Delta. It is a necessary part of ensuring food security in this region. Agricultural activities and food production have been hampered in this region due to the devastation and degradation of her farm lands resulting from extensive oil pollutions. Oil pollution and gas flaring which have been regular features in Niger Delta have hampered agricultural production by reducing cultivable land and making yields poor. The poor and declining yields are known to discourage this all important activity that the majority of upland communities depend on for sustenance and income generation. Therefore, to stem the current slide towards poverty and food insecurity, the farming population needs to be empowered into enhanced agricultural productivity.

Fishing activities which include the harvest of fishes, oysters, periwinkles, crabs, shrimps, etc from natural water bodies and the local processing of the same are some of the oldest traditional livelihoods associated with the riverine areas of the Niger Delta. Aquaculture practice is still at the very rudimentary level comparatively. The relevance and potential of fish related economic activities have been captured by NAGA, World Fish Centre Quarterly thus, 'Fish is a key ingredient on the global menu, a vital factor in the global environmental balance and an important basis for livelihoods worldwide. It needs to be placed where it belongs: high on the global agenda and integrated into thinking, action and policies at the highest levels by all nations." This traditional livelihood of Niger Delta is under threat currently due to the activities of industries, especially the oil companies and climatic conditions. Abah (2013) shares his views thus; "Fisheries livelihood in the coastal area of Niger Delta is vulnerable to displacement in the event of an adverse climatic event and water pollution from industrial activities."

In line with recognizing the need to enhance and improve on rural livelihoods, Nigeria joined other countries and organizations between August 22-25, 2005 to organize and attend the NEPAD Fish for All Summit in Abuja, Nigeria. The sole aim of the summit was to improve the management of fisheries and aquaculture, and application of new aquaculture technologies, (NAGA, 2005). Ten years after the Summit one still wonders if Nigeria has achieved optimum production in fish, especially with the observation of Abah (2013) that "the high volume of importation (of fish) constitutes a huge drain in the nation's foreign exchange reserve".

Local processing industries and storage facilities are limited and still very rudimentary, hence producers of perishables and raw materials also engage in the minimal and limited processing of their produce. The power sector has failed to power this sector of the traditional economy up to date. The resultant effect is that a lot of wastage and loss of potential income is experienced. This is very discouraging to farmers in particular and limits the number of people attracted to this traditional livelihood. There is need to improve on the processing industry. This will enhance prolonged life of goods and add value to them, which will attract higher market prices and more income generation not only at the personal and regional levels, but also at the national level.

It is therefore obvious that these activities are not only carried out at the subsistence level, lacking the application of modern technology, credit facilities, new techniques, and infrastructure that can enhance production, but are worsened by environmentally related factors like oil pollution and climatic change. This underscores the need to re-visit improvement of these livelihoods.

Another traditional livelihood of Niger Delta is hunting and harvesting of forest resources from the wild. Onakuse and Lenihan (2003) are of the opinion that "food gathering through rural water and forestry resources among the rural poor constitutes viable sources of livelihoods for rural dwellers." NEST (1991) indicates that the forest zones of this region provide us with an array of resources such as wood and non-timber resources which may include spices, fruits, nuts, leaves, barks of trees (for medicinal purpose), reeds for mat making and cane for furniture making. NEST (1991) further analyses the great potentials in forest resources such as wood, as being the basis for numerous labour intensive industries such as saw and ply mills, construction and furniture industries, industrial production of useful chemicals, drug manufacturing industries and many more. It summarizes the potentials of forest resources and the need to improve on the livelihoods associated with them thus; "Taken with new techniques in biotechnology and phyto-chemical research, they can form the cornerstone of multi-million naira enterprises which sustain cottage industries engaged in the collection and primary processing of such products". Hunting from the wild provides a range of products such as snails, grass cutters and other edible animals that serve as delicacies in the food industry, and support the nutritional needs of people. This livelihood faces the same challenges as the agriculture related ones, but in addition those involved in this economic activity do so in unsustainable way.

The cottage craft industry is another sector of the traditional economy of the people. These include canoe, mat, basket and cane furniture making. All sorts of local farming implements and fishing equipment are made through the local craft industry. These include diggers, hoes, and machetes; fishing hooks, traps, racks and baskets. It is



clear that our production system at this level lacks high level technology. This sector has a great potential if enhanced especially in terms of quality, designs and aesthetics, as currently the status of the products does not meet all the standards of the international market.

Trading in agricultural related and crafts products are also another form of livelihood in this region. However, due to poor infrastructural facilities such as poor communication and road networks, this economic activity has been limited in scope. The Niger Delta is well known for its difficult terrain that hinders free movement.

There are communally owned eco-tourist sites that have not been fully developed to attract a high patronage, nationally and internationally. Poor infrastructural development of the Niger Delta has also been the bane of this sector. Patronage of such areas has been limited to the immediate rural populace who are not in a position to generate meaningful revenue necessary for further development activities.

The above exposition clearly shows the need to transform the traditional economy of the people through enhancing their respective traditional livelihoods.

## **Strategies for Enhancing Traditional Livelihoods**

The need to transform livelihoods is one of the priority areas of the transformation agenda of Nigeria - especially as it relates to her vision to become one of the first twenty economies in the world by 2020. To enhance traditional livelihoods implies making improvements in the value and outcome of economic activities that serve as means of living to a people. It will involve actions that will not only transform them qualitatively, but also quantitatively. Some of these measures have been helpful in other developing economies where they have been rightly applied. It is important to sound a cautionary note here, that the workability and success of these strategies will be dependent on the political will of leaders, the cooperation of the people, and the elimination of structural problems in our system, which may tend to negatively affect the realization of the set goals. Creating enabling environment for the improvement of these livelihoods is a task the government must necessarily strive to achieve.

The systematic approach to improving traditional livelihoods in the Niger Delta must start with a review and understanding of the past and present status and the complexes of these livelihoods. This will reveal what needs to be improved, enhanced or transformed and in what ways. It will entail livelihood analysis to reveal available resources, assets, access to them, market returns and areas of vulnerability. Enhancing traditional livelihoods must involve the active participation and contribution of the practitioners. This will ensure shared commitment and consideration for the cultural context of the people. Also, through indigenous knowledge, information about location of resources, assets, their potentials, management, uses and returns, will be made available. This vital information will be helpful in forming the direction of change and choice of action to be taken in each livelihood case. Some of the suggested measures that will enhance the traditional livelihoods in Niger Delta are;

- I. Re-orientation of the practitioners is a necessary beginning step to sensitize them on the new possibilities associated with their means of livelihood. They must be oriented to see and think beyond their present, and change the subsistence orientation of their livelihoods. They must be educated on the need to manage, conserve and use resources sustainably. Global best practices relevant to their respective livelihoods must be imparted to them. The strategy of marking out conservation areas, specific time intervals of using assets and harvesting resources and selective harvesting of some products could be helpful in preventing depletion of such resources for future use.
- 2. Agriculture-oriented researches could be useful in finding alternative ways of improving soil quality that has been degraded due to oil exploration activities and overuse, in Niger Delta. Such remediation actions must be eco-friendly. Proper waste disposal, especially the hazardous ones must be ensured to avoid pollution of the ground water. Caution should also be exercised in the use of chemical inputs in any agricultural production to avoid harmful residual effect, as research has shown. Currently, there is emphasis on returning to traditional farming technique which encourages use of little or no chemicals in agricultural production. This is termed organic agriculture. Most organic agro products are known to fetch more revenue in the international market. Ghana is currently practicing organic agriculture in the production of coca beans. Nigeria can do same for her own agricultural products. Borrowing an idea from the Canadian International Development Agency (CIDA)'s advocacy for "Promoting Sustainable Rural Development through Agriculture", fishing and aquaculture can be enhanced through adopting practices such as avoidance of use of chemicals in harvesting and producing fish. The use of chemicals in fishing as a livelihood venture not only taints the taste of fish, but also affects the nutritional value. The natural chemical balance of their natural habitat is also altered by the use of such chemicals. This tends to affect their breeding and survival negatively. In aquaculture practice therefore, minimum use of chemicals must also be adopted in feed formulation. Diversification of aquaculture to include brackish water species is advocated.



- 3. Introduction of more aesthetic designs and creations can ensure added value and higher market price for our locally produced crafts. The demands of the global community must be considered in doing this. Our choice of designs must be such that they will accommodate local as well as international taste. This implies variety of designs.
- 4. Traditional tourist sites can be improved in line with international standards by adding structures like hotels, and other forms of recreational facilities that will ensure the comfort and general well-being of visitors while there. Security is crucial and critical in ensuring an appropriate climate for effective development. Security concerns have become of great importance since militant and terrorist activities in the Niger Delta and Nigeria are known to the global community. Effort must be increased to ensure early detection of security threats around such tourist zones. This can be achieved by improving security surveillance through the use of closed circuit cameras in appropriate places and maintaining strong security networks around the neighbourhoods. Government can partner with the local community as well as other private security organizations to achieve this. Also, roads leading to such sites of attraction must be rebuilt, or at least maintained to a usable state, to ensure safety. Transport facilities and easy accessibility to them are also vital. With these in place, a greater patronage will be assured and this will as well boost income generation.
- 5. Processing of our agricultural products is highly limited in the traditional economy. In order to add more value to the goods, efforts should be made to improve processing and storage facilities. This sector of the economy can only be effective with steady power supply. The consistent failure of the power sector has negatively affected the economy of Nigeria in spite of all the efforts being made to put it in order. The power sector is a constant decimal in the Nigerian economy that still requires urgent attention if all the sectors of the economy are expected to grow beyond their present limit. It is the engine that drives any economy that is internationally recognized. Improving the power sector will indeed ensure long shelf life of goods and reduce waste due to spoilage. Appropriate and good packaging in addition, will make goods more attractive and acceptable in international market.
- 6. In order to address the systemic disarticulation of the Nigerian economy, conscious effort should be made to link agriculture to industry. The traditional livelihoods of our people generate products that can feed the industry. Establishing such linkages could form the necessary launchpad for rural and urban industrialization in Nigeria.
- 7. Improvement on the local technology is not only necessary but it must be based on indigenous knowledge so as to ensure acceptability, appropriateness and affordability. Improvements that will eliminate stresses and difficulties associated with traditional livelihoods will definitely improve the outcomes of such livelihoods. For example, technology that can eliminate the production of excessive smoke while frying "garri" a staple food in Nigeria, or smoking fish will make such activities stressfree and delightful ventures. Enhancing livelihoods in the traditional economy will also involve the consideration of the health status of practitioners. Practices that impinge on the life and well-being of the people must be dropped and avoided. In place of these, better alternative ways of doing things and healthier lifestyle must be introduced to the people. Therefore, cleaner and safer farm inputs are advocated. Improved health status of the people will ensure high productivity.
- Acceptance of the role information and communication technology in expanding the economy: In today's economy, the role of information and communication technology cannot be ignored. Mohan (2001), succinctly captures the situation thus; "ICTs at a minimum can enhance the livelihoods of the poor and improve market efficiency". While the Chairman of M.S. Swanunathan Research Foundation (MSSRF) India, in Mohan (2001) states, "the technological empowerment of the poor adds value to their work and lives". All these remarks point to the usefulness of ICT in transforming livelihoods. Through ICT people can gain access to appropriate and helpful information that can impact positively on their livelihoods fast. In addition to receiving information that can improve productivity, access to economic opportunities becomes very possible. Price information, new and modern ways of production, weather conditions and global market trends are made available through the Internet. Tapping on such information definitely attracts great value, and traditional livelihood practitioners cannot be left out, if they latch in on this wonderful opportunity provided by the Internet technology. Rural farmers in some developing economies have come to realize the importance of the use of mobile phones in fast sharing of information that enhances their livelihoods. With e-commerce or online marketing, traditional livelihood practitioners are bound to reap enormous benefits. People of Niger Delta and Nigeria as a whole, must be taught the use of web tools in enhancing their economy. For ICT to work for the people there must be deliberate and concerted efforts to provide relevant education for the populace, in addition to the needed infrastucture.
- **9.** In addition to developing international market links, market for products of enhanced traditional livelihoods must be created, developed and sustained within the national boundary. Checks are



therefore necessary in limiting in-flow of similar or competitive goods from outside. This will serve as an incentive for increased production and generation of income. The current practice of importing things we are producing or capable of producing should be discouraged. Policy reformulation and implementation become crucial in this regard. Government policies must be sensitive enough to protect the interest of practitioners of enhanced traditional livelihoods. This will require proactive policies that will be friendly to sustainable traditional livelihoods. Policies that will enhance price stability and attractiveness must be encouraged by government, while at the same time avoiding any policy that will encourage undue competition from outside, thereby creating room for discouragement.

- 10. Government should also create the enabling environment in the area of providing necessary framework and infrastructure that will facilitate public private partnerships. This will also require the building of strong institutions that will enhance capacity building and provide sufficient capital for the programmes involved. Traditional institutions can be improved to serve the same purpose or collaborate with the new ones government may create. It must be emphasized here, that effective coordination is necessary between the public and private sectors to achieve set objectives. NGOs can take up some aspects of the programmes aimed at enhancing these traditional livelihoods, while part of the revenue from the oil sector can also be channelled towards funding these livelihood development strategies. Government should take as a challenge the issue of protecting the Niger Delta land from oil pollution more seriously. The oil companies must be made to comply with the environmental regulations that align global best practice in oil exploration activities. Those oil companies which contravene these laws and degrade the environment, thereby rendering the traditional livelihoods of the Niger Delta impotent, should be made to face the full penalty of such actions.
- 11. Government and private partnerships should provide improved incentives in the areas of credit facilities, more friendly repayment modes, skills through regular training exercises to update the practitioners of traditional livelihoods, make available more arable land for agricultural activity and improved seedlings as well as tools of production. The research reports of institutions of higher learning and those of agricultural research institutions must not only be made available to those who need them most to enhance livelihoods, but government and other private organizations should provide the finance needed to try the recommendations of such research endeavours.

## Conclusion

In conclusion, there are expected derivable benefits once the transformation in traditional livelihoods takes place. Some of these include; a better general wellbeing of the people and less hostilities among the peoples in the Delta because of resource control issues. Rural/urban population drifts because of poor infrastructural development and unemployment will be curtailed. Other benefits will include higher income generation for the entire nation, improved food security and poverty reduction.

Indeed, I see the Niger Delta as a land of greater opportunities, possibilities and potentials. When these are fully tapped, the Nigerian economy will be transformed to greater heights. With enhanced and transformed traditional economy, sustainable development will be attained and the nation will definitely gain tremendously, as overdependence on her oil sector will be reduced. More so, the dream of attaining the Millenium Development Goals will no longer become elusive. This way, our future becomes more assured and we can definitely look up to a Niger Delta beyond oil.

#### References

Abah, R. C. (2013). Vulnerability of Fisheries Livelihood in the Coastal Area of Niger Delta Region of Nigeria in World Journal of Fish and Marine Sciences 5 (2): 152-158. ftp://taurus2.eoc.dlr.de/put/kuenzer/Clement%202013.pdf (accessed on 10/2/15).

Canadian International Development Agency (2003). Promoting Sustainable Rural Development through Agriculture: Making a Difference in the World. Canada (CIDA) (www.ada.gc.ca) (accessed 10/2/15)

CBN (1995). Central Bank of Nigeria's Annual Report and Statement of Accounts. Lagos, Nigeria.

Food and Agricultural Organisation (FAO) (2002). Towards Earth Summit: Social Briefing Number 2.

Ibekwe-Uche, N. (2014) Overcoming Oil Slump. Available at: <a href="http://www.punchng.com/opinion/letters/mynews-com/overcoming-oil-slump-2/">http://www.punchng.com/opinion/letters/mynews-com/overcoming-oil-slump-2/</a> Accessed on 17<sup>th</sup> December, 2014.

Igboeli (2002). Annual Production and agriculture in the New Millenium. A Key note address delivered at Annual NSAP Conference held at Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria 19-23 March 2002, pp1-3.

Mohan U. (2001). Bridging the Digital Divide in Per Pinstrip-Anderson & Raju Panaya Lorch(eds); The Unfinished Agenda: Perspectives on Overcoming Hunger, Poverty and Environmental Degradation. Int. Food Policy Research Institute, Washington DC.



- NAGA World Fish Centre (2005). Fish for All: A Turning Point For Aquaculture and Fisheries in Africa. World Fish Centre quarterly vol. 28, No. 3, July December 2005.
- Nigerian Environmental Study Action Team (1991). Nigeria's Threatened Environment. Ibadan: Intec. Printers Ltd.
- Nworgu, F.C. (2006). Prospects and Pitfalls of Agricultural Production in Nigeria. Ibadan: Blessed Publications.
- Ogon, P. I. (2006). Land and Forest Resource Use in the Niger Delta. Issues in Regulation and Sustainable Management (globetrotter.berkeley.edu\swep). (accessed on 10/2/15)
- Onakuse, S. and Lenihan, E. (2003). Livelihood Systems and Rural Linkages in Niger Delta Region of Nigeria. <a href="http://www.nuigalway.ie/dern/documents/44\_stephen\_onakuse\_and\_eamon\_lenihan.pdf">http://www.nuigalway.ie/dern/documents/44\_stephen\_onakuse\_and\_eamon\_lenihan.pdf</a> (accessed on 10/2/15).
- Overseas Development Institute (ODI). Understanding Livelihoods in Rural India. Diversity, Change and Exclusion, UK (DFID) (<a href="http://www.livelihoodoptions.info">http://www.livelihoodoptions.info</a>) (accessed on 15/10/11)
- United Nations Development Programme (UNDP) (2006). Niger Delta Human Development Report. Lagos: Perfect Printers Ltd.
- United Nations Development Project (UNDP) (2012). Nigeria's Path to Sustainable Development through Green Economy. <a href="http://www.undp.org/content/nigeria/en/home/library/environment\_energy/RioReport.html">http://www.undp.org/content/nigeria/en/home/library/environment\_energy/RioReport.html</a> (accessed on 10/2/15)
- Zoomers, A. (2008) "Rural Livelihoods" in Desai, V. and Potter, R. (eds) The Companion to Development Studies. Great Britain: Hodder Education.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage: http://www.iiste.org

### **CALL FOR JOURNAL PAPERS**

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

**Prospective authors of journals can find the submission instruction on the following page:** <a href="http://www.iiste.org/journals/">http://www.iiste.org/journals/</a> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

## MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Academic conference: <a href="http://www.iiste.org/conference/upcoming-conferences-call-for-paper/">http://www.iiste.org/conference/upcoming-conferences-call-for-paper/</a>

## **IISTE Knowledge Sharing Partners**

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

