PERCEPTION OF IMPACT OF DONOR AGENCIES ON THE SOCIO-ECONOMIC WELL-BEING OF FISHER FOLKS IN SOUTHEAST NIGERIA

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INTRODUCTION

The contribution of fisheries to the Nigerian economy is significant. It serves as source of supply of high quality micronutrients, 40% of dietary animal protein intake, food security (through production of over 400,000 tons per annum), generation of over 3 million employment opportunities, poverty alleviation, and it accounts for about 2% of national gross domestic product (GDP) and 88% of non-oil foreign exchange earnings through shrimp export (FAO, 2004; FDF, 2007). Despite its potentials, the artisanal fisheries sector in Nigeria is particularly labour intensive, highly competitive and employs simple crafts and gears (Moses, 2002), and hindered by persistent bottlenecks including access to good-quality inputs and markets. As expected, with increasing human population,

ABSTRACT

The study evaluated the overall influence of International Fund for Agricultural Development (IFAD) fisheries intervention on the socio-economic well-being of fisher folks in Akwa Ibom State, southeast Nigeria, using bi-polar and transformed five-point Likert scales. A multi-stage sampling technique was adopted to select 220 beneficiaries, resident in five IFADintervention recipient coastal fishing settlements from five benefiting Local Government Areas in the State. The beneficiaries/respondents were mostly women (63.3%), had at least primary education (39.90%), households of 4-7 members, married (63.36%) and aged between 34 and 55 (79.80%). The beneficiaries' perception revealed multidimensional aspects of well-being; what one respondent considered as important indicator of well-being may be different from the other. Results revealed affective, high utilization and patronage of scarce facilities provided by IFAD, leading to their short lifespan, early collapse and, ultimately, low influence on the long-term socio-economic well-being of the beneficiaries. Hence, the change in well-being of the beneficiaries was short-lived, most of whom still lived in poor accommodation (huts = 40.37%) and depend on kerosene lamp (60.55%) for lighting. Over 56.9% of respondents depended on well water as their source of drinking water, while 56.40% depended on local chemist shop for healthcare treatment. The study posits that wellbeing has several dimensions, hence interventions in fisher folk communities should be intensive, broad and multidimensional in approach. It is possible that with repeated research and continual intervention over a ten-year period, visible socio-economic improvements could be effected. economical and therefore recommended for fish farmers.

there is a wide gap/deficit of demand over supply with attendant high cost of the product and its unavailability in most markets (IFAD, 1998).

Poverty is widespread among millions of fisher folks in sub-Saharan Africa (SSA) and South and Southeast Asia where overfishing has depleted the fishery resources. Poverty affects the ability to manage the fisheries and incapacitates fishers in improving their livelihoods. It has been realized that poverty (not so much failures in food production) is the primary cause of food insecurity and famine (IFAD, 1998). Hence IFAD (2007) posit that, if supported, the artisanal fisheries sector demands less expenditure and often shows a better cost/benefit ratio than the large scale fisheries, thereby contributing more effectively to the national economy.

The absence of social structures, infrastructural facilities, suf-

ficient investment funding and institutional arrangements in SSA countries, like Nigeria, further aggravates and engenders poverty in small-scale fishing communities (FAO, 2010). Hence the need for collaboration with donors and development agencies who among other things engage in human capacity development, short and long-term planning, monitoring and funding intervention, as well as providing robust framework for policy directions. The development agencies include multilateral donors, like the World Bank, International Fund for Agricultural Development (IFAD), Food and Agriculture Organization (FAO), Africa Development Bank (ADB) and the United Nations Environmental Program (UNEP), and bilateral donors such as the United Kingdom Department for International Development (DFID) and the Canadian International Development Agency (CIDA). Some not-for-profit Foundations such as the Ford and the MacArthur Foundations, Leventis Foundation, as well as public relations outfits of various multinational oil companies like Shell, Chevron and Mobil oil also play a role in supporting various development efforts.

This study focuses on the role of IFAD in ameliorating the poverty of fishing communities in southeast Nigeria. IFAD is a specialized agency and international financial institution of the United Nations established in 1977 (as one of the major outcomes of the 1974 World Food Conference) to alleviate poverty and improve the nutritional level of the poorest populations in developing countries through lending, primarily on highly concessional terms with the primary objective of increasing food production by smallholders. Over the years, IFAD had engaged in various economic activities to reduce poverty, reduce high post-harvest losses and promote enhanced technologies and water and sanitation facilities with the overall purpose of improving the living standards of fisher folks and strengthening the contribution of artisanal fisheries to rural economy in Nigeria. A total of US \$19.7 million was extended between 1987 and 1990 for the development of artisanal fisheries in Nigeria alone (IFAD, 1991).

The objective and framework of this study was to critically survey the views of fisher folks from IFAD-intervention recipient fishing communities in southeast Nigeria, to identify both their socio-economic characteristics, indicators of well-being, as well as assess the perception of the beneficiaries toward IFAD intervention projects in the study area with the view of proffering solutions/recommendations to any identified challenges.

MATERIALS AND METHODS

The Study Area

The study was carried out in Akwa Ibom State, southeast Nigeria, located between latitude 4° 33′, 5°35′ north and longitude 7°35′, 8°25′ east. The State, rich in oil wells, is a major maritime region with a coastline of 130 km and contributes about 25.8% of Nigeria's total domestic fish catch, added to the fact that the State is drained by three major river systems viz. the Qua Iboe, Cross and Imo Rivers in the Niger Delta region, Ni-

geria's wealth basin. It occupies a total land mass of 7,246.935 square kilometers and a population of 6.8 million people (NPC, 2006). Situated within the tropical rainforest zone, the State enjoys two major seasons in a year: the dry season (November to April) and the rainy season (May to October). Fishing is the predominant occupation in the coastal areas.

Population of the Study, Sampling Procedure and Sample Size

All the beneficiaries, both men and women, resident in the IFAD intervention recipient fishing communities in Akwa Ibom State formed the population of the study. A multi-stage sampling technique was adopted with purposive sampling at the first stage to select five benefiting Local Government Areas (LGAs). At the second stage, three (3) benefiting, participating communities were randomly selected from each LGA, giving a pool of 15 communities/coastal fishing settlements out of which five (5) communities were further randomly picked and forty-four (44) respondents from each of the communities randomly selected to arrive at 220 respondents. However, two of the questionnaires were not useful for analysis, reducing the sample size to 218.

The theoretical framework of this study is derived from measuring well-being based on four dimensions of satisfying the human development (capacity building, training on fish processing and record keeping), economic development (credit mobilization and employment), social and environmental improvement (erosion control and embankment), and psychological needs of the rural community well-being (potable water, health centre, town hall and foot bridge) through active participation and coordination by the locals (Kerlinger and Lee, 2000). Personal observations, interviews and questionnaires with personal characteristics and bi-polar and five-point Likert scales were utilized to provide some information about the perception on socio-economic status of the fishers and their community. The summative rating of the 5-point Likert scale responses of each respondent was computed and transformed to interval scores according to Kerlinger and Lee (2000) using the following general relationship:

$$\sum_{i} x_{i} = x_{i} + x_{2} + x_{3} + x_{4} + \dots + x_{n}$$

$$\sum_{i} x_{i} = \sum_{i} x_{i} = x_{i} = Scores \ of \ EUIFI \ or \ PBIFI$$

Therefore, composite index = $\sum_{i=1}^{n} \frac{x_i}{M_s}$ Where n = number of items

 $x_i \dots x_n$ = items of the measurable attributes $\sum_i X_i = \text{summative rating of the measurable variable}$ $M_s = \text{possible maximum score, which is the summation of the possible highest value of each of the scaled n items (Inyang and Nkantion, 2004; Inyang, 2005)$

These were subsequently subjected to simple descriptive statistics (mean, percentage and frequency counts). Three levels of utilization index: low (0.00-0.250), average (0.251-0.500) and high (0.501-0.750) were used to determine utilization of IFAD intervention (EUIFI) among beneficiaries and Perception

of Beneficiaries towards IFAD Fisheries Intervention (PBIFI). The hypothesis was stated in the null form that there is no significant difference in the influence of IFAD fisheries intervention on the socio-economic characteristics of IFAD beneficiaries. Analysis of variance ANOVA and t-Test were used to test the hypothesis of the study and the significance of the tests was decided at 0.05 level of probability (95%).

RESULTS AND DISCUSSION

Personal Characteristics

The survey revealed that female respondents accounted for 63.30% and males - 36.70%. The respondents modally aged 34 - 44 and 45 - 55, which together constitute about 80.00% of the sample population, most of whom had post primary education (about 53%), 39.90% had at least primary education, while 2.80% had no formal education indicating a high literacy and educational level. Majority of respondents were married (84.00%) with family of 4 - 7 (60.00%); 53.00% of respondents were members of a cooperative organization. This result agrees with a FAO report (1992) that the average family size of rural dwellers is seven (7) persons. Similar observations were made by Ekpo and Udoh (2010) among the female fisher folks at Ifiayong, another coastal fishing settlement along the Cross River Estuary, Nigeria. Paveliuc-Olariu et al. (2010) further observed that rural entrepreneurs are on average 36 years old with secondary studies degree and originate from the rural environment in which the business is first initiated.

The fact that the beneficiaries of IFAD intervention were mostly women (63.3%) could be explained by the absence of men during the survey and the concession given to women as the group most vulnerable to poverty among fisher folk. Women contribute substantially to the rural economy and household food security. Across the developing world, they are among the poorest and most disadvantaged groups. They face gender-based discrimination which is reflected in inequalities in their rights and in their access to resources - especially land, technology and social services, including education and health (Ekaas et al., 2004). Hence governments and donor agencies like IFAD have institutionalized gender mainstreaming in all projects (IFAD, 1998, 2008). The UN had also institutionalized the Convention on the Elimination of Discrimination against Women (CEDAW) to promote advocacy and policy dialogue in favour of rural women and support joint efforts. On 13 June 1985, Nigeria ratified the Convention on the EDAW (Ekaas et al., 2004). In June 1992, in recognition of the vital role of women in environmental management and development, the UN Conference on Environment and Development, in Rio Declaration, adopted Principle 20 positing that full participation of women is essential to achieve sustainable development.

Annim et al. (2008), in a study in Ghana, observed gender and spatial disparity in the application of microfinance as a strategy to create wealth and reduce poverty in developing countries with more females and clients in self-employed agriculture

dominating the lowest quintiles compared to those in non-farm activities. They suggested the need to target more females and people in self-employed agriculture in application of microfinance. Generally the fisher-women are financially independent. IFAD is involved in such projects facilitating the equitable economic advancement of the rural poor by targeting subsectors which are of particular economic importance to both men and women. One of such subsectors is artisanal fisheries – Artisanal Fisheries Development Project (AFDP) where women are noted to play prominent roles alongside men. Other IFAD development initiatives in Nigeria include Cassava Multiplication Programme (CMP) and community-based agricultural and rural development programme (CBARDP), both involving a large population of women farmers and women-headed households, respectively (IFAD, 2008).

Socio-economic Well-being of Respondents

Socio-economic well-being of respondents was measured in terms of access to health facilities, accommodation, type of toilet facility, source of drinking water and treatment in event of disease. Results from Table 1 revealed that 62.8% of respondents dispose human wastes using pit toilet, while 16.1% and 11.0% used bare ground and open water bodies, respectively. Only a small percentage (4.10%) had access to a water cistern. This scenario portrays a poor socio-economic status of the community.

Results also revealed that most of the respondents lived in poor accommodation such as huts (40.37%) and utilized kerosene lamp for lighting (60.55%). The main source of drinking water was underground well (56.9%) found in many homes, while 24.3% of the respondents access private or community bore holes, and about 6.0% stream. In terms of healthcare facility, 56.40% patronized local chemist shop, 27.5% clinic or hospital, and 4.10% itinerant drug sellers for treatment. Of particular note is the psychological health dimension in which some respondents preferred spiritual support in church (about 2%) and traditional healers (about 5%) in handling their health challenges. Similar observation was made in a survey (Ramsey and Beesley, 2006) of a rural community of aged population in Canada which preferred having more churches built for them than health care facilities.

Level of Utilization of IFAD Components

Beneficiaries indicated high (67.90%), average (16.10%) and low (1.40%) levels of affective utilization of IFAD intervention projects. The high level indicates a high patronage of the scarce facilities provided, leading to their short lifespan, deterioration and early collapse, and ultimately low influence on their long-term socioeconomic well-being.

Some beneficiaries also perceived that the IFAD project components provided in the study area were adequate, while others felt they were inadequate. This illustrates the multi-dimensional links

Table 1. Distribution of Influence of IFAD on Health and Housing

Socio-economic variables	Frequency	Percentage
Health/Type of system	. , , , , , , , , , , , , , , , , , , ,	
Water system	9	4.13
Pit toilet	150	68.81
Bucket type	0	0.00
Bare ground bush	35	16.06
Rivers/Water Bodies	24	11.01
Source of drinking water		
Tap water	19	8.70
Bore hole	115	52.75
Well	53	24.31
Stream	12	5.50
River	15	6.88
Rain	4	1.82
Source of Treatment		
Clinic/hospital	60	27.52
Chemist	135	61.93
Traditional healer	10	4.59
Church	4	1.83
Itinerant drug seller	9	4.13
Housing/Type of system		
Single Detached	36	16.51
Hut	88	40.37
Room and Parlor	71	32.57
Flat with water system	7	3.21
Flat without water system	16	7.34
Construction Material		
Mud with thatch Roof	6	2.75
Mud with zinc Roof	40	18.35
Block with thatch Roof	33	15.14
Block with zinc Roof	73	33.49
Plank with zinc Roof	45	20.64
Plank with thatch Roof	3	1.38
Thatch with thatch Roof	18	8.26
Source of Lighting		
Electricity	56	25.68
Kerosene lamp	122	60.55
Candle	13	5.96
Oil lamp	7	3.21
Palm fibre	10	4.60

Source: Field survey

in rural community well-being. For instance, while economic well-being is important to the youthful sample population, respondents indicated the highest levels of utilization in patronage of infrastructures and project components like health care facility (health centre), water and sanitation, footbridge, school blocks and town hall provided for the entire community, some of which had outlived their cycle, while the least utilized component was income generation, subscribed to by as much as 49.10% of respondents (table not shown in this report). Hence, though the linkage to economic well-being was recognized by several respondents, it is best achieved when relevant infrastructure such as provision of electricity, schools, etc., are adequately catered for. This corroborates an earlier assessment of IFAD projects by FDF (IFAD, 2008).

Perception of the Overall Effect of IFAD Programmes on the Well-being of Beneficiaries

All respondents expressed some level of influence on their well-being as a result of the IFAD intervention. About 39.40% of respondents perceived the overall effect of the intervention to be average, while 31.0% perceived it as low on their well-being index; a few, about 4.60%, rated it as average high. Analysis of the result further revealed that age of respondents contributed to the highest level of variation (p<0.05; F = 6.586) to this perceived view, while personal characteristics such as sex, marital status, house hold size and educational level exerted no significant influence (p>0.05). The overall effect of IFAD programme, including all the packages as perceived by the beneficiaries, was assessed using a bi-polar scale (Inyang and Nkantion, 2004). The result is presented in Table 2.

Table 2. Distribution of Overall influence of IFAD Programmes on the Well-being of Beneficiaries (ISWBIFI)

ISWBIFI Range	Frequency	Percentage
Low 0.000 - 0.500	159	72.9
High 0.501 – 1.000	59	27.1
Total	218	100

Source: Field survey

Most beneficiaries (72.9%) perceived that the IFAD programme had low influence on their well-being (Table 2), while few respondents indicated otherwise. This is against respondents' affective and high utilization of IFAD intervention projects. The Post Impact Assessment of the IFAD Artisanal Fisheries Development project 1991 - 1997 by the Federal Department of Fisheries (FDF) of Nigeria noted that nearly 160 communities and about 250,000 people were provided with assistance, 35% of whom were estimated to be women (IFAD, 2008). FDF also noted that the projects concentrated on the technical and economic needs of the targeted communities, overlooking a comprehensive, socially integrated package of assistance that would have been of particular benefit to people (IFAD, 2008). These disagreements in the perceptions of the impact of IFAD projects on the well-being of respondents underscore the multidimensional aspects of well-being. Similar deviations from the expected were observed in Southwestern Manitoba, a rural community in Canada (Ramsey and Beesley, 2006). It shows that what one respondent considered an important indicator of well-being may be different from the other.

The concept of well-being as a measure of human welfare is an ongoing debate globally. Several indices such as the Hedonism concept, Desire theory, GNP (Gross National Product), HDI (Human Development Index) and, recently, Sustainable Livelihoods Approach (SLA) have been advanced (DFID, 1998; FAO, 1995; Lenselink, 2002). The sustainable livelihoods framework considers the resources people can draw on for their livelihoods, which may be social, human, financial, physical or natural, and referred to as "livelihood assets" or "liveli-

hood capitals". The natural capital produces economic capital and human capital, and encompasses potential drinkable water, arable and forested lands; financial capital - population with savings, among other things; physical capital - includes availability of electricity, adequate accommodation and infrastructure like paved roads, airport and so on; human capital - infant mortality rate, literacy level, children enrolment in formal school, etc., while social capital includes family ties, access to media (newspapers, radio, etc.), among other things (ABS, 2002). Individuals, groups and communities need access to and use of varying amounts of each type of capital, with significant interactions occurring between the uses of different types of capital for community well-being to be achieved (ABS, 2002). The livelihood strategies people pursue are the ways in which they use the livelihood capitals to try to ensure a stable income and a better life for themselves and their families. The strategies are influenced by policies, institutions and process outside people's control, which governs access to the livelihood capitals, therefore their "vulnerability". The right combination of capitals, policies, institutions, processes, vulnerability context and livelihood strategies result in sustainable livelihood outcomes. The Code of Conduct for Responsible Fisheries, CCRF, and the SLA are complementary because they seek to promote responsible fisheries, better governance in fisheries and poverty (FAO, 1995; Lenselink, 2002).

From the foregoing, different authors proffer various concepts of well-being with subjective versus objective indicators or a combination of the two. To be capable of defining the change in certain socio-economic variable-indicator under certain impact, a different research method, i.e. longitudinal research, and different correlation and impact measurements may need to be applied. This study correlates the concept of well-being as a level of satisfaction due to improvement in income, access to social infrastructure, which ultimately raises the self-esteem of a given population and enables such population to participate in community development. This change in a person's level of satisfaction, income and self-esteem is predicated upon some external factors (e.g. intervention). Intervention is supposed to make available the social goods to as many people as possible. Governments should therefore replicate intervention efforts at various levels for the people.

CONCLUSION

This is a transversal study - cross-sectional analyses that involve observation of socio-economic indicators at one specific point in time. It is expected that the study will be repeated in future. The present study indicates short-lived change in well-being of the beneficiaries, most of who still live in poor accommodation (huts = 40.37%) and depend on kerosene lamp (60.55%) for lighting. The study also indicates that the populations of rural coastal fishing communities in Southeast Nigeria consist of a good proportion of youthful members with few aging, actively engaged in artisanal fishing, though under poor socio-economic conditions, unlike the rural communities hinterland, under similar poor conditions, which suffer out-migration of

youths. This paradox further illustrates the complexities and overlapping dimensions of rural community well-being and the influence of factors both external and internal to the rural community. The study therefore posits that well-being has several dimensions; hence, interventions in fisher folk communities should be more intensive, broad and multidimensional in approach. Different approaches should also be employed in defining the change in socio-economic variable-indicators. There is a need to target and empower more females and youths in self-employed agriculture or artisanal fisheries with illustrated do-it-yourself packages, skill acquisition and sponsorship of community-organized self-help projects, as well as strengthening (capacity building) community economic organizations/structures like cooperative societies (Philip and Udoh, 2011) to which many (53% of respondents) belong. Furthermore, the fisher folks need political empowerment "to be aware of, claim and exercise their rights effectively" (FAO, 2005) for the governance of small-scale fisheries. Though the socio-economic change in this study seems short-lived, it is possible that research repeated every couple of years shows different results in perception due to the fact that IFAD cannot cause immediate visible socio-economic improvements but it could cause improvements during a ten-year period.

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Sažetak

PERCEPCIJA UTJECAJA DONATORSKIH AGENCIJA NA SOCIOEKONOMSKI POLOŽAJ RIBARA U JUGOISTOČNOJ NIGERIJI

Ovim istraživanjem procijenjen je ukupni utjecaj intervencija u ribarstvu Međunarodnog fonda za poljoprivredni razvoj (IFADa) na socioekonomski položaj ribara u državi Akwa Ibom u jugoistočnoj Nigeriji pomoću bipolarne i preoblikovane Likertove ljestvice od 5 stupnjeva. Višefazna tehnika uzorkovanja primijenjena je pri odabiru 220 korisnika s prebivalištem u pet obalnih ribarskih naselja, s pet područja lokalne uprave pod posebnom državnom skrbi, izloženih intervenciji IFAD-a. Korisnici/ispitanici bile su uglavnom žene (63,3 %), zatim ispitanici s osnovnim obrazovanjem (39,90 %), kućanstva s 4 – 7 članova, oženjeni (63,36 %) te ispitanici između 35 i 55 godina (79,80 %). Percepcija ispitanika otkrila je višedimenzionalne aspekte dobrobiti - ono što jedan ispitanik smatra važnim pokazateliem dobrobiti, ne mora važiti za drugog. Rezultati su pokazali efektivnu i visoku iskoristivost intervencija IFAD-a među korisnicima. Korisnici su utvrdili visoku iskoristivost deficitarnih sredstava. Ova visoka razina iskoristivosti potvrđuje da je intervencija adekvatno doprinijela socioekonomskoj dobrobiti ispitanika. Promjena u dobrobiti korisnika je bila kratkog vijeka jer većina još uvijek živi u siromaštvu - u kolibama ih živi 40,37 %, a s petrolejkom kao jedinim izvorom svjetla 60,55 %. Više od 56,9 % ispitanika ovisi o bunarskoj vodi kao izvoru pitke vode, dok ih 56,40 % ovisi o lokalnoj ljekarni u slučaju bilo kakvog liječenja. Ovo istraživanje pretpostavlja nekoliko dimenzija dobrobiti, stoga bi intervencije u ribarskim zajednicama trebale biti intenzivne, opsežne i višedimenzionalne u svom pristupu. Dodatnim istraživanjima i kontinuiranim intervencijama u razdoblju od deset godina moguće je postići vidljivi socioekonomski napredak.

Ključne riječi: razvoj ribarstva, sredstva za život, siromaštvo, indeks dobrobiti

REFERENCES

- Annim, S. K., Awusabo-Asare, K., Asare-Mintah, D. (2008): Spatial and socio-economic dimensions of clients of microfinance institutions in Ghana. Journal of Geography and Regional Planning, 1, 5, 85-96.
- ABS (Australian Bureau of Statistics) (2002): Social Capital and Social Wellbeing. Discussion paper. Commonwealth of Australia, Queensland, 23pp.
- DFID (1998): Implementing the Sustainable Rural Livelihoods Approach. In: Carney, D. (ed.), Sustainable Rural Livelihoods. What contribution can we make? Papers presented at the Department for International Development's (DFID) Natural Resources Advisers' Conference (July, 1998).
- Ekaas, S., Cooke, R. D., Moore, B. (2004): Access to Land and Property in Selected Countries. FAO/IFAD/ILC, Rome, Italy, 70pp.
- Ekpo, I. E., Udoh, J. P. (2010): Women's participation in lower lkpa river fisheries of Akwa Ibom State, Nigeria: a case study of Ifiayong. Paper presented at the 25th Annual conference of the Fisheries Society of Nigeria (FISON), Lagos, 25th 29th October, 2010.
- FAO (1992): Fishery committee for the Eastern Central Atlantic: Ninth Session of the Working Party on Resource Evaluation, Report No. 454.
- FAO (1995): Code of Conduct for Responsible Fisheries. FAO, Rome, 41p.
- FAO (2004): National Fisheries Review, 5, 23, 210p.
- FAO (2005): Contribution of Fisheries to National Economics in West and Central Africa, Fisheries Dept., FAO, Rome, 14pp.
- FAO (2010): The state of world fisheries and aquaculture 2010, FAO, Rome, 213pp.
- FDF (2007): Fishery Statistics of Nigeria. Federal Department of Fisheries, Abuja, FCT, Nigeria. 24pp.
- IFAD (1991): Proceedings of Fisheries Development Extentionist Training Course. Miller, J. W., Ben-yami, M., Onabanjo, M. A., Igun, B. O. A. (Facilitators), Federal Department of Fisheries, Abuja. 266pp.

- IFAD (1998): IFAD 1978-1998: Rural women in IFAD's projects the key to poverty alleviation, IFAD, Rome, 19pp.
- IFAD (2007): Rural Poverty in Nigeria: Agriculture in the Federal Republic of Nigeria. International Fund for Agricultural Development. Available from: http://www.ruralpovertyportal.org/web/guest. Accessed 2nd February, 2012.
- IFAD (2008): Socio-economic and gender analysis training workshop for IFAD projects in Nigeria- Workshop Report, Katsina, Nigeria, 22–26 November 2004, 74pp.
- Inyang, E. B. (2005): Evaluation of preparedness of the field extension staff of AKADEP in the implementation of HIV and AIDS agriculture intervention package. Research Report. International Centre for Educational Evaluation, University of Ibadan, 120pp.
- Inyang, E. B., Nkantion, I. (2004): Impact evaluation of skill acquisition programme of the corporate social responsibility of ELF Petroleum Nigeria Limited. A Report. Department of Agricultural Economics and Extension, University of Uyo, 105pp.
- Kerlinger, F. N., Lee, H. B. (2000): Foundations of Behavioural Research, Fourth Edition, London, Holt, Rinehart and Winston, 962pp.
- Lenselink, N. M. (2002): Participation in Artisanal Fisheries Management for Improved Livelihoods in West Africa A Synthesis of Interviews and Cases from Mauritania, Senegal, Guinea and Ghana. FAO Fisheries Technical Paper 432, FAO, Rome. Available from: http://www.fao.org/docrep/005/y4281e/y4281e04.htm. Accessed 2nd February 2012.
- Moses, B. S. (2002): Tropical Fisheries, Abaam Publishing Co., Kaduna, Nigeria, pp. 1-8.
- NPC, National Population Commission (2006): Census Results, NPC Headquarters, FCT, Abuja, Nigeria.
- Paveliuc-Olariu, C., Nwachukwu, I. N., Bover-Felices, K. (2010): A comparative analysis of the entrepreneurial profile of the rural entrepreneur: Moldavia region of Romania, Niger state in Nigeria and Camaguey region of Cuba. AAB Bioflux, 2, 1, 35-39.
- Philip, K. J., Udoh, J. P. (2011): Information provision and dissemination patterns among migrant fisher folks in Cross River estuary, Nigeria, pp. 303 318. In: Aina, L. O. (ed.), Information for all: strategies for national development, Nigerian Library Association/University Press, Abuja. Available from: http://www.academia.edu/1424964/Management_of_Nigerian_Copyright_Law_and_the_Open_Access_Initiative_A_Bridge_to_Attaining_Information_for_All_in_Nigeria. Accessed 2nd March 2012.
- Ramsey, D., Beesley, K. (2006): Rural community well-being: The perspectives of health care managers in southwestern Manitoba, Canada. Journal of Rural and Community Development, 2, 86-107.