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Sustainable rural infrastructural development in Nigeria within the context of Vision 20:2020

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Abstract

The state of rural development growth in Nigeria has overtime impacted profoundly on all sectors of the national economy. Development initiatives in the sector began rather too late in the history of development in the country. The Second National Development Plan period 1970-74 marked the beginning of national and academic agitation for rural infrastructural development for accelerated national economic development growth. Realizing the gap between rural-urban sectors, successive governments in the country began to put various programs in place to meet both the national and international goals of human and capital developments. Toward this goal, a study was recently carried out to x-ray the position of the rural infrastructure in South-West, Nigeria with a view to proffering sustainable strategies for rural development in the country. A survey method was used to articulate and affirm the inadequacy of basic infrastructure in Atakunmosa West Local Government Area (AWLGA) of Osun State. This paper therefore discusses the result of the study and also presents highlights of strategies that could accelerate infrastructural development in the rural areas of Nigeria.

Keywords: Rural, Infrastructure, Sustainable, Development, Nigeria Vision20:2020

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1. Introduction

The agitation for development globally is rooted in the necessity to combat and eradicate poverty that is pervasive in less advanced and poorly industrialized countries of the world. There are many typologies to the concept of poverty and this make its understanding very elusive and contrasting (Adenipekun, 2009) and because it cut across geographical boundaries, races, nations, people and culture, the UN considered it as a universal problem.

According to UNDP Report (1997) nearly all countries at the World Summit for Social Development in 1995 committed themselves to the goal of eradicating severe poverty in the first decade of the 21st century. This challenge was reviewed in 1997 from human development point of view to extend focus to include all denial of choices and opportunities for living a tolerable life. The main indicators of human development focus include child death rates in developing countries, malnutrition rates, proportion of children out of primary school, the share of rural families without access to safe water, and income poverty. Others are basic education and health care. The Millennium Development Goals evolved from the Millennium Summit 2000, an extension of the objectives of the World Summit for Social Development of 1995. MDGs Summit2000 widens into 8 goals to be achieved by 2015. These goals were signed by 192 United Nations member states as listed below.

- Eradication of extreme poverty
- Achievement of universal primary education
- Promotion of gender equality and women empowerment
- Reduction of child mortality rate
- Improvement in maternal health
- Combat HIV/AIDS, malaria and other diseases
- Ensure environmental sustainability
- Development of global partnership for development.

In 2002 UN Millennium Campaign was launched to call for supports and inspire people from around the world to take action in support of the Millennium Development Goals (http://www.un.org/millenniumgoals). In 2005 another World Summit was held to look at the agenda of MDGs and to base it on achievable set of proposals. Many Campaign strategies ("Score the Goals", "World Water Day 2011", "8-Goals for Africa", etc) are launched in recent times to eradicate the scourge of poverty and underdevelopment in the world.

Nigeria is a member of the UN and is no exception in the fight against poverty, hunger and human development initiatives. The country has undertaken many objective moves in this direction but the

advances have been uneven particularly between the major sectors of the economy, the rural and urban sectors.

The focus of this study is therefore the examination of MDGs parameters in the rural areas of AWLG using the basic infrastructure available with a view to articulating the challenges confronting development in the area and the means of sustaining human development in all its ramifications. It also highlights the pro-rural strategies that would accelerate the realization of NV20:2020 food security. This study adopts the Human Development Index (HDI), Human Poverty Index (HPI), Concepts of Rural Planning, Growth Poles and Integrated-Local-Endogenous Development. The outcome of this study portrays the standard of living of rural people in AWLGA of Osun state.

2. Background

Rural / urban drift still persist in Nigeria in the 21st century despite government's claim of several rural development programs. Average rural dweller irrespective of age or sex desires opportunity to vacate the rural environment for city life. The trend portend negative signal for the already saturated urban environment, particularly in areas of housing, sanitation, crimes and food security. An attempt by rural dwellers to eke out living from nature exerts greater pressure and damages on the ecological system such as deforestation, environmental degradation and pollution. Development of rural areas is measured by the provision of infrastructures and economic opportunities made available to the people. The situation in Nigeria is abysmally poor and has constituted one good source of poverty (NPC, 2005). Some factors cause poverty directly and indirectly in Nigeria and include: lack of basic services, such as clean water, education and health care; another is lack of assets, such as land, tools, credit, and supportive network of friends and family; a third is lack of income including food, shelter, clothing, and empowerment (political power, confidence, and dignity). Others that affect poverty indirectly contribute to inequality (condition that stifles political power or denies people of dignity or human rights), discrimination on the ground of gender, race, disability, age or ill health (NPC, 2005).

In a nutshell, people living in the rural areas are poor and suffer hunger because the economies at this level mainly depend on agriculture (Otive, 2006). Two-thirds of the populations in Nigeria are rural poor, lives on income less than US\$1 per day. The incidence of poverty instead of lowering continues to increase, from 28.1 % in 1980, it increased to 46.3 % in 1985, from 65.6% in 1996, it increased to 69.2 % in 1997. Nigeria is therefore seen to have a record of a Gini Index of 50.6 and is thus one of the nations with the highest Gini Index in the world (Otive, 2006). Gini Index is the measure of the gap between the rich and the poor. The country's capital budget allocations over the year is adjudged to be skewed in favor of the urban areas (NPC, 2005; FOS, 2005; FRN, 1990 p. 24)

Nigeria according to Nwajuiba (2012) faces huge food security challenges. About 70 per cent of the population lives on less than=N= 100 (US\$ 0.70) per day, suffering hunger and poverty. Nigeria's claim to remain an agrarian economy hinges on two key facts. The first is the share of agriculture in the Gross

Domestic Product (GDP) and the second is the proportion of the population engaged in the agricultural sector. On both cases, the agricultural sector contributes more than any other sector of the economy. Agriculture provides over 40% of GDP while the population of Nigeria involved in farming is between 60 and 70%. However, large regional differences exist. In the southeast, as few as 22% of the population live in rural areas, most of them are engaged in non-farming activities (Nwajuiba, 2012). The geopolitical zones analysis of incidence of poverty in Nigeria as at 1996 put the Northeast at 70.1% of the total population, Northwest 77.2%, North Central 64.3%, Southeast 53.5%, Southwest 60.9%, and South Central 58.2%. Incidence of poverty in the rural sector is put at 69.3% (FOS, undated). This invariably emphasizes the seriousness of the vicious circle in the sector.

Nigeria has about 79 million hectares of arable land, of which 32 million hectares are cultivated. Over 90% of agricultural production is rain-fed. Smallholders, mostly subsistence producers account for 80% of all farm holdings. Both crop and livestock productions remain below potentials. Although the average agricultural growth rate was 7% between 2006 and 2008, this growth lies below the 10% necessary for attaining food security and poverty reduction. Among other factors, inadequate access to and low uptake of high quality seeds, low fertiliser use and generally inefficient production systems lead to shortfalls. As a result, Nigeria's food import bill has been on the rise. Nigeria's large, growing population has become dependent on imported food staples. This includes commonly consumed staples such as rice, wheat and fish. This was not the case prior to the boom in petroleum exports starting from the early 1970s.

Nigerian agriculture contributes to a small extent to global warming through bush burning and other environmentally adverse management practices. This statement is from sub-Saharan Africa summary of the excellent international assessment of agricultural knowledge, science and technology (IAASTD) concluded in 2008. Nigeria faces two central challenges to her agricultural sector and food security: population dynamics and infrastructural facilities. Going by the population dynamics, Nigeria's population in 2011 was estimated at 162 million people and in 2050 to be between 230 and 450 million people. Urban population in 2011 was at 51% and is still growing.

The population of Nigeria earning less than US\$ 2 per day in 2009 was 84%. The country was declared the world's 7th most populated country and would be the world's 3rd most populated country after India, China, outstripping the USA by 2050. A number of lessons could be discerned from this current and future population projection of Nigeria with serious implications for agriculture and food security. This situation therefore calls for adequate rural planning and development strategies.

Before Nigeria can address the underlying problems articulated above, the issue of rural sector economy must properly be taken care of. The focus of the sector has to shift away from being heavily dependent on smallholder producers whose primary need is household subsistence. The smallholder producers at best produce very little marketable surplus. In this category is the target group of the National Accelerated Food Production Program (NAFPP) set up since 1972. The contemporary policy thrust focuses on a transformation of the agricultural sector through the promotion of agribusiness along the value chain still requires provision of infrastructural facilities to succeed.

3. Conceptual underpinning and review of literature

3.1. Conceptual underpinning

3.1.1. Concept of Nigerian Vision 20:2020 and food security

Nigerian Vision 20:2020 is a generic concept of National Economic Development Policy. It evolves from many aspects of the past national development plans (National Rolling Plan 1990-92, NEEDS 2005 and Vision 2010). It tries to articulate and consolidate the critical issues in these development plans. As a development plan, it was designed as a blueprint to capture the desire of Nigeria to be among the top 20 most industrialized nations in the world by the year 2020 with a minimum GDP of US\$ 900 billion and a per capital income of not less than US\$ 4000 per annum. Vision 20:2020 was generated from the outcome of a research by the American Investment Bank on the prospects of Nigeria becoming a nation in the league of 20 topmost economies of the world if the nation's abundant natural and human resources could be effectively managed (Abdulhamid, 2008 in Olaseni and Alade, 2012). Vision 20:2020 is therefore an articulation of the long term plans to launch the country unto a path of sustained social and economic progress and accelerate the emergence of a truly prosperous and united nation (NPC, M&E Report, 2010a). The blueprint provides the detail analysis of Nigeria's economic growth and development strategies for the period of eleven years between 2009 and 2020. The Vision process was analyzed across 29 thematic areas under 29 National Technical Working Groups (NTWGs). Each of the thematic areas operates its strategic plans of its sector's specific vision, policy targets, objectives and priorities for other related respective thematic areas. According to the plan thrust, the plan seeks to engender accelerated pro-poor growth, achieve an average GDP growth rate of 11percent, raise the GDP per capital from \$ 1075, in 2009 to \$ 2008.75 by 2013, generate jobs to absorb the teeming unemployed and create new opportunities, among others, in order to attain the MDGs by 2015, and move the nation towards achieving its Vision by 2020 (NPC, 2010b). The plan (NPC, M&E Report, 2010a, p. 20; NPC, 2010b, p. ix) was designed to achieve six main objectives to wit:

- Bridging the Infrastructural Gap to unleash Economic Growth and Wealth creation
- Optimising the sources of economic growth to increase productivity and competitiveness
- Building a productive, competitive and functional human resource base, for economic growth and social advancement
- Developing a knowledge-based economy
- Improving Governance, Security, Law and Order and engendering more efficient and effective use of resources and promoting Social Harmony and Conducive Business Environment for growing the economy
- Fostering Accelerated, Sustainable Social and Economic Development in a Competitive and Environmentally friendly manner.

The Vision 20:2020 plan was structured and produced in two main volumes. Volume II provided a structural detail of the sectoral plans arranged in seven broad parts. Part II of the 1st National Implementation Plan covers the Productive Sectors which includes the primary sectors that produce goods and services in the economy: the agriculture and food sector, trade and commerce, manufacturing, small and medium enterprises, solid minerals, oil and gas, culture and tourism, and film and entertainment industry. These sectors were identified and referred to as "growth drivers" for the economy. To accelerate progress in the implementation of the plan Federal Government formulated a 7 point presidential agenda which include Food Security as one of them. Nse (2008) in Aledare and Okesoto (2010), posits that the main policy thrust on food security in the 7 point presidential agenda includes "the injection into research, production and development of agricultural inputs, to revolutionize the agricultural sector, leading to 5-10 folds increase in yield and production, resulting in massive domestic and commercial outputs and technological knowledge transfer to farmers.

3.1.2. Concept of rural planning and growth pole

Rural planning is an important aspect of overall planning process that consolidates the development growth spectrum of a nation. It integrates the linkages between the rural and urban environments and offers reasons for the "spread and back wash effect" of one over the other. According to Ratcliffe (1983) there is but unclear distinction between rural and urban areas as many of the urban policies always contain rural dimension and towns and countryside often share certain common problems. In Nigeria many of these common problems: housing, employment, transports, and provision of other services and facilities arises from fallout of the neglect of rural conservative economic planning. The socio-economic situation in the rural sector is quite different from that of urban. The situation in the rural sector therefore demands a set of comprehensive and cohesive planning policies to meet prevailing circumstances of the time. At the core of rural planning is the study of rural demographic change over time. This study is meant to reveal the consequences of increase / decrease in the population of settlements within easy commuting distance to one another and the social transformation therefrom. Two of many objectives of rural planning are: the maintenance of relatively stable population in small market towns, and provision of answers to a continuing drift of population away from the more isolated areas of the country (Ratcliffe, 1983). Population declines obviously occur in most of the isolated or highly remote areas of the country for reasons of falling demand for agricultural labor, lack of social and infrastructural services, failure to introduce small-scale industrial enterprises, scarcity of employment for youth and women, sheer psychological effects of isolation upon remote communities, poor housing and lack of transport and communication network.

According to Christofakis and Papadaskalopoulos (2011), the growth poles and diffusion model, and the model of integrated-local-endogenous development are internationally the two dominant models used in successful implementation of spatial or regional planning and programming. They (growth poles and diffusion model) engender the attraction of activities and the concentration of growth in poles from where the diffusion of growth is expected to occur towards the surrounding region (Perroux, 1955; Aydalot, 1965 and Boudeville, 1968). The second model refers to the integrated spatial development which is based on the

utilization of the endogenous potential of the regions. As discovered by (Barguero, 1991 and Garofoli, 2002), the use of growth poles model is based on the main hypothesis of the complete identification of industrialization with enlargement and growth, and the objective was to increase industrial product and concentration of development in large urban centres (growth poles) which had those necessary prerequisites such as infrastructure, external economies, labour force, market etc. for the attraction and operation of large industrial complexes. The large industrial complexes in this category is what (Lasuen, 1969) termed propulsive industries. During the era of dominant use of this model, growth poles were linked to metropolitan centres and growth axes the main forms of polar concentration. The disadvantages of the dominant growth poles model became a serious concern by the end of the 1970s. In the less-developed areas, conditions and quality of life did not improve as expected, while in large urban industrial complexes, the intensifying trends of population and activity accumulation caused severe saturation issues. Notwithstanding, the growth poles model laid the approaches for the new economic geography in that it provided the process of economic growth per se and reinforces various types of spatial concentration. The new economic geography thus acknowledge and emphasize the increasing returns to scale due to geographic concentration, the effect of transport and role of hubs in the formation of dynamic urban centres, the industrial spatial organization and concentration economies as well as the role of cities and urban networks in the global economic system and commercial relations (Fujita et al., 1999). A new framework 'the integrated development model' was formulated (Christofakis, 2001). This was designed to work in parallel with growth poles model, theories and practices. The model led to significant readjustments and finally to the formation of a new strategy of regional development - the "integrated-local- endogenous development". The modification in this new model relates to the organization of production, its interconnection with Research and Technological Development, distribution, vocational training processes, development of new relations between corporations and local organizations, and finally the networking of all the above sectors. Comparatively, the integrated -local- endogenous development model has a rural application while the dominant growth poles model is conceivably of urban and metropolitan cities. In the opinion of Christofakis and Papadaskalopoulos (2011, pp. 5-7), with the integrated model, settlements and dynamic cities would function in synergy to be able to focus and capture the growth and competitiveness as well as the prosperity desired for a region or the country at large. The two models (growth poles and integrated-local-endogenous development) do not operate in a competitive way but are complementary to each other on the basis of a "mixed" development models. The two models are applied in parallel in various combinations that depends on the particular characteristics and the stage of development of a country, international situation and strategic socio-economic choices of the government.

3.2. Review of literature

Nigeria is described as a rural society (Osuntogun and Oludimu, 1986; Olowu, 1986) because a greater percentage of Nigerians live in the rural areas, and the expected gains from urban-based activities and services are just modest and have not provided the "big-push" to move the national economy into sustained growth. The urban industrial sector is still dependent on the rural outputs (Oluwayomi, 1986 p.142).

However, it has suffered neglect since the time of 1954 Federal Constitution. The Constitution placed rural development as residual item and treated it as a regional responsibility (Akinbode, 1986). Rural development initiatives began to gain national and academic recognition from the Second National Development Plan period 1970-74. Although a universal definition of rural or rural development is yet to exist of now (Rios, 1989; Morrisey, 1987; Pressler and Swenson, 1984; Denver and Brown, 1985; Croft, 1984; Oluwayomi, 1986; Whitaker, 1982), people know when they are rural.

Some authors have looked at rural development from increase in per capital income of the rural dwellers (Rostow, 1969; Oluyide and Essang, 1975). Others looked at it from the qualitative improvement in the standard of living of the people (Mabogunje, 1980), availability of job opportunities, reduction of poverty to an acceptable minimum, and the provision of policy that will emphasize constant equality of all (Dudley, 1977; UNDP, 1997). In addition to the above, others have advocated for "Basic Needs Approach" (Oluwayomi, 1986 p.145) in the provision of basic infrastructure as were available in urban agglomerations (Akinbode, 1986) to reduce the imbalance between the urban and rural areas (Olowu, 1986).

According to Olowu (1986), infrastructure is regarded as the basic underlying structures upon which other super-structures are built, that is, economic and institutional infrastructures and are basically in the rural context to perform both economic and social functions (Oluwayomi, 1986 p.145). Infrastructure according to Olaseni and Alade (2012) is an umbrella term for many activities usually referred to as "social overhead capital" by development economists. Rural infrastructure is associated with the rural environments and is grouped into three categories-economic, social and institutional infrastructures. Economic infrastructure constitutes "the preconditions for industrialization" such as roads, markets, rural agro-based industries; farm input supplies, electricity, telecommunications, water supply, sanitation and sewage, solid waste collection and disposal. Others include postal services, dams and canal works for irrigation and drainage etc (Yusuf, 2007). Social infrastructure constitutes the basic social services such as basic health, education, water supplies, etc. Institutional infrastructure are governmental institutions that provide credits, farm input supplies, extension services etc. at the local or community level. In summary, combination of both the qualitative and quantitative improvement in the conditions of living of rural population stands out the best description of rural development (Moise, 1970). It is observed that no meaningful rural socio-economic transformation can take place without a significant modernization and acceleration of agricultural production. Effective agricultural production is inevitable and must be provided in addition to other factors mentioned above (Ayo, 1986) to accelerate and sustain development growth in the country generally.

According to UNDP (1997), the greatest challenge confronting growth within the context of human development is the problem of mobilizing resources and this has to do with difficulty of priorities restructuring and steady mainstreaming of the priorities into new programs of pro-poor growth. This is exactly the situation in Nigeria and is a precarious one. The rural transport need required to accelerate the socio-economic growth of the rural areas in Nigeria is one of such challenges (Olanrewaju, 1986) and the situation despite the low cost, cheap and environment compliant sufficiency required in the modes of transportation at this level (Adenipekun, 1999), mobility in the rural areas of Nigeria is still very poor. Rural infrastructure has over time suffered neglect in quality and quantity and its distribution is heavily skewed in

favor of the growing urban areas (Olowu, 1986). Government with a view to alleviating the imbalance took certain policy measures that rather further accentuate the skewed and imbalanced situation.

Since from the mid-1960s the country's public finance and expenditure is centralized. Allocation and distribution of basic infrastructure is reserved in the Federal Government policies. Local governments were revitalized nationally in 1976 with the intention to use them as institutions to provide and maintain rural infrastructure but the political scenario provided a very different result. Establishment of a rural development agency (DFFRI) at the Federal level in 1986 further launched a discriminatory provision of basic infrastructural facilities in selected areas of the country. DFFRI charged with the responsibility of implementing rural development activities toward amelioration of the imbalance in social and economic infrastructures between the urban and rural areas of Nigeria (FRN, 1990 p.85) inadvertently further deepen the dichotomy between the two areas than it was before it. The present political policy measures have not in any way improved the situation.

The Local Government Authorities in Nigeria had for sometimes depends principally on the meager allocations from the Federal and State Governments (that may most of the time not be forthcoming). It is therefore very imperative that LGA for the purpose of creating a dependable economic base, of necessity needs to look inward to sustainable sources of capital generation. According to Adenipekun (2010) exploitation of respective natural resource endowments in the rural areas will go a long way to produce sufficient capital for rural development projects in Nigeria and the benefit of their natural geographical spreads across the length and breadth of the entire country in commercial quantities will sustainably last generations. Conservation of these resource reserves remains the big challenges in rural development initiatives in Nigeria (Adenipekun, 2010).

4. Empirical survey of rural infrastructure in selected areas of AWLG, Osun state, Nigeria

4.1. Method, materials and procedures

Atakunmosa West Local Government Area (AWLGA) was carved out from Atakunmosa Local Government Area (ALGA) of Osun state in 1996. The latter was created along with other LGAs in the country in 1986 by the Military administration. AWLG has its' headquarter at Osu, a town mid-way between Ile-Ife and Ilesa, about 103 km East of Ibadan. The LGA falls within population concentration of towns between 250,000 to 500,000 people and heavy annual rainfall of between 1500 to 2000mm. Common agricultural crops grown within the LGA include rice, cassava, maize, yams, cocoa, oil-palm, rubber and timber. Others are oranges, mangoes, banana, plantain and vegetables. Natural mineral deposits are identified in reasonably commercial quantities within the LGA. The mineral deposits include gold, kaolin, clay and diamond. There are also abundant water resources, rivers and streams of tourism benefits in the area. AWLGA is bounded in the North by Oshogbo LGA; in the West by Ede LGA, Ife North LGA, and Ife Central LGA respectively. It is bounded in the East by Obokun LGA and Ilesa LGA respectively and in the South by Atakunmosa East LGA.

A base map of the LGA was prepared by PEAS Associates in 1992. The map shows location distribution of all settlements existing within the LGA. This was used in the selection of sampled settlements for the purpose of socio-economic survey carried out for this study. The LGA was divided into four segments - East, West, North and South. Five settlements were randomly selected from each segment to enable full coverage of the entire LGA and on equal representation. In other word, twenty (20) settlements were selected for this survey. Ten questionnaires were served to respondents selected at random in each settlement surveyed and a total of 200 questionnaires were administered on the sampled population irrespective of size, nature and configuration of the settlement. The context of the questionnaire reflects the United Nations parameters for the assessment of MDGs particularly those that relates to rural poverty and human development. The style of questionnaire design allowed respondents to assert and express their personal opinion of the conditions in the rural setting and the empirically local means of sustainable human and economic developments.

5. Results and discussion

Responses from settlements although show similar patterns yet it exhibits the true condition of the rural setting in the study area. Not all houses where applicable in some settlements accommodates civil servants. Respondents also find it difficult to give distance of nearest GSM service provider closest to their settlement but rather were able to provide names of service providers. Figures were provided on average estimates throughout in the analyses. The result of the survey is as discussed below:

5.1. Infrastructural facilities

Only one settlement out of twenty in the study area enjoys twelve (12) basic facilities. Ten (10) settlements have at least five (5) basic facilities. The remaining (9) settlements enjoys not more than three (3) basic facilities. Two (2) of these settlements contain 3000 and 1000 households respectively. Average of between 5 and 7 occupants is found in each household. This fact points to the gross inadequacy and sparse distribution of basic facilities in the study area.

5.2. State of rural economy

The Average Annual Income of resident worker in the village indicates that income from farming (agricultural activities) constitute the bulk of rural revenues. These are mainly at the seasons of harvest. Income ranges between =N=100,000 and =N=800,000 per annum. This is about =N=8,300 to =N=67,000 monthly. Eight settlements have not less than 60% of their adults (18yrs above) work and receive income mainly from agricultural activities. A significantly small proportion of residents (not more than 20%) engage in rural petty trading. Only four settlements indicated employment in civil service and this is not more than 5% of the population where applicable. Agricultural practice is very local and at subsistence levy. Research indicated that no mechanized farming is engaged, all responses indicated that crude implement (traditional

cutlass and hoes) are widely used by farmers. The rural farmers therefore do not adequately enjoy incentives to boost local production in many of those trades that women can do to generate income (gari processing, oil palm processing, soap and candle production, tailoring and hairdressing, poultry farming, etc). Hence, the rural economy is very low.

5.3. Rural education and literacy

About 25% of the settlements in the study area do not have any facility for primary education and 50% do not possess facilities for secondary education. Only two settlements have provision for more than 1 secondary school but not a single tertiary institution is located within the immediate reach of these settlements. The proportion of males to females' enrolments shows a fair average in the leverage of their turnout from primary/secondary schools. Result from 5 out of 6 settlements that responded to proportion of girls to boys' admission in tertiary education indicated the ratio is 2g/5b. Adult (15-24yrs) literacy is quite low in the study area. Only 7 settlements constituting 35% of the study area have more than 50% of their adult population able to read and write. Other settlements show larger proportion of their adult population highly illiterate (not able to read and write). It is therefore very rare to see good number of women engaged in wage (non-agric.) employment thereby inhibiting women participation in politics. It is only in 2 settlements that (2 number females) had emerged in frontline politics; one as Deputy Governor and the other a member of House of Representative.

5.4. Nutrition and health

Less than 20% of the under 5years children in 6 out of 8 settlements of the study area can hardly eat three meals daily. Thirteen (13) settlements indicated less than 20% of adult (18yrs and above) live without adequate balanced diet. Feeding and nutritional intakes in the South West Nigeria is in other words not quite a problem. There are only two Comprehensive Health Centers and seven maternity centers in the whole of the study area. These are expected to serve 20 settlements consisting of population approximately 35,400 people. Despite this low number of Health facilities, wide publicity and campaign programs are put in place by the government in the eradication of infant mortality, immunization, maternal health, and eradication of HIV/AID. All settlements indicates nil or very low under 5years old infant (under – 1year) and maternal mortality cases; over 80% coverage of 1year old immunization against measles and over 80% proportions of births were attended to by skilled personnel. There are rare cases of HIV/AIDS patients. It is only in one settlement, i.e. in the Comprehensive Health Centre at the Local Government Headquarter, that four cases were reported. 15 out of 20 settlements generally indicated a very high incidence of malaria attack.

5.5. Social and environmental condition of the study area

There are rampant cases of annual bush burning usually as the preparation for planting season approaches. This method is seen to be the cheapest means of bush clearing and preparation of land for planting by the rural farmers. Virtually all respondents from all settlements attest to this practice. Solid wastes are generally dumped either in the bush, open pit or community refuse dump sites. For wet wastes disposal, 30% of respondents disposed their feces in the bush, 20% disposed their feces partly in toilet and partly in the bush, and 20% disposed their feces in pit-latrines while another 30% of the respondents disposed feces in modern toilets. Over 70% of respondents from all settlements in the study area use both kerosene and firewood gathered from the trees in their immediate environment for their domestic fuel. The remaining 30% depend principally on firewood. This statistics attest to the high level deforestation in the rural area. There is usually no means of replacing those trees cut down for domestic fuels.

Very high inadequacy of domestic water supply is consequential to the poor sanitation of the rural settlements. 30% of the respondents collect their domestic water supply from stream located not less than 2km away from their homes, 50% depends on partly shallow wells and partly streams, only 1 settlement enjoyed both tap, shallow well and streams as its source of domestic water supply.

Although quite a good number of roads (65%) in the study area are fairly good and motorable all seasons, yet means of carriage of goods and farm produce to markets is generally poor. This constitutes a big challenge to agricultural production. Head porterage and use of motorcycles are the commonest means of carrying goods in all the settlements under study. Use of lorries and buses are restricted to motorable roads during rainy seasons. Socially, rare cares of armed robbery, land or boundary disputes, youth restive, or attack on land and properties are reported by respondents. This indicates that a peaceful living atmosphere exists in the rural areas of AWLG.

6. Prospects of sustainable rural economy in Atakunmosa West Local Government Area (AWLGA)

Abundant deposits of gold and clay in commercial quantities are reported from the survey of 20 settlements concluded in AWLGA. Over 50% of the settlements that responded to question on natural resource locate directly on gold resource land while 2 of the settlements, constituting 12.5% locate directly on clay resource land. If these resources are conserved for the benefits of the rural inhabitants can inject business activities in many ways into the rural economy. Exploitation of the resources will engender increase and improvement in real estate activities thereby attracting different categories of workers both skilled and unskilled, artisans and professionals to the rural areas. Different rights and interest would be appropriated and compensations paid to owners. Rural petty trades will complement rural efforts and agitations on gari production, oil palm, soap and candle productions, poultry farming etc. Economy of scale will evolve from specialization and this will bring about higher concentration of population that will further attract such social facilities like rural banking, insurance and hotel businesses. Improvement on the existing basic infrastructural facilities will translate into general rural development. Government attention cannot but be attracted in the provision of institutional infrastructure: loans and credit schemes, improved agricultural schemes (use of tractors and equipment, research and crop hybrids, fertilizers, etc.). The rural environment in AWLGA requires government's desperate attention for the development of the rural economic growth.

7. Conclusion and recommendation

7.1. Conclusion

The present state of the rural development in AWLGA of Osun state, Nigeria testify to the fact that all denial of choices and opportunities for living a tolerable life within the context of MDGs cannot be met in Nigeria by the year 2015. The percentage figures provided explains the various levels of development attained in this assessment and fairly represent the level of development growth of the rural areas in Nigeria. It is therefore very imperative that the federal government of Nigeria encourages each local government authority to undertake the management of natural resources in all the rural settlements within their respective areas of jurisdiction. The federal government should come out with modalities by which the untapped natural resource endowment of each rural area could be conserved for the development of the rural areas and betterment of life of both the existing generation and generations yet unborn.

7.2. Recommendation

- i. All the natural endowments in the rural areas of Nigeria should be put to effective utilization. The resources are potential means of sustainable "Economic Base" of each rural settlement.
- ii. To appreciate the vital link between the rural and urban economies especially in the areas of urban industrial/manufacturing sector, a framework of integrated developments that incorporates the growth poles model of city development and that of integrated-local-endogenous development is very imperative. The long term repercussion of urban industrial expansion would be accommodated by rural economy that exists to supply the urban needs.
- iii. To attain sustainable improvement in agricultural production and food security in Nigeria, it is glaringly becoming necessary to revisit and reintroduce the pattern of agricultural management style of the defunct Western Region. During those good agricultural days, administration of agricultural schemes, farm settlements and extension services were organized in extension divisions that covered the entire region: Okitipupa, Ife, Ilesa, Ondo, Ekiti, Owo, Ibadan West, Ibadan East, Osun, Oyo, Egba, Egbado, Colony, Ijebu, and Remo divisions.
- iv. As the economic base of the rural economy improves and the market expands, small and medium scale enterprises (SMEs) would be required to consolidate the indigenous manpower needs of the sector. Institutional infrastructures would go along with the trend of development.
- v. Federal Government should provide enduring and sustainable environments for local and international markets for the discharge of both agricultural and mineral products as well as tourism services. Marketing Boards in the past oversee the price control, represents and protects interests of farmers at international market, particularly in Cocoa, Cotton, Groundnut and Rubber.
- vi. Land in the African culture is synonymous to life and the basis of all socio-economic benefits. Federal Government need to review the institutional framework on land and land resources to allow respective proprietary land owners reap the full economic returns on their lands. To this end the

expertise of Real Estate Surveyors and Valuers is very necessary in all the Local Government Authorities in Nigeria for effective and efficient management and appraisal of land resources.

References

Adenipekun, M.T. (1999), "The Role of Non-Motorised Transport in Rural Areas of Nigeria: A Case Study of Atakunmosa West Local Government", Unpublished Dissertation submitted to the CURP, University of Ibadan.

Adenipekun, M.T. (2009), "Poverty: the Bane of Managing Natural Endowments in Developing Economies", paper presented at the 2009 National Conference of the Department of Estate Management, Yaba College of Technology, August.

Adenipekun, M.T. (2010), "Conservation of Natural Resources in Nigeria: A Pragmatic Solution to Socio-Economic and Environmental Crisis", paper presented at the 2010 National Conference of the Department of Estate Management, Yaba College of Technology, August.

Akinbode, I.A. (1986), "A Perspective on Rural Development in Nigeria", *The Quarterly Journal of Administration*, Vol. xx No. 3&4, pp. 127-8.

Ayo, S.B. (1986), "Promoting Rural Development Through Small-Scale Industries in Kwara state", *The Quarterly Journal of Administration*, Vol. xx No. 3&4, pp. 202-3.

Bern, M. (1995), "Sustainable Use of Natural Resources", Development and Environmental Report No. 14, Institute of Geography, University of Berne.

Christofakis, M. (2001), "Local Development and Regional Policy", Athens, Papazisis.

Christofakis, M. and Papadaskalopoulos, A. (2011), "The Growth Poles Strategy in Regional Planning: The recent experience of Greece", *Theoretical and Empirical Researches in Urban Management*, Vol. 6 Issue 2, pp. 5-7.

Croft, D.B. (1984), *The Concept and Attributes of Rural*, Las Cruces, New Mexico State University.

Dudley, S. (1977), "The Meaning of Development", International Labour Review, Vol. xix, No. 2, pp. 2-7.

Federal Ministry of Solid Minerals (2000), "Mineral Deposit in the Thirty-Six States of Nigeria", Mines Department.

Federal Office of Statistics (2005), "Incidence of Poverty in Nigeria, Selected Years: Percentage of Poor People in Population", NEEDS, Abuja.

Federal Republic of Nigeria (1990), "First National Rolling Plan 1990-92", The Planning Office, FMBP, Lagos, Vol. 1.

Fujital, et al. (1999), "On the evolution of hierarchical urban systems", *European Economic Review* 43, pp. 209-251.

Glasson, J. (1979), An introduction to Regional Planning, London, Hutchinson, 2nd ed., pp. 115-118.

Lasuen, J. R. (1969), "On Growth Poles", Urban Studies, Vol. 6 No. 2, pp. 137-61.

Mabogunje, A.L. (1980), The Development Process: A Spatial Perspective, Hutchinson University Library.

Moise, M. (1970), "Definitions and Objectives of Rural Development" in Colin, L. and John, D. (Ed), *Africa Contemporary Record, Annual Survey and Documents*, pp. 308-9.

Nwajuiba, C. (2012), "Nigeria's Agriculture and Food Security Challenges", Inaugural lecture, No.5, Imo State University, Owerri, Nigeria.

National Planning Commission (2005), "National Economic Empowerment and Development Strategy", NEEDS, Abuja, Nigeria.

National Planning Commission (2010a), "2010 Performance Monitoring and Evaluation Report for Federal Ministries, Departments and Agencies, Presidency, Abuja.

National Planning Commission (2010b), "Nigeria Vision 20:2020- The First NV20:2020 Medium Term Implementation Plan 2010-2013", Vol. 1.

Olanrewaju, S.A. (1986), "The Challenge of Rural Transportation in Nigeria", *The Quarterly Journal of Administration*, Vol. xx No. 3&4, pp. 180-5.

Olaseni, M. and Alade, W. (2012), "Vision 20:2020 and the Challenges of Infrastructural Development in Nigeria", *Journal of Sustainable Development*, Vol. 5 No. 2, pp. 63-66.

Olowu, D. (1986), "Institutional Approach to Rural Infrastructure Development in Nigeria", *The Quarterly Journal of Administration*, Vol. xx No. 3&4, pp. 153-8.

Oluwayomi, D.A. (1986), "Overcoming Rural Underdevelopment in Nigeria", *The Quarterly Journal of Administration*, Vol. xx No. 3&4, pp. 137-9.

Oluyide, S.O. and Essang, S.M. (1975), "Aspects of Rural Poverty in Nigeria: Implication for Policy", *proceedings of the Annual Conference of The Nigerian Economic Society*, University of Ibadan.

Osuntogun, C.A. and Oludimu, O.L. (1986), "Some Challenges of Rural Development in Nigeria", *The Quarterly Journal of Administration*, Vol. xx No. 3&4, pp. 112-6.

Otive, I. (2006), "The Millennium Development Goals: Can Nigeria Meet the Goals in 2015?" paper presented at a Symposium on MDGs and Nigeria: Issues, Challenges and Prospects, Institute of Chartered Accountants of Nigeria, Abuja District.

Pressler, L. and Swenson, D. (1984), "Rural and Small City Elderly", An Information Paper, Senate Special Committee on Aging, Washington DC.

Ratcliffe, J. (1983), *An introduction to Town and Country Planning*, London, Hutchin & Co. Ltd., 2nd ed., pp. 277-294.

Rios, B.R.D. (1988), "Rural -A Concept Beyond Definition?", Eric Digest-htm.

Rostow, W.W. (1969), "Five Stages of Nations", The Economist, August.

UNDP (1997), "Human Development to Eradicate Poverty", Human development Report, New York.

Whitaker, W.H. (1982), "The Many Faces of Ephraim: In Search of Functional Typology of Rural Areas", in Rios, B.R.D. *Rural-A Concept Beyond Definition?, Eric Digest-htm*.

Yusuf, M.O. (2007), "Private Sector Initiatives and Infrastructural Development in Nigeria", at http://www.centbank.org/OUT/PUBLICATIONS/.../RD/.../JOS-02-4.PDF (accessed 15 November, 2011).

Other online sources:

http://www.un.org/millenniumgoals

http://www.indexmundi.com/nigeria/millennium-development-goals.html