

Infrastructure and Human Development in Nigeria: A Study of the South- South Geo-Political Zone

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Abstract: *The current global economy indicates that human development is fast becoming central issue in the area of sustainable development due to its indispensable nature in enhancement of sustainability developmental goals. In this case, developing countries including Nigeria now saw the reason to align their infrastructural growth with human development growth which is particularly crucial in the Niger Delta region of Nigeria. Adopting a descriptive research design, this study therefore examined the level of infrastructural development in relation to human development growth in the Niger Delta region of Nigeria. 284 respondents selected through purposive sampling technique were draw from 6 communities in the Niger Delta region of Nigeria. The questionnaires were distributed via self-administered and also analyzed using descriptive analysis technique. The finding among others revealed that the community people believed that the projects/programmes carried out by NDDC can transform the lives and conditions of community members. In other words, the community believed that their lives and living conditions can be transformed if NDDC is able to execute some of their projects and programmes in the communities surveyed while the study concluded that adequate infrastructure is a key to human development in the Niger Delta region of Nigeria. In other words, infrastructure and human development exist in a state of dynamic interdependence with each influencing the other. On this note, the study therefore, recommends that Nigerian government should invest in human capital in the Niger Delta through the rebuilding of infrastructure and by so doing, the economy would gain expected power of productivity.*

Keywords: *Human development, sustainability, infrastructure, development strategies, NDDC, Niger Delta region, Nigeria.*

I. Introduction

In the current global world, infrastructure plays a vital role in the sustainable economic growth and human development (Ishrat, 2015). At present, there is a rapid global infrastructure transition across all countries of the world which has renewed the interest of scholars and researchers even policy makers on the need for infrastructure as a pivot for human development (Oswald, Li, McNeil & Trimbath, 2011). While infrastructure serves as the very core of economic and social development, it also contributes to raising the standard of living and quality of life. Various studies (e.g. Ishrat, 2015; AIDI, 2013; Oswald et al., 2011; Agbaje, 2008) have indicated that infrastructure is at the very core of economic and social development which serves as the bed rock practically in contemporary activities. It also contributes in raising the living conditions and quality of life which comprises of education, health, medical care, industry and agriculture. In fact, it acts as both an engine and a product of economic and social development.

Furthermore, infrastructure development is a catalyst to nation building (Ishrat, 2015). Most times, infrastructure is used to measure the overall nation building. Infrastructure services contributes directly and indirectly to human development such as roads, highways, bridges, ports, and transport system that facilitates the movement of people that enhances their welfare and well-being. Previous studies have shown that despite the increasing awareness and developmental efforts geared towards achieving these basic needs, many countries across the globe still suffer from lack of access to basic and adequate infrastructure. Recognizing the significant role of infrastructure as a driving force in increasing Human Development Index (HDI) countries all over the world especially in the developing countries, they have intensified efforts in investment on infrastructure. Despite the remarkable efforts globally on modern infrastructure, many countries still face the challenge of having adequate and sustainable provision of infrastructure due to high cost, time required for new constructions and the role of government through its policies (Agbaje, 2008). However, some studies predict that most countries especially developing countries might face the challenge of meeting up global development expectations due to the rapid pace of infrastructural advancement globally. Evidence from the African

Infrastructure Country Diagnostic report indicates that more than 50% accounts for investment in infrastructure in Africa. African countries have been rated as very low in terms of productivity amongst the regions of the world (AIDI, 2013), despite the huge deposit of natural, human and mineral resources. This scenario is peculiar to Nigeria especially in the South- South region which contributes more than 90% to the national revenue (Okumaga & Okereka, 2012). In other words, the region is still underdeveloped especially in the area of infrastructure even with their huge economic contribution to the nations' overall economic growth and development. According to Agbaje, (2008), lack of adequate infrastructure and skilled human capital among others would deprive Nigeria, indeed South-South region fruitful development. In the light of the above description, this study therefore seeks to examine the level of infrastructure development with human development in the south-south zone of Nigeria.

II. Literature Review

2.1 The State of Infrastructure in Nigeria

Nigeria is divided into six geo-political zones namely; South- South, South -West, South-East, North-West, North-Centre and North-East, with a population of over 170million with GDP growth of 5.55%. Nigeria is richly blessed with both natural and mineral resources. In view of developing the country, the government introduced various initiatives and establishment of agencies in achieving its desired goal (Akinwale, 2010; Attai, Ogbole & Ojonemi, 2012; Enyi, 2014). Some of these initiatives and programs were to provide adequate infrastructure for the development human capital, however, it failed to yield the desired goals and objectives (Attai, Ogbole & Ojonemi, 2012; Enyi, 2014). For example, so much money was invested in these development plans (e.g. provision of adequate access and opportunity to education and health) especially when oil became the mainstay of the economy yet nothing much was achieved (FGN, 2009; Attai, Ogbole & Ojonemi, 2012; Enyi, 2014). The dilemma of infrastructure decay and deficiency leading to poor human development in Nigeria is very unfortunate and unacceptable conserving the huge government investment (FGN, 2009).

Furthermore, the recent studies (e.g. Osabuahin, et al. 2012; Waheed, 2014; Sanusi, 2012) conducted shows that the dearth of basic infrastructure in Nigeria such as transport, energy, water supply, sanitation, and waste management, education and health sectors is reflected in the decline in the Gross Domestic Product (GDP) which has resulted to a decline in economic growth (Osabuahin et al. 2012; Waheed, 2014). Sanusi (2012) noted that about 60% of the Nigerian population lack electricity supply despite over USD13 billion spent annually on fuel generators. Olaseni (2011) revealed that Nigeria has 5,900 MW of generation capacity from three hydro-based and five thermal plants. He observed that only 10% of rural households and 40% of total population have access to electricity. In a similar study, Wale(2012) noted that the pace at which the Nigeria economy is degenerating is due to the absence of quality and substantial infrastructural facilitates.

Authors such as Akinwale (2010); Akeem &Akinwale (2010); Ocheni (2012);Uzoh (2013); Olatinwo (2013); Ikechwuku (2015) in the recent time have linked infrastructures development to human development. For instance, Nigerian government effort to improve infrastructure even in the South-South region has not reflected in the living conditions and well-being of its citizenry. Also, the studies conducted by Akinwale (2010); Akeem &Akinwale (2010); Ocheni (2012);Uzoh (2013); Olatinwo (2013); Ikechwuku (2015) noted that developing countries infrastructure development are not in consonant with the will-being of the people. Thus, there is correlation between infrastructure development and the level of human capital of the country. Accordingly, the World Bank Report (2013), noted that Nigeria government have made so much commitments in its developmental initiates especially in the area of human development yet no significant impact has been made in the living conditions of the people and therefore calls for more attention in sustainable infrastructural development to be able to meet up with the global infrastructure trend. Uzoh (2013) further emphasized that there is need for government to indulge in sustainable infrastructural development that will boost not only economic growth but also sustainable human development. The issue of infrastructure and how it affects human capital seems to be more predominant in the South-South region of Nigeria and this region contributes greater %age of the nation entire wealth. The preceding section covers infrastructural and human development in the South-South zone of Nigeria. (Note that literature review consists of summary, synthesis and critique. You don't seem to have summary and critique in your literature review. You need to demonstrate the three components to make a complete literature review).

2.2 Infrastructural and Human Development in the South-South Zone of Nigeria

The South-South zone, as covered in this paper, comprises of all the oil-producing states in Nigeria (Abia, Akwa-Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo and Rivers States) with a total land area of about 75,000 square kilometres and made up of one hundred and eighty-five (185) local government areas. The region contributes over 90% to the Nigerian economy (Nwogwugwu, Emmanuel & Egwuonwu, 2012). The exploration of oil disrupted the natural environment of the people which affected their means of livelihood. This has made the region economically, socially and politically unstable due to the incessant agitations and protest by

the aggrieved youths. It is expected that such a region should experience a commensurate and adequate infrastructures and human development to sustain not just the environment but also serve as a means of survival for the people. However, this region is suffering from infrastructural decay and low human development (Nwogwugwu, Emmanuel &Egwuonwu, 2012)

Evidence from previous studies have shown that environmental dilapidation is caused by oil spillage which has made life unbearable for the local people (Agbibo, 2013; Olatoke et al, 2012; Aghalino, 2011; Eweje, 2006). This is reflected in the deplorable condition of farmland, fishponds and rivers which has severely altered the once reliant and regenerative region to a state of poverty, violence and a dying ecological environment (Okonta & Oronta, 2001; Mnom & Igwe, 2012; Okonta, 2005; Kaur, 2013). More details about the state of infrastructures in the six (6) geopolitical zones of Nigeria as highlighted by Eneh (2011) are presented below.

Table 1: State of Infrastructures in the Six Geopolitical zone of Nigeria

Parameters	Niger Delta (South South)	South West	South East	North West	North Centre	North East
Unemployment (19-24)	9.5	4.5	6.6	2.2	4.3	3.2
Access to school	70.0	87.5	58.9	70.3	70.6	70.1
Access to safe water source	45.5	73.1	40.3	50.2	48.5	80.3
Access to medical	44.6	72.3	36.5	54.2	60.1	47.3

Source: Eneh (2011)

From the table above, it is evident that the south-south region compared to other regions of Nigeria which do not produce oil is not encouraging. For example, the highest level of unemployment is reflected in the South-South according to the Table 1 above while access to infrastructural facilities like school, safe water and medical care are low. Studies have shown that the programmes and activities initiated by the Nigerian government failed as a result of lack of strategic planning, uncoordinated programmes, non-availability of adequate infrastructures to accommodate the trained youths.

2.3 The Link between Infrastructure and Human Development

The need for infrastructure in human development cannot be undermined due to the significant role it plays not just in economic growth but also in accelerating human development. For example, infrastructures are the tools used for developing human capital development. In other words, good roads, good health facilities, interrupted electric supply etc. boast the quality of human development that can be achieve by a nation. The study by Brenneman & Kerf (2002) has acknowledge the link between infrastructure and human development, noting that increased access to infrastructure services in four sectors (energy, water and sanitation, information and communication technologies, and transportation) would impact on the human development and consequently impact on the economic growth. Foster & Briceño-Garmendia, (2010) stated infrastructures in the form of integrated regional information and communication networks would result to human development. Similar studies by Akinwale (2010); Akeem &Akinwale (2010); Ocheni (2012);Uzoh (2013); Olatinwo (2013); Ikechwuku (2015) in the recent time have linked infrastructures development to human development. They agreed that a common link exist between infrastructures and human development and that is why every successive government in Nigeria is trying hard to achieve a reasonable result. Therefore, infrastructure development should be in consonant with the human development. In a situation whereby infrastructure fails to reflect in the well-beings of the citizens, it means that human development has not be achieve.

Accordingly, the World Bank report (2013), noted that Nigeria government has made so much commitments in its developmental initiates especially in the area of human development yet no significant impact has been made in the living conditions of the people and therefore calls for more attention in sustainable infrastructural development to be able to meet up with the global infrastructure trend. Uzoh (2013) further emphasized that there is need for government to indulge in sustainable infrastructural development that will boost not only economic growth but also sustainable human development. The issue of infrastructure and how it affects human capital seems to be more predominant in the South-South region of Nigeria and this region contributes greater %age of the nation entire wealth. Thus, there is need for Nigerian government re-examine its infrastructure development in line the human development in the South-South region of Nigeria. The preceding section covers infrastructural and human development in the South-South zone of Nigeria.

III. Research Methodology

3.1 Research design

For the research design, this study opts for a descriptive research design. Sekaran and Bourgie (2011) affirmed that descriptive research design is necessary when the researcher is interested in describing the variables in a situation of interest to the researcher. Apart from that, the research design is commonly used in the field of social science like this nature.

3.2 Research approach

The study adopts a quantitative survey questionnaire approach to elucidate information from the respondents. Quantitative survey questionnaire approach is suitable in a social science study like this. Besides, it is faster and easier in terms of gathering information within a limited time (Minai, Lucky & Olusegun, 2011; Lucky and Minai, 2011).

3.3 Population and sampling technique

The population of the study covered six (6) Niger Delta Communities, namely: Akassa, Afiesere, Bonny, Koko, Oloibiri and Omoku while the sample size is 300 respondents comprising of fishermen, community leaders, farmers, traders and youths drawn through a purposive sampling technique. Lucky, Minai & Hamzah (2014) and Mohammad, Minai & Lucky (2014) suggested a convenience/purposive sampling technique where there is lack of sampling frame and where the actual population of the study cannot be identified. Hence, the use of purposive sampling technique in this present study.

3.4 Data collection procedure

The study adopted the self-administered questionnaire distribution procedure to distribute 300 and retrieved 284 questionnaires respectively. Previous studies such as Lucky, Minai & Hamzah (2014) and Mohammad, Minai & Lucky (2014) have adopted this procedure and suggested that it is suitable in a study of this nature. In all, a total of 284 questionnaires were returned filled representing 94.7 %.

IV. Data Analysis Results

4.1 Descriptive analysis result

The descriptive analysis such as marital status, qualification, occupation and year of resident in the community was conducted on the profiles and particulars of the respondents. The result indicates that for gender, 231 representing 81.3% are male while the remaining 53 representing 18.7% are female. Also for the age distribution, the result shows that Out of the 284 respondents 64 representing 22.5% fall within the age group of 26-33years; 50 representing 17.6% are in age group of 18-25years; Only 51 representing 18 % are in the age bracket of 50years and above while 55 of them representing 19.4% are in the age group of 34-41years. Further descriptive result on the marital status indicates 146 of them representing 51.4% are married; 80 of them representing 28.2% are single; 21 of them representing 7.4 % are divorced while the remaining 12 of them indicating 4.2% are separated. For the qualification of respondents, the result revealed that greater % age of them accounting 36.6% has attained tertiary education; 24.6% has secondary education; 18 of them accounting 6.3% possess junior secondary education; 11 of them representing 3.9 % has primary education, 13 of them which account for 4.6% have no formal education and the rest of them 4 representing 1.4% has additional degrees. Also for the occupation of the respondents, the result shows that majority of the respondents are civil servants and self-employed as their occupation and these account for 62(21.8%) and 60(21.1%) of occupations respectively. The unemployed respondents which ranked next account for 55(19.4%) while the student's respondent account for about 54(19.0%). Accordingly, agro-business activities account for about 48(16.9%) while 5(1.8%) were those whose occupational activities fall in other categories such as pensioners and government employed. Finally, for years of resident in community by respondents, the result shows that majority of the respondents have resided in the community for 10-20years representing 102(35.9%) of the surveyed group. 86(30.3%) of the respondents have resided in the community for 21-30years while 37(13.0%) for 31-40years. Only 59(20.8%) have resided in the community for 41years and above.

4.2 Results of the Analysis of Descriptive Research Questions

This study was guided by four (4) research questions. These research questions are analyzed in the order in which they were asked in the questionnaire.

The Main Questions on NDDC Programmes and Sustainable Community Development in the Niger Delta region.

Question on the project(s) executed by NDDC in the community

From Table 2, the result of the six (6) selected communities; Akassa, Afiesere, Bonny, Koko, Oloibiri and Omoku the Niger Delta region shows that 55 respondents representing 19.4 % indicated that no projects were executed by NDDC in their communities. 30 and 17 respondents representing both 10.6 and 6.0 % indicated that roads, water supply and jetty and roads, water supply and bridges are among the projects executed by NDDC in their communities respectively. Also, the result depicts that 23(8.1%), 18(6.3%), 34(12.0%) and 4(1.4%) of the respondents indicated that roads, water supply and electricity, roads, schools and water supply, roads and electricity and roads, schools, water supply, electricity and bridges respectively were among the projects executed by NDDC in their communities.

Table 2: Responses on the project(s) executed by NDDC in the community

Responses	Frequency	Percent (%)
Roads, Water Supply & Jetty	30	10.6%
Roads, Water Supply & Bridges	17	6.0%
No projects executed	55	19.4%
Electricity	42	14.8%
Schools	10	3.5%
Roads, Water Supply & Electricity	23	8.1%
Roads	31	10.9%
Roads, Schools and Water Supply	18	6.3%
Roads & Electricity	34	12.0%
Roads, Schools, Water Supply, Electricity & Bridges	4	1.4%
Bridges	1	0.4%
TOTAL	265	93.3%
Missing	19	6.7%
TOTAL	284	100.00

Question on Responses on the level of projects execution by NDDC in the community

Result from Table 3 indicates that 18 and 34 respondents representing 6.3% and 12% respectively affirmed that the level of projects execution by NDDC in the community is always complete and ongoing respectively. Also, 60 and 44 respondents accounting for 21.1% and 15.5% are abandoned and not completed respectively. While the greater percent of them 112 accounting for 39.4% affirmed that they are not aware whether such projects executed by NDDC in the community are completed, ongoing, abandoned or not completed, and the rest of them is forming 5.6% are unknown.

Table 3: Responses on the level of projects execution by NDDC in the community

Responses	Frequency	Percent (%)
Complete	18	6.3%
On-going	34	12.0%
Abandoned	60	21.1%
Not completed	44	15.5%
Don't know	112	39.4%
TOTAL	268	94.4%
Missing	16	5.6%
TOTAL	284	100.00

Question on Programmes by NDDC that can improve the living conditions and wellbeing of community members

For this question, 132 respondents representing 46.5% agreed that Physical development and human development can improve the living conditions and well being of community members, 39 respondents representing 13.7% believe that physical development can improve the living conditions and well being of community members, 53 respondents representing 18.7% agrees that human development can improve the living conditions and well being of community members while 56 respondents representing 19.7% don't know what can improve the living conditions and well being of community members and 4(1.4%) was missing.

Table 4: Responses on programmes by NDDC that can improve the living conditions and wellbeing of community members

Responses	Frequency	Percent (%)
Physical development (roads, schools, hospitals, bridges & electricity	39	13.7%
Human development (skills acquisition, formal education, scholarship	53	18.7%
Both	132	46.5%
Don't know	56	19.7%
TOTAL	280	98.6%
Missing	4	1.4%
TOTAL	284	100.00

Question on whether the projects and activities of NDDC have improved the living conditions in the community

For this question, the result indicates that majority of them, 100 and 83 of them, forming 35.2% and 29.2% strongly disagreed and disagreed that the projects and activities of NDDC has improved the living conditions in their communities while 34 and 22 of them representing 12.0% and 7.7% agreed and strongly agreed that the projects and activities of NDDC has improved the living conditions in their communities. The rest of them are unknown and undecided. Table 5 has the details.

Table 5: Responses on whether the projects and activities of NDDC has improved the living conditions in the community

Responses	Frequency	Percent (%)
Strongly Agree	22	7.7%
Agree	34	12.0%
Undecided	21	7.4%
Disagree	83	29.2%
Strongly Disagree	100	35.2%
TOTAL	260	91.5%
Missing	24	8.5%
TOTAL	284	100.00

Question on the level of ratings of commitment of NDDC to the development of community

Table 6 depicts the descriptive result for the level of commitment of NDDC to the development of community. The result revealed that 79 and 75 respondents rated NDDC commitment to community development are both dissatisfactory and very dissatisfactory respectively. It also shows that 69 of the respondents surveyed representing 24.3% are undecided about this issue while 26 of them representing 9.2% and 31 of them accounting for 10.9% feel that commitment of NDDC to the development of their communities are both very satisfactory and satisfactory respectively. The rest of the respondents accounting for 1.4% are unknown.

Table 6: Responses on the level of ratings of commitment of NDDC to the development of community

Responses	Frequency	Percent (%)
Very Satisfactory	26	9.2%
Satisfactory	31	10.9%
Dissatisfactory	79	27.8%
Very Dissatisfactory	75	26.4%
Don't Know	69	24.3%
TOTAL	280	98.6%
Missing	4	1.4%
TOTAL	284	100.00

Question on whether the programmes and projects of NDDC are based on the needs of community

From table 7 below, it shows that a whole lot 190 respondents representing 66.7% strongly disagree that NDDC programmes are based on the needs of the community, 23 respondents representing 8.1% strongly agree to the fact that NDDC programmes are based on the needs of the community, 51 respondents representing 18.0% agrees that NDDC programmes are based on the needs of the community, 4 respondents representing 1.4% don't know if NDDC programmes are based on the needs of the community, while 2 respondents representing 0.7% disagree that NDDC programmes are based on the needs of the community and 14 (4.9%) was missing in transit of questionnaire item 19 not ticked by some respondents.

Table 7: Responses on whether the programmes and projects of NDDC are based on the needs of community

Responses	Frequency	Percent (%)
Strongly Agree	23	8.1%
Agree	51	18.0%
Don't Know	4	1.4%
Disagree	2	0.7%
Strongly Disagree	190	66.9%
TOTAL	270	95.1%
Missing	14	4.9%
TOTAL	284	100.00

Question on the level of efficiency of members in contributing to decision making of programmes by NDDC

From Table 8 above, indicates that 102 of them accounting for 35.9 % and 70 respondents forming 24.6 % believed that the level of efficiency of members in contributing to decision making of programmes by NDDC is very inefficient and ineffective respectively. Others 27, 11, 70 and 4 of them which account for 9.5, 3.9, 24.6 and 1.4 % respectively believed that the level of efficiency of members in contributing to decision making of programmes by NDDC is efficient, very efficient, undecided and unknown.

Table 8: Responses on the level of efficiency of members in contributing to decision making of programmes by NDDC

Responses	Frequency	% (%)
Don't Know	70	24.6%
Very inefficient	102	35.9%
Inefficient	70	24.6%
Efficient	27	9.5%
Very efficient	11	3.9%
TOTAL	270	95.1%
Missing	4	1.4%
TOTAL	284	100.00

V. Discussion On The Findings

The major objective of this study is to examine the infrastructure in relation to human in the South-South geo-political zone of Nigeria. The study applied a descriptive study design to elucidate data from the respondents who are mainly fishermen, community leaders, farmers, traders and youths in the Niger Delta region of Nigeria. Overall, the study found that infrastructure is linked to human development including the economic development as affirmed by previous studies conducted by Nkechi & Okechukwu (2012); Kessides (1993); Lucky, Adegoke & Nordin (2014) who affirmed that infrastructures are predictors of positive economic development in many areas such as the production of goods and services, distribution of finished products to markets, as well as basic social services such as schools and hospitals; for example, roads enable the transport of raw materials to a factory.

First and foremost, the descriptive analysis result for the availability of projects executed by NDDC revealed that many of the communities in the Niger Delta region of Nigeria surveyed, have not experience or witness any form of NDDC projects and programmes in the communities being investigated. This shows that NDDC projects and programmes may not be visible in the Niger Delta communities surveyed. It equally suggests that the Niger Delta communities been surveyed may have not have benefited from NDDC projects and programmes. Thus, NDDC projects and programmes are very strange and uncommon to the people of the community surveyed. This affirmed the World Bank report (2013) claimed that Nigerian government's efforts and commitments to provide sustainable infrastructural development has not yielded a significant and fruitful result especially when compare to the global infrastructure trend.

The response from the study's survey indicated that majority of the programmes executed by the NDDC were abandoned while others are uncompleted with some on-going ones and few completed. This corroborates with the study of Ingwe, Mboto and Ebong (2012); Sunjka and Jacob, (2013) on the assessment of developmental projects in the Niger Delta. Likewise Isidiho and Sabran (2015) that although, there are evidences of NDDC projects in the Niger Delta region, however most of the projects are deficient therefore they are unable to address the developmental challenges in the region.

Apart from the above, the study's finding equally indicates that the communities believed that the projects/programmes carried out by NDDC can transform the lives and conditions of community members. In other words, the communities believed that their lives and living conditions can be transformed through NDDC activities only if they are able to complete is able most of their developmental projects and programmes.

Also, the finding shows that greater %age of the communities surveyed strongly disagreed that the projects and activities of NDDC has improved the living conditions in their communities. In other words, the finding try to link NDDC projects and activities to the improved living conditions of the communities surveyed. The finding implies that NDDC projects and activities have not impacted on the improved living conditions of the communities surveyed. It further suggests that NDDC projects and activities have not positively impacted on the living conditions of the communities surveyed. Additionally, the finding shows that only few NDDC projects are traceable to their communities. It revealed that NDDC is yet to initiate or execute any form of sustainable projects in the communities surveyed as of the time this present research was conducted.

Further findings on the satisfactory or not satisfactory of level of commitment of NDDC to the development of their communities revealed that greater %age of the community people surveyed are not only dissatisfied and very dissatisfied with level of commitment of NDDC to the development of their communities but also do not feel the impact. In other words, the finding indicates that NDDC commitment to developmental

agenda is not only dissatisfactory but also very dissatisfactory and has not transform the Niger Delta region as enshrined in the goals and vision of NDDC. This suggests that NDDC is not committed to the development of the Niger Delta communities rather what it does is just paying lip services which is why the agitation and protest in the Niger Delta region has not been fully addressed.

Similarly, the study also revealed that most of the developmental projects and programmes executed by NDDC are not in line with the needs and aspirations of community members. This indicates that community members are not consulted by NDDC in the deciding the particular projects that will impact on the lives of community members while for the rating of the level of efficiency of members in contributing to decision making of programmes by NDDC, the finding shows that the greater %age of the communities surveyed showed that community member's contribution in decision making is not only inefficient but also very inefficient. Even those communities who are undecided about this particular issue also reflect inefficient and very inefficient. Thus, community members are not involved in the decision making on developmental activities carried out in their communities.

Finally, the finding revealed that community members strongly believed that when allowed to make decisions in developmental initiatives, it increases their level of involvement. This finding suggests that NDDC needs co-opt community members in their developmental plans for better project outcomes and results. It is believed that projects executed by the community would reflect and address their needs and aspirations.

The study provides several implications for the key actors in this area of study namely; government, non-governmental agencies, NDDC and the communities in Niger Delta region of Nigeria. To the government, NDDC and non-governmental agencies, the study would be of a huge benefit to them since the study would provide them with the current status of NDDC projects and programmes in the Niger Delta region of Nigeria. The information obtained in this study would assist the NDDC to re-evaluate their policy on developmental projects in the Niger Delta region. It would also make both the government and NDDC to understand that it is not enough to provide infrastructure; however, such infrastructure should be able to impact on the lives of the target population. This is crucial to human development that places emphasis on the overall well-being of people. This study's findings would also enlighten and provide useful information to the non-governmental agencies interested in the NDDC activities in the Niger Delta region of Nigeria on the need to engage community members in developmental initiatives in other to achieve sustainable development. Finally, to the communities, the finding would inform and create more awareness of the NDDC developmental plans and projects and also to enlighten community members on the need to collaborate with NDDC to achieve developmental goals especially within their community.

5.1 Conclusion

One vital conclusion of this study is that adequate infrastructure is a key to human development in the Niger Delta region of Nigeria. In other words, infrastructure and human development exist in a state of dynamic interdependence with each influencing the other. Infrastructure can impact human development directly, through enabling the provision of life-enhancing services like clean drinking water, protection from the vagaries of the natural environment, and electricity for cooking and indirectly through enhancing economic growth, granting access to new income-earning opportunities for the poor, and strengthening governance. As countries develop and population increases, the demand for more and better infrastructure increases, as does the capability for countries to meet the increased demand. In the best of worlds, these bidirectional positive linkages between infrastructure and human development create a virtuous cycle. Of course, the infrastructure that provides the services people desire is also part of the physical world, and as such affects and is affected by it. The need for sustainable infrastructure is becoming increasingly important as the world's stock of hard infrastructure grows.

From the foregoing, it is obvious to suggest ways that will improve the provision of critical infrastructure in Nigeria as well as sustain human development particularly to the South-South geopolitical zones. The bane of this country is large scale corruption, which hampers economic growth and sustainable development. Therefore, if the embezzlement of public fund is reduced and the allocated funds for developmental agenda are used judiciously in providing the necessary infrastructure, Nigeria will be a great nation. Since one of the challenges facing Nigeria is poor economic and social infrastructure, to ensure long-term growth and prosperity, Nigeria must invest in advanced technology and rebuild the infrastructure without which the economy will not gain from the "power of productivity".

5.2 Limitations and Suggestions for Future study

One major limitation to this study is the analysis technique used. The study is limited to descriptive analysis in understanding the community development in the Niger Delta region of Nigeria. The use of descriptive analysis does not provide room for detail information about the issue being investigated. Therefore, this study recommends other analysis techniques such as correlation and regression analysis and this would provide strong evidence on the relationship between infrastructure development and human development in the

Niger Delta region of Nigeria. Also, the data for this study only reflects the six regions in the Niger Delta of Nigeria without consideration to other regions in the world with similar challenges. Therefore, the study suggests that future study should replicate this study in other environment with similar situation.

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