# IMPACT OF STATE DEVELOPMENT PROGRAMMES ON PROVISION OF INFRASTRUCTURE FACILITIES IN NIGERIA: INTERROGATING THE CONTRIBUTIONS OF ANAMBRA INTEGRATED DEVELOPMENT STRATEGY, 2008-2015

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#### Abstract

The study sought to: ascertain the extent to which ANIDS has reduced poverty through massive rural road expansion in Anambra State; determine the level to which ANIDS has contributed to rehabilitation of dilapidated primary and secondary schools in Anambra State; verify the extent to which ANIDS has contributed to the provision of safe drinking water for people in Anambra State and determine the extent to which ANIDS has reduced transportation problems of the major cities in the state. Integrated Rural Development (IRD), theory was adopted as the theoretical framework of analysis. Descriptive survey design was adopted with a total population of one million, two hundred and eleven thousand, seven hundred and twenty four (1,211,724) drawn from the six (6) selected local government areas of the state. A sample size of 400 was utilized, determined with the use of Taro Yamani formula. The major instrument for data collection was a structured questionnaire. Pearson Product Moment Correlation Coefficient was used to test the hypotheses formulated for the study. Findings among other things revealed that ANIDS objective of poverty reduction through massive rural road expansion was not optimally achieved. It was therefore recommended that more attention should be paid to construction and reconstruction of rural roads in the State to facilitate agricultural activities for food security and by extension poverty reduction, etc.

Keywords: Development Programmes, Infrastructure Facilities, Poverty, Water, Roads.

#### Introduction

No administration or regime survives without a strong based development programme which inculcates development agenda of the administration. A development programme is a conglomeration of ideas, strategy, activities, actions and steps crafted or designed to pursue development agenda. The beauty of a well designed programme lies in the fact that it acts as a compass that directs the piloting of government affairs. This is why Owen (2012) noted that without a sense of strategy, any organization lacks direction. A development programme can therefore be seen as policies, activities and projects set out to pursue development in a given area. It details what a particular administration plans to do and how they will go about doing that. A development programme may be broad covering virtually all sectors of the economy ranging from provision of physical infrastructure such as quality road networks, rural and urban electrification, construction of bridges, and provision of pipe borne water, schools, hospitals, education, healthcare services among others. It is therefore the duty of every administration to make sure that basic infrastructure facilities are put in place having set out development strategies as a guide to improve the socio-economic wellbeing of the people.

Infrastructure refers to fundamental facilities and systems serving a country, city, or area, including the services and facilities necessary for its economy to function. It typically characterizes technical structures such as roads, bridges, tunnels, water supply, sewers, electrical grids, telecommunications, hospitals, and so forth. The American Society of Civil Engineers (2017) graded infrastructure into 16 categories, namely aviation, bridges, dams, drinking water, energy, hazardous waste, inland waterways, leaves, parks and recreation, ports, rail, roads, schools, solid waste, transit and wastewater. The capacity of government or different administrations and regimes to deliver on its mandates is usually dependent on

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the strategy and programmes designed towards efficient provision of the aforementioned infrastructure facilities. The above may have prompted different development strategies and programmes by several administrations in Nigeria. For instance, in 1972 Gowon's government introduced National Accelerated Food Production Programme (NAFFPP) and Nigerian Agricultural and Cooperative Bank entirely devoted to funding of agriculture. There was also the much publicized Operation Feed the Nation (OFN) in 1976 by the then military head of state General Olusegun Obasanjo. The Shehu Shagari's Green Revolution Programme had twin objectives of curtailing food importation while boosting crop and fibre production. Maduagwu (2000), cited in Abah, Edeh and Nwakamma (2016), maintained that the food programmes such as NAFFPP, OFN, Green Revolution and the Go Back to Land Programme failed because of the farfetched objectives of making farmers out of all Nigerians. In 1986 General Babangida established the Directorate of Food Roads and Rural Infrastructure (DFRRI) for rural development. Babangida's wife also went into the business of caring for the Nigerian women. She set up Better Life Programme. Furthermore, in 1993 Abacha and his wife set-up the Family Support Programme and Family Economic Advancement Programme (FEAP). There was also the National Poverty Eradication Programme (NAPEP), established in 2001 by the Obasanjo's administration. The Subsidy Re-investment Programme (SURE-P) and You Win Programme introduced in January 2012 by the Goodluck Ebele Jonathan's administration following the attempt to remove the subsidy on petrol. The most current effort by the federal government is the N-Power introduced by the present administration led by President Muhammadu Buhari. All these programmes pursued the development agenda of the respective administrations. These development programmes cut across the 36 states of the federation including Anambra State.

Anambra State was created on the 27<sup>th</sup> August 1991. The name Anambra was an *anglicized* version of the original 'Oma Mbala', the native name of the Anambra River. The state is bounded to the west by Delta State, Imo and Rivers States to the south, Enugu State to the east and Kogi State to the north. In terms of population, it ranked 10<sup>th</sup> out of the 36 states of the federation with a total population of 4,055,048 (NPC, 2006). The history of development efforts in the state can as well be traced to the federal government's development efforts. The political and socio-economic background leading to the establishment of Anambra Integrated Development Strategy (ANIDS) was one characterized by instability which distorted development in the state.

Before Peter Obi's administration introduced the Anambra State Integrated Development Strategy (ANIDS), as an approach to comprehensively tackle especially, the issue of infrastructure decay in the state, the state was traumatized occasioned by the frequent change of government. The instability that characterized the polity led to policy inconsistency and abandonment of programmes and projects. According to Wikipedia (2017), the state was faced with decades of neglect and bad governance, the slight in migration has posed problems to available infrastructural provision, environmental sanitation, erosion control and other social services.

Challenged by these existential downturn socio-economic realities in the state, the Anambra state government under Mr. Peter Obi established ANIDS in 2006. ANIDS was designed to achieve the following developmental goals and objectives: (i) poverty reduction through massive expansion of rural roads, especially in remote food producing areas to enable rural farmers evacuate their food items and other agricultural produce to urban market for better profit (ii) Construction, reconstruction and rehabilitation of various educational institutions from primary to tertiary level; public utilities and water resource, transport, works and roads, lands survey and town planning information; (iii) empowerment of thousands of less privileged particularly women and vulnerable group such as widows, orphans, HIV patients and physically challenged to enable them either expand their trade or start petty trading or small scale farming; (iv) Provision of revolving loans to establish small scale agro-based business such as

poultry farms, fish ponds, pigs farms, soap making machines; (v) Provision of variety of skill acquisition training session for the unemployed (especially the indigent, physically challenged, women and youths; (vi) completion and equipping of cardio thoracic centre, kidney dialysis in Onitsha, Amaku General Hospital Awka, Umuleri General Hospital, Psychiatric Hospital Nawfia and Umunze General Hospital. The above objectives of ANIDS are laudable and capable of driving development in the state. However, while some believe that ANIDS has performed and achieved her mandate, others argued that the development strategy did not do much to improve the wellbeing of the people. It is based on this premise that this study has become imperative and focused to determine the impact of ANIDS on the provision of infrastructure facilities in the state.

### **Statement of the Problem**

Development programmes such as Anambra Integrated Development Strategy (ANIDS) is expected to robustly drive development of infrastructure facilities such as quality road network, pipe borne water, electricity, healthcare facilities such as hospitals and modern equipment, schools, skill acquisition, poverty reduction, youth empowerment, human capital development, and boost food production. Unfortunately, it is still debatable what ANIDS has done to improve socio-economic wellbeing of the people. There is still mass exodus of Anambrarians and people from other states from the most rural communities to the major urban and commercial cities in the state such as Onitsha, Nnewi, Awka, Ekwulobia among others. One still wonders why the influx of people despite claims that those basic infrastructure facilities have been provided especially in the rural communities. It does appear that not much has been achieved through the ANIDS. In most rural communities, electric power supply within the period under study is still a problem. Access to safe drinking water has compounded the problem of communities especially for some who had to trek a long distance to fetch water from streams. The nature of most rural roads is such that cannot guarantee access to farms. Thus, evacuation of farm produce to markets where they are needed most has become a big challenge to farmers.

Regrettably, communities in the riverine areas of Anambra East, Anambra West, Ogbaru local government areas etc. are the worst hit. Some primary and secondary schools especially in most riverine rural communities are still in dilapidated conditions yearning for urgent attention. It is also worrisome that the major cities have become characterized by inadequate and deteriorated road networks, walkways, unregulated building patterns, sanitation, uncontrolled street trading, mountains of garbage, and chaotic transport systems, creating congestion, noise pollution and overcrowding (Wikipedia, 2017). Emma and Chukwujindu (2013), argued that despite budgetary allocation to the state, Anambra State still has a long way to go in terms of meeting the demands and expectations of its citizenry. Infrastructural facilities such as good roads/networks of roads, supply of good and adequate water, access roads in rural areas and hinterlands, provision of infrastructure for basic education of her children and youths, healthcare services, transportation services, rural electrification programme and provision of information and communication technology (ICT) to the teeming and yearning people of Anambra State is inadequate. The rate at which able bodied youths migrate to urban centres for greener pastures leaving farming and other agricultural activities to the aged and older men and women, to say the least, is most unfortunate. Hence, food production seems to have been affected. Urbanization which precedes migration has resulted to high rate of crime such as armed robbery, kidnapping and general insecurity in the state. Urbanization has compounded the problem of transportation which is a feature of cities in the state.

#### **Objectives of the Study**

The broad objective of the study is to determine the impact of the Anambra State Integrated Development Strategy (ANIDS) on the provision of infrastructure facilities in Anambra State. The

specific objectives are to:

- Ascertain the extent to which ANIDS has achieved her objective of poverty reduction through massive expansion of rural roads in Anambra State.
- Ascertain the extent to which ANIDS contributed in the rehabilitation of primary and secondary schools in Anambra State.
- Verify the extent to which ANIDS has improved access to safe drinking water for people in Anambra State.
- Determine the impact of ANIDS on transportation problems of the major cities in Anambra State.

# **Theoretical Framework**

There are different theories, views and shades of opinions in development studies. For instance, the classical writers such as Adams Smith, David Ricardo and Rogers (1969) believe that development is measured in terms of national economy, i.e. in terms of Gross National Product, which is the total money or market value of all final goods and services produced by the residents or nationals of an economy during an accounting period, usually one year. Development for this group is also measured in terms of the Net National Product (NNP) which is the net market value of a nation's produced goods and services. Modernization theorists on the other hand, often use such words as 'modern' and its permutations and by categories such as "institutional differentiation", 'development', 'nation building', 'detribalized' etc. In the words of Offiong (1980:4), "What modernization theorists most often end up with is in eventuating ethnocentric practical recipes which admonish the poor societies to imitate them all the way and they would acquire a sudden leap into the 20<sup>th</sup> century. In other word, join the Calvinistic cult and you will experience as sudden leap into modernity."

There are also liberal views, the Marxist (radical) perspective of development, among others. However, the researchers adopted Integrated Rural Development (IRD), theory in this study. Integrated rural development theory assumes that development is a multi-dimensional concept that embraces all aspects of the societal life that geared towards improving the wellbeing of man. The first use of the idea of integrated development was the resolution convening the World Conference on Agrarian Reform and Rural Development which was held in Rome on July 12-20, 1979. This conference called for a "frontal attack on poverty and other socio-economic problems that confront, especially the third world countries, which can be addressed through the instrumentality of integrated development.

Basler (1979) later expanded the theory in his study titled "The concept of Integrated Rural Development". He argued that approaching development from a multi-dimensional point of view has some objectives which include:

- Increase food production and improvement of supplies for the whole population.
- Improvement of the material infrastructure, training and health services.
- Attention of the "flight from the land" by the provision of jobs in agriculture (including complementary services) and in non-agriculture fields.
- Increase of employment, productivity and incomes of the rural population especially the rural poor and betterment of their living conditions.
- Integration of the whole population with the socio-economic process of development and decision making.

Omoruyi (2001) sees integrated theory as a comprehensive way of solving the community problem. It calls for total and effective co-ordination of both human and material resources as it relates to spheres of life. However, very important is its sustainability.

An infrastructural development programme can be sustained by creating a felt need among beneficiaries about the efficacy of the programme, developing institution which continually adapt, providing (or self-generating) resources and building support among political elite and community groups. Provision of infrastructure facilities is one best ways of improving the lives of the people. The US National Research Council (1987) referred to these infrastructure as highways, streets, roads, and bridges, mass transit, airports and airways, water supply and water resources, waste water management, solid waste treatment and disposal, electric power generation and transmission, telecommunications, and hazardous waste management and the combined system these modal elements comprises.

Availability of these basic social amenities is still a challenge to governance in developing countries, especially in Nigeria. Madu (2007) cited in Edeh, Nwakamma and Ugbala (2017) asserted that "the importance of rural infrastructure provision lies in its capacity to sustain daily activities, quality of life and economic base in the rural areas". What obtains in most rural communities in Nigeria is near collapse of basic infrastructure. Ele (2006) noted that there is very apparently poor quality education in most rural areas in Nigeria. Ifere (1992) had earlier argued that rural education is characterized by limited functional or work oriented education and disdain for handicraft and technical subjects. Okoli and Onah (2002:159) made similar observation as they noted thus: "The privilege of education which, for instance, is supposed to be a birth right of every Nigerian child is an illusion to many rural dwellers. In some places, there are no schools at all while in some others the schools are shabby, ill-equipped and poorly staffed."

Ogunnowo and Oderinde (2012) noted that the condition of transportation in agricultural sector of Nigeria is quite appalling. For instance, road is an asset to any rural setting as it provide the farmers the access to their farm and makes for free flow of farm produce to urban markets. In some cases, the bridges/culverts linking the rural areas have been damaged. Such situation has made many rural areas suffer varying degrees of remoteness, inaccessibility, relative isolation, and backward effects of development. Poverty level is still high. Healthcare system is poor. Okoli and Onah (2002) observed similarly that in most rural areas of Nigeria, no medical institution of any sort exists at all and that where they do, the people have to travel very long distances to get them. The Anambra Integrated Development Strategy is a development strategy set out to address infrastructure decay in the state and improve the general standard of living of the people. It is a broad strategy that focuses on all sectors of the economy. ANIDS is an integrated approach towards solving the developmental problems of the state specifically in the area of infrastructure which is the main focus of the study.

The relevance of the theory to the study is based on the fact that there are so many areas yearning for development in Anambra State and other places. Efforts at development are supposed to encompass both human oriented and space oriented dimensions of development such as provision of infrastructure facilities namely; quality road network, pipe borne water, rural electrification, schools among others. This is where ANIDS comes in as an integrated strategy toward development of the state. A development effort that is multi-sectoral and integrated will positively impact both human and non-human aspects of development.

### Methodology

Descriptive survey design was adopted and six local governments were selected across the three senatorial zones of the state. Data generated were presented in frequency tables, percentages and hypotheses formulated were respectively tested such that Pearson product correlation coefficient formed the bases upon which the extent of relationship of the studied variables were established while t-statistics was used to test the level of significance.

### Results

**Table1:** Response rates on the extent to which ANIDS has reduced poverty through massive rural road expansion in Anambra State.

	Response Item		SA	Α	U	SD	D	Total	Mean	SD
	-		5	4	3	2	1			
1	Development programmes are	No:	184	137	20	13	21	375		
	necessary to the provision of basic	Os :	920	548	60	26	21	1575	4.2	6.58
	social and infrastructural facilities.	%	49	37	5	3	6	100		
2	ANIDS is a development strategy	No:	210	115	10	15	25	375		
	that pursued the overall development	Os :	1050	460	90	30	25	1655	4.41	7.27
	of Anambra State	%	56	31	2	4	7	100		
3	ANIDS has rehabilitated some rural	No:	180	165	5	15	10	375		
	roads that enable the shipments of	Os :	900	660	15	30	10	1615	4.31	6.92
	agricultural yields to urban markets.	%	48	44	1	4	3	100		
4		NT	20	40	20	100	105	275		
4	ANIDS achieved her objective of	NO:	30	40	20	180	105	3/3	2.22	1.04
	poverty reduction through massive	Os :	150	160	60	360	105	835	2.22	1.84
	food production in the State.	%	8	11	5	48	28	100		
5	Most rural roads in the state are still	No:	167	163	20	9	16	375		
	in deplorable condition despite	Os :	835	652	60	18	16	1581	4.22	9.74
	acclaimed success of the ANIDS.	%	45	43	5	3	4	100		
6	Rural farmers were empowered by	No:	175	145	15	15	25	375		
	ANIDS through granting of loans	Os :	875	580	116	30	25	1626	4.34	3.79
	and other agricultural facilities to	%	47	39	4	4	7	100		
	boost food production in Anambra									
	State.									
7	Shipment o f farm products is	No:	105	40	20	180	30	375		
	difficult given the deplorable nature	Os :	525	160	60	360	30	1135	3.03	3.42
	of rural roads in the state.	%	28	11	5	48	8	100		
8	The activities of ANIDS relating to	No:	180	165	5	15	10	375		
	poverty reduction have improved	Os :	900	660	15	30	10	1615	4.31	6.92
	food production in Anambra State.	%	48	44	1	4	3	100		

Source: Field Survey (2015)

Table 1 above shows the response rates on the extent to which ANIDS has reduced poverty through massive rural road expansion in Anambra State as contained in questionnaire items ranging from 1 to 8, with their respective means score and standard deviation. The average (mean) value of each questionnaire item was gotten by divisding the overall score with the number of observations while the standard deviation measures spread or dispersion from the observations. Standard deviation also describes how individual values are located from and around the mean. Response rates on question 6 shows that 13 (3%) of the total respondents strongly disagree with the statement, 21 (6%) of the respondents disagree, 137 (37%) of the respondents agree and 184 (49%) of the respondents strongly agree that the development programmes are necessary to the provision of basic social and infrastructural facilities, while 20 (5%) of the total respondents were undecided. From table 6 above, the mean and standard deviation of the overall score on the questionnaire item were 4.02 and 6.58 respectively. The imperativeness of development programmes as quintessential in providing basic social infrastructural facilities were supported by their response rate on the mean and standard deviation which were above 3.5.

Item 2 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 25 (7%) of the respondents disagree, 115 (31%) of the respondents agree and 210 (56%) of the respondents strongly agree that ANIDS is a development strategy that pursued the overall development of Anambra State, while 10 (2%) of the total respondents were undecided. From table 6 above, the mean and standard deviation of the overall score on the questionnaire item 2 were 4.41 and 7.27 respectively.

Response rate on item 3 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 10 (3%) of the respondents disagree, 165 (44%) of the respondents agree and 180 (48%) of the respondents strongly agree that the state of infrastructure facilities was relatively low before the introduction of ANIDS by the state government, while 5 (1%) of the total respondents were undecided. The mean and standard deviation of the overall score on the questionnaire item were 4.31 and 6.92 respectively. The results of the mean and standard deviation on their responses to item 3 affirmed that the infrastructure facilities prior emergence of ANIDS was relatively low.

In responding to questionnaire item 4, it shows that 180 (48%) of the total respondents strongly disagree with the statement that ANIDS achieved her objective of poverty reduction through massive expansion of rural roads to boost food production in the State, 105 (28%) of the respondents disagree, 40 (11%) of the respondents strongly agree and 30 (8%) of the respondents strongly while 20 (5%) of the total respondents were undecided. The mean of the overall score on item 4 was 2.22 while the standard deviation was 1.84. The results of the mean and standard deviation on their responses on item 4 were relatively below 3.5 suggesting that ANIDS have not holistically achieved their objective, though have achieved in some areas in the state.

Response rate on item 5 above shows that 9 (3%) of the total respondents strongly disagree with the statement, 16 (4%) of the respondents disagree, 163 (43%) of the respondents agree and 167 (45%) of the respondents strongly agree that most rural roads in the state are still in deplorable condition despite acclaimed success of the ANIDS,, while 20 (5%) of the total respondents were undecided. From table 6 and item 5 above, the avaerage (mean) and standard deviation of the overall score are 4.22 and 9.74 respectively.

Responses on item 6 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 25 (7%) of the respondents disagree, 145 (39%) of the respondents agree and 175 (47%) of the respondents strongly agree that rural farmers were empowered by ANIDS through granting of loans and other agricultural facilities to boost food production in Anambra State, while 15 (4%) of the total respondents were undecided. From their responses on item 6, the avaerage (mean) and standard deviation of the overall score are 4.34 and 3.79 respectively.

More so, responses on item 7 above shows that 180 (48%) of the total respondents strongly disagree with the statement, 30 (8%) of the respondents disagree, 40 (11%) of the respondents agree, and 105 (52%) of the respondents strongly agree that shipment of farm products are difficult given the deplorable nature of rural roads in the state, while 20 (5%) of the total respondents were undecided. Given their responses on item 7, the mean and standard deviation of the overall score on the questionnaire item were 3.03 and 3.42 respectively. The values of the mean and standard deviation were conscientiously below 3.5 indicating that they are still having difficulties in evacuation of farm products due to deplorable state of rural roads but not all.

Item 8 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 10 (3%) of the respondents disagree, 165 (44%) of the respondents agree and 180 (48%) of the respondents

strongly agree that the activities of ANIDS relating to poverty reduction have improved food production in Anambra State,, while 5 (1%) of the total respondents were undecided while the mean and standard deviation on their scores were 4.31 and 6.92.

	Response Item		SA	A	U	SD	D	Total	Mean	SD
			5	4	3	2	1			
9	ANIDS has sufficiently provided	No:	167	163	20	9	16	375		
	reading material s and laboratory	Os :	835	652	60	18	16	1581	4.22	9.74
	equipments in schools in the state.	%	45	43	5	3	4	100		
10	ANIDS has provided enough skill	No:	100	240	10	15	10	375		
	acquisition programmes for the	Os :	500	960	30	30	10	1530	4.08	6.21
	teeming unemployed youths in	%	27	64	3	4	3	100		
	the state.									
11	ANIDS has contributed	No:	185	145	10	15	20	375		
	significantly in renovation of	Os :	925	580	30	30	20	1585	4.23	6.66
	dilapidated structures in both	%	49	39	3	4	5	100		
	primary and secondary schools in									
	the state									
12	ANIDS area of coverage cuts	No:	105	40	20	180	30	375		
	across rehabilitation of primary	Os :	525	160	60	360	30	1135	3.03	3.42
	and secondary schools in	%	28	11	5	48	8	100		
	Anambra State.									
13	Payment of teachers in both	No:	150	55	10	155	5	375		
	primary and secondary schools	Os :	750	220	30	310	5	1315	3.51	4.59
	has been adequate and as at when	%	40	15	3	41	1	100		
	due.									
14	ANIDS has significantly	No:	175	145	15	15	25	375		
	improved access to adult	Os :	875	580	116	30	25	1626	4.34	3.79
	education in the state.	%	47	39	4	4	7	100		

# Table 2: Response rates on the level to which ANIDS has contributed in the rehabilitation of primary and secondary schools in Anambra State.

# Source: Field Survey, (2015)

Response rate on questionnaire item 9 above shows that 9 (3%) of the total respondents strongly disagree with the statement, 16 (4%) of the respondents disagree, 163 (43%) of the respondents agree and 167 (45%) of the respondents strongly agree that ANIDS has sufficiently provided reading materials and laboratory equipments in schools in the state, while 20 (5%) of the total respondents were undecided. The mean and standard deviation of the overall score on the questionnaire item were 4.22 and 9.74 respectively. The results of the mean and standard deviation on their responses to item 9 confirmed that ANIDS developmental strides cut across reabilitation of both primary and secondary schools in Anambra State.

In responding to questionnaire item 10, it shows that 15 (4%) of the total respondents strongly disagree with the statement, 10(3%) of the respondents disagree, 240 (64%) of the respondents agree and 100 (27%) of the respondents strongly agree that ANIDS has provided enough skill acquisition programmes for the teeming unemployed youths in the state, while 10 (3%) of the total respondents were

undecided. The mean of the overall score on item 10 was 4.08, while the standard deviation was 6.21.

More so, response rate on item 11 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 20 (5%) of the respondents disagree, 145 (39%) of the respondents agree and 185 (49%) of the respondents strongly agree that ANIDS has contributed significantly in renovation of dilapidated structures in both primary and secondary schools in the state, while 10 (3%) of the total respondents were undecided. From table 7 and item 11 above, the avaerage (mean) and standard deviation of the overall score are 4.23 and 6.66 respectively.

In addition, responses on item 12 above shows that 180 (4%) of the total respondents strongly disagree with the statement that ANIDS area of coverage cuts across rehabilitation of primary and secondary schools in Anambra State, 30 (8%) of the respondents disagree, 40 (11%) of the respondents agree and 105 (28%) of the respondents strongly agree, while 20 (5%) of the total respondents were undecided. From their responses on item 12, the avaerage (mean) and standard deviation of the overall score are 3.03 and 3.42 respectively. The mean and standard deviation results were increasingly below 3.5 indicating that ANIDS have not sufficiently provided enough reading materials and laboratory equipments to have enhanced educational learning capbilities in both the secondary and primary schools in Anambra State.

Responses on item 13 above shows that 155 (41%) of the total respondents strongly disagree with the statement, 5 (1%) of the respondents disagree, 55 (15%) of the respondents agree and 150 (40%) of the respondents strongly agree that payment of teachers in both primary and secondary schools has been adequate and as at when due, while 10 (3%) of the total respondents were undecided. Given their responses on item 13, the mean and standard deviation of the overall score on the questionnaire item were 3.51 and 4.51 respectively.

Item 14 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 25 (7%) of the respondents disagree, 145 (39%) of the respondents agree and 175 (47%) of the respondents strongly agree that ANIDS has significantly improved access to adult education in the state, while 15 (4%) of the total respondents were undecided while the mean and standard deviation on their scores were 4.34 and 3.79.

	Response Item		SA	Α	U	SD	D	Total	Mean	SD
			5	4	3	2	1			
15	Water supply is one of the basic	No:	180	165	5	15	10	375		
	amenities engendered by ANIDS	Os :	900	660	15	30	10	1615	4.31	6.92
	in improving life and other	%	48	44	1	4	3	100		
	economic activities.									
16	We can feel the impact of good	No:	144	156	20	35	20	375		
	governance through provision of	Os :	720	624	6	70	20	1440	3.84	5.50
	safe drinking water in the state.	%	38	42	5	10	5	100		
17	Most boreholes are dug in	No:	180	165	5	15	10	375		
	strategic locations for easy	Os :	900	660	15	30	10	1615	4.31	6.92
	assessments.	%	48	44	1	4	3	100		

Table 3: Response rates on the extent to which ANIDS has improved access to safe drinking water for people in Anambra State.

18	There are cases of waterborne disease occasioned by inadequate	No: Os :	155 775	20 80	10 30	160 320	30 30	375 1235	3.29	4.05
	supply of portable water to the various communities in the state	%	41	5	3	43	8	100		
19	One can easily identify boreholes	No:	149	105	40	55	26	375		
	and water treatment machines	Os :	745	420	120	110	26	1421	3.79	5.36
	provided through the instrumentality of ANIDS in the state	%	39	28	11	15	7	100		
20	There are massive water projects	No:	210	115	10	15	25	375		
	provided by ANIDS in various	Os :	1050	460	90	30	25	1655	4.41	7.27
	communities in the state.	%	56	31	2	4	7	100		

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# Source: Field Survey, (2015)

Response rate on questionnaire item 15 above shows that 5 (1%) of the total respondents strongly disagree with the statement, 15 (4%) of the respondents disagree, 165 (44%) of the respondents agree and 180 (48%) of the respondents strongly agree that water supply is one of the basic amenities engendered by ANIDS in improving life and other economic activities, while 5 (1%) of the total respondents were undecided. The mean and standard deviation of the overall score on the questionnaire item were 4.31 and 6.92 respectively.

In responding to questionnaire item 16, it revealed that 35 (10%) of the total respondents strongly disagree with the statement, 20 (5%) of the respondents disagree, 156 (42%) of the respondents agree and 144 (38%) of the respondents strongly agree that they can feel the impact of good governance through provision of safe drinking water in the state, while 20 (5%) of the total respondents were undecided. The mean of the overall score on item 16 was 3.84 while the standard deviation was 5.50 respectively.

More so, response rate on item 17 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 10 (3%) of the respondents disagree, 165 (44%) of the respondents agree and 180 (48%) of the respondents strongly agree that most boreholes are dug in strategic locations for easy assessments, while 5 (1%) of the total respondents were undecided. From the aforementioned, the avaerage (mean) and standard deviation of the overall score were 4.31 and 6.92 respectively. In addition, responses on item 18 above shows that 160 (43%) of the total respondents strongly disagree with the statement, 30 (8%) of the respondents disagree, 20 (5%) of the respondents agree and 155 (41%) of the respondents strongly agree that there are cases of waterborne disease occasioned by inadequate supply of portable water to the various communities in the state, while 10 (3%) of the total respondents were undecided. From their responses on item 18, the avaerage (mean) and standard deviation of the overall score were 3.29 and 4.05 respectively. The result of the mean was below 3.5 as opposed to the value of standard deviation. This suggests that proportionate number of the people are free from cases of waterborne diseases while handful of individuals are still having cases of waterborne disease semenating from dearth of portable water supply.

Responses on item 19 above shows that 55 (15%) of the total respondents strongly disagree with the statement, 26 (7%) of the respondents disagree, 105 (28%) of the respondents agree and 149 (39%) of the respondents strongly agree that they can easily identify boreholes and water treatment machines provided through the instrumentality of ANIDS in the state, while 40 (11%) of the total respondents were undecided. Given their responses on item 19, the mean and standard deviation of the overall score on the questionnaire item were 3.79 and 5.36 respectively.

In the same vein, item 20 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 25 (7%) of the respondents disagree, 115 (31%) of the respondents agree and 210 (56%) of the respondents strongly agree that there are massive water projects provided by ANIDS in various communities in the state, while 10 (3%) of the total respondents were undecided while the mean and standard deviation on their scores were 4.41 and 7.27 respectively.

	Response Item		SA	Α	U	SD	D	Total	Mean	SD
			5	4	3	2	1			
21	Urban mass transportation system has	No:	150	55	10	155	5	375		
	been one of the major challenges of	Os :	750	220	30	310	5	1315	3.51	4.59
	urban cities such O nitsha, Nnewi and	%	40	15	3	41	1	100		
	Awka in the State.									
22	ANIDS has improved transportation	No:	149	105	40	55	26	375		
	system in Anambra State.	Os :	745	420	120	110	26	1421	3.79	5.36
	-	%	39	28	11	15	7	100		
23	ANIDS has significantly provided	No:	155	20	10	160	30	375		
	busses to facilitate means of	Os :	775	80	30	320	30	1235	3.29	4.05
	transportation and business activities	%	41	5	3	43	8	100		
	in the state									
24	The people enjoy considerabl y	No:	175	145	15	15	25	375		
	reduced cost of transportation in	Os :	875	580	116	30	25	1626	4.34	3.79
	shipping their agricultural yields to	%	47	39	4	4	7	100		
	urban cities in the state.									
25	Improved transportation system is a	No:	150	55	10	155	5	375		
	key that drive socio -economic	Os :	750	220	30	310	5	1315	3.51	4.59
	activities in the state.	%	40	15	3	41	1	100		
26	Dearth of improved transportation	No:	175	145	15	15	25	375		
	system has a multiplier effect on the	Os :	875	580	116	30	25	1626	4.34	3.79
	price of goods and services in the state.	%	47	39	4	4	7	100		

# Table 4: Response rates on the extent to which ANIDS has reduced transportation problems of the major cities in Anambra State.

# Source: Field Survey (2015)

Response rate on questionnaire item 21 in Table 4 above shows that 155 (41%) of the total respondents strongly disagree with the statement, 5 (1%) of the respondents disagree, 55 (15%) of the respondents agree and 150 (40%) of the respondents strongly agree that urban mass transportation system has been one of the major challenges of urban cities such as, Onitsha, Nnewi and Awka in the State, while 10 (3%) of the total respondents were undecided. The mean and standard deviation of the overall score on the questionnaire item were 3.51 and 4.59 respectively. The results of the mean and standard deviation affirmed that transportation system heretofore has been one of the major issues/challenges of urban cities in anambra State.

In responding to questionnaire item 22, it shows that 55 (15%) of the total respondents strongly

disagree with the statement, 26(7%) of the respondents disagree, 105(28%) of the respondents agree and 149(39%) of the respondents strongly agree that ANIDS has improved transportation system in Anambra State, while 40(11%) of the total respondents were undecided. The mean of the overall score on item 22 was 3.79, while the standard deviation was 5.36.

More so, response rate on item 23 above shows that 160 (43%) representing proportionate number of the respondents strongly disagree with the statement, 30 (8%) of the respondents disagree, 20 (5%) of the respondents agree and 155 (41%) of the respondents strongly agree that ANIDS has significantly provided busses to facilitate means of transportation and business activities in the state, while 10 (3%) of the total respondents were undecided. From table 9 and item 23 above, the avaerage (mean) and standard deviation of the overall score are 3.29 and 4.05 respectively. The results of the mean suggested that ANIDS has provided busses to facilitate businesses in some cities but not all the major cities in Anambra State. The same was supported by the overall score of the standard deviation of 4.05 which shows significant deviation from the mean.

In addition, responses on item 24 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 25(7%) of them disagree, 145 (39%) of the respondents agree and 175 (47%) of the total respondents strongly agree that people enjoy considerably reduced cost of transportation in shipping their agricultural yields to urban cities in the state, while 15 (4%) of the total respondents were undecided. From their responses on item 24, the avaerage (mean) and standard deviation of the overall score are 4.34 and 3.79, respectively. The mean and standard deviation results dovetailed with their responses.

Responses on item 25 above shows that 155 (41%) of the total respondents strongly disagree with the statement, 5 (1%) of the respondents disagree, 55 (15%) of the respondents agree and 150 (40%) of the respondents strongly agree that improved transportation system is a key that drives socio-economic activities in the state, while 10 (3%) of the total respondents were undecided. Given their responses on item 25, the mean and standard deviation of the overall score on the questionnaire item were 3.51 and 4.51 respectively. These results are consistent and supportive of their responses indicating the imperativeness of improved transportation system as quintessential for socio-economic activities in the state.

Item 26 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 25 (7%) of the respondents disagree, 145 (39%) of the respondents agree and 175 (47%) of the respondents strongly agree that dearth of improved transportation system has a multiplier effect on the price of goods and services in the state, while 15 (4%) of the total respondents were undecided while the mean and standard deviation on their scores were 4.34 and 3.79. These results equally emphasize the need for ANIDS to improve on their service provider-mechanisms in improving transportation system since it has a direct multiplier effect on the prices of goods and services in the area.

#### **Test of Hypotheses**

The test of hypotheses was conducted using the sums of responses in tables 1-4, respectively. For hypothesis one, questions 2-4 and 7-8 were loaded and summed to generate two data distribution for massive expansion of roads as (X) and ANIDS objective of poverty reduction as (Y). For hypothesis two, responses on questions 9-11 and 12-14 were also collated and loaded for the generation of two data distribution for ANIDs contributions on infrastructural development as (X) and rehabilitation of primary/secondary schools in Anambra State as (Y), while responses on questions 15-17 and 19-20 were also scaled for testing hypothesis three and for hypothesis four, responses on questions 21-23 and 24-26 were summed to generate two data distribution for ANIDS provision of busses in the urban cities as (X)

and conveyance of products at reduced transportation costs as (Y).

The hypotheses were tested using the following procedures:

Step 1: State the research problem

Step 2: State the assumptions

Step 3: Statement of the hypothesis

$$H_{0:} = 0$$

 $H_A$ :  $\neq 0$ 

Step 4: Data and computation of r,  $r^2$  and  $t_e$ .

Step 5: Decision Rule: Test of hypotheses was succinctly based on 95% level of confidence. In the test, if the calculated t-value was greater than the positive critical t-value or less than the negative critical t-value, the study would reject the null hypothesis and accept the alternate hypothesis, but if the calculated t-value was less than the positive critical t-value or greater than the negative critical t-value, the null hypothesis would be accepted and the alternate rejected. This, however, is premised under n-2 degree of freedom (2-tailed), the positive critical t-value was 1.96 and the negative critical t-value was -1.96, respectively. Step 6: Decision

Step 7: Interpretation

### **Test of Hypothesis 1:**

Step 1: Research Problem

To what extent has ANIDS achieved her objective of poverty reduction through massive expansion of rural roads in Anambra State?

Step 2: Assumptions:

The test of this hypothesis is based on the assumption that (i) the sampling distributions are normal, and (ii) the sampling distribution are independent.

Step 3: Statement of Hypothesis:

- H<sub>o1</sub>: ANIDS has not achieved her objective of poverty reduction through massive expansion of rural roads in Anambra State.
- $H_{a1}$ : ANIDS has achieved her objective of poverty reduction through massive expansion of rural roads in Anambra State.

Step 4: Data and computation.

No	$\Sigma X$	$\sum Y$	Σ XY	$^{2}\Sigma X$	$\sum Y^2$	
375	1393	1244	4713	5560	4530	

 Table 15: Test of Hypothesis 1: Summary of Data Derived from Appendix 2.

# Source: Field survey, 2015.

Table 15 shows the summary of independent variable (X) and dependent variable (Y) computations needed to test hypothesis 1, as shown in Table 10. Details of the data used in these computations are presented in Appendix 1 of this thesis. From Table 10 above, number of respondents = 375,  $\Sigma X = 1393$ ,  $\Sigma Y = 1244$ ,  $\Sigma XY = 4713$ ,  $\Sigma X^2 = 5560$ , and  $\Sigma Y^2 = 4530$ , respectively.

r = 0.23

Coefficient of determination  $(r^2) = 0.0529$ 

Computation of t-value:

$$t_{c} = r \sqrt{n-2} \sqrt{1-r^{2}}$$

$$t_{c} = 0.23 \sqrt{375-2} \sqrt{1-0.0529}$$

$$t_{c} = 4.56$$

For hypothesis One: r = 0.23,  $r^2 = 0.0529$  and  $t_c = 4.56$ 

# **Step 5: Decision Rule:**

At 0.05 level of significance and degree of freedom, reject  $H_{o}$  if the computed t-value is greater than the critical t-value or is less than the negative critical t-value.



**Figure 1**: Normal Distribution Curve showing Rejection and Acceptance Decision Regions for Hypothesis 1.

### Step 6: Decision:

At 0.05 level of significance and degree of freedom, the calculated t-value of 4.56 is greater than the critical t-value of 1.96, so the study rejects the null hypothesis that ANIDS has not achieved her objective of poverty reduction through massive expansion of rural roads in Anambra State and accept the alternate hypothesis that ANIDS has achieved her objective of poverty reduction through massive expansion of rural roads in Anambra State.

#### **Step 7: Interpretation**

Given the result on the coefficient of determination ( $r^2 = 0.0529$ ) which shows 0.0 53% extent by which ANIDS has reduced poverty through massive rural road expansion in Anambra State. The same was also affirmed given the correlation result of 0.23, though weak, suggesting a positive and significant relationship between massive expansion of roads and poverty reduction in Anambra State. However, aligning from the aforementioned, ANIDS has done relatively well to certain extent but the correlation result of 0.23 (weak) showed that her objective of poverty reduction through massive rural road expansion has not been optimally achieved.

# Test of Hypothesis Two:

#### Step 1: Research Problem

To what extent has ANIDS contributed in the rehabilitation dilapidated of primary and secondary schools in Anambra State?

Step 2: Assumptions:

The test of this hypothesis is based on the assumption that (i) the sampling distributions are normal, and (ii) the sampling distribution is independent.

Step 3: Statement of Hypothesis:

- $H_{02}$ : ANIDS has not to greater level contributed to rehabilitation of dilapidated primary and secondary schools in Anambra State.
- H<sub>a2</sub>: ANIDS has to greater level contributed to rehabilitation of dilapidated primary and secondary schools in Anambra State.

Step 4: Data and computation.

Table 16: Test of Hypothesis two: Summary of Data Derived from Appendix 3.

No	$\sum X$	$\sum Y$	$\sum XY$	$^{2}\Sigma X$	$\sum Y^2$	
375	1828	1556	8347	10230	7228	

# Source: Field survey, 2015.

Table 16 shows the summary of independent variable (X) and dependent variable (Y) computations needed to test hypothesis 2, as shown in Table 11. Details of the data used in these computations are presented in Appendix 2 of this thesis. From Table 11 above, number of respondents = 375,  $\Sigma X = 1828$ ,  $\Sigma Y = 1556$ ,  $\Sigma XY = 8347$ ,  $\Sigma X^2 = 10230$ , and  $\Sigma Y^2 = 7228$ , respectively.

Coefficient of determination  $(r^2) = 0.05776$ 

Computation of t-value:

 $t_{c} = r \sqrt{n-2}$   $t_{c} = 0.76$   $\sqrt{1-n^{2}}$   $t_{c} = 0.76$   $\sqrt{1-0.05776}$   $\sqrt{375-2}$  22.58

For hypothesis two: r = 0.76,  $r^2 = 0.05776$  and  $t_c = 22.58$ 

### **Step 5: Decision Rule:**

At 0.05 level of significance and degree of freedom, reject  $H_{0}$  if the computed t-value is greater than the critical t-value or is less than the negative critical t-value.



**Figure 2**: Normal Distribution Curve showing Rejection and Acceptance Decision Regions for Hypothesis 2.

# Step 6: Decision:

At 0.05 level of significance and degree of freedom, the calculated t-value of 22.58 is greater than the critical t-value of 1.96, so the study rejects the null hypothesis that ANIDS has not to greater level contributed to rehabilitation of dilapidated primary and secondary schools in Anambra State and accept the alternate hypothesis that ANIDS has to greater level contributed to the rehabilitation of dilapidated primary and secondary schools in Anambra State.

# **Step 7: Interpretation**

ANIDS has contributed 58% significantly to the rehabilitation of dilapidated primary and secondary schools in Anambra State. This result was also supported by the correlation coefficient of r=0.76 (strong) which implies a significant positive relationship between ANIDS contributions on infrastructural development on rehabilitation of dilapidated primary and secondary in Anambra State.

# 4.4.3 Test of Hypothesis Three:

Step 1: Research Problem

To what extent has ANIDS improved access to safe drinking water and general standard of living of people in Anambra State?

Step 2: Assumptions:

The test of this hypothesis is based on the assumption that (i) the sampling distributions are normal, and (ii) the sampling distribution is independent.

Step 3: Statement of Hypothesis:

 $H_{03}$ : ANIDS has not significantly improved access to safe drinking water for people in Anambra State.

 $H_{a3}$ : ANIDS has significantly improved access to safe drinking water for people in Anambra State.

Step 4: Data and computation.

Т	able 17: Tes	st of Hyp	oth esis 3: Sum	mary of Data	Derived from	Appendix 4.	
	No	$\sum X$	$\sum Y$	$\sum XY$	$^{2}\Sigma X$	$\sum Y^2$	
	375	1583	1364	6235	7600	5622	

# Source: Field survey, 2015.

Table 17 shows the summary of independent variable (X) and dependent variable (Y) computations needed to test hypothesis 3, as shown in Table 12. Details of the data used in these computations are presented in Appendix 4. From Table 12 above, number of respondents = 375,  $\Sigma X = 1583$ ,  $\Sigma Y = 1364$ ,  $\Sigma XY = 6235$ ,  $\Sigma X^2 = 7600$ , and  $\Sigma Y^2 = 5622$ , respectively.

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r = 0.61

Coefficient of determination  $(r^2) = 0.3721$ 

Computation of t-value:

$$t_{c} = r \sqrt{n-2} \sqrt{1-r^{2}}$$

$$t_{c} = 0.61 \sqrt{375-2} \sqrt{1-0.3721}$$

$$t_c = 14.87$$

For hypothesis three: r = 0.61,  $r^2 = 0.3721$  and  $t_c = 14.87$ 

# **Step 5: Decision Rule:**

At 0.05 level of significance and degree of freedom, reject  $H_{0,i}$  if the computed t-value is greater than the critical t-value or is less than the negative critical t-value.

**Figure 3**: Normal Distribution Curve showing Rejection and Acceptance Decision Regions for Hypothesis 3.



# Step 6: Decision:

At 0.05 level of significance and degree of freedom, the calculated t-value of 14.87 is greater than the critical t-value of 1.96, as a result, the study rejects the null hypothesis that ANIDS has not significantly improved access to safe drinking water for people in Anambra State and accept the alternate hypothesis that ANIDS has significantly improved access to safe drinking water for people in Anambra State.

# **Step 7: Interpretation**

ANIDS has improved access to safe drinking water for people in Anambra State by 37% significantly. This also was supported by the correlation coefficient of r=0.61 (above average) indicating a significant positive relationship between ANIDS supplies of basic amenities and improved access to safe drinking water for people in Anambra State.

# **Test of Hypothesis Four:**

Step 1: Research Problem To what extent has ANIDS impacted on transportation in major cities in Anambra?

# **Step 2: Assumptions:**

The test of this hypothesis is based on the assumption that (i) the sampling distributions are normal, and (ii) the sampling distribution is independent.

Step 3: Statement of Hypothesis:

 $H_{04}$ : ANIDS has not reduced transportation problems in the major cities of Anambra State.

 $H_{a4}$ : ANIDS has reduced transportation problems in the major cities of Anambra State.

Step 4: Data and computation.

	• =					
No	$\sum X$	$\sum Y$	$\sum XY$	$^{2}\Sigma X$	$\sum Y^2$	
375	1358	1241	4587	5344	4535	

# Source: Field survey, 2015.

Table 18 shows the summary of independent variable (X) and dependent variable (Y) computations needed to test hypothesis 4, as shown in Table 13. Details of the data used in these computations are presented in Appendix 5. From Table 13 above, number of respondents = 375,  $\Sigma X = 1358$ ,  $\Sigma Y = 1241$ ,  $\Sigma XY = 4587$ ,  $\Sigma X^2 = 5344$ , and  $\Sigma Y^2 = 4535$ , respectively.

$$r = 0.22$$

Coefficient of determination  $(r^2) = 0.0484$ 

Computation of t-value:

$$t_{c} = r \sqrt{\frac{n-2}{\sqrt{1-r^{2}}}}$$
  
 $t_{c} = 0.22$   
 $\sqrt{\frac{375-2}{\sqrt{1-0.0484}}}$ 

$$t_c = 4.36$$

For hypothesis four: r = 0.22,  $r^2 = 0.0484$  and  $t_c = 4.36$ .

# **Step 5: Decision Rule:**

At 0.05 level of significance and degree of freedom, reject  $H_{o}$  if the computed t-value is greater than the critical t-value or is less than the negative critical t-value.



**Figure 4**: Normal Distribution Curve showing Rejection and Acceptance Decision Regions for Hypothesis 4.

### **Step 6: Decision:**

At 0.05 level of significance and degree of freedom, the calculated t-value of 4.36 is greater than the critical t-value of 1.96, therefore, the study rejects the null hypothesis that ANIDS has not reduced transportation problems in the major cities of Anambra State and accept the alternate hypothesis that ANIDS has reduced transportation problems in the major cities of Anambra State.

### **Step 7: Interpretation**

ANIDS has reduced transportation problems in the major cities by 0.049% significantly. This was confirmed by the correlation coefficient of r=0.22, very weak, indicating the extent of their relationship. However, the implication of the result is that the extent at which ANIDS has reduced transportation problems is quite insignificant given the result of the coefficient of determination  $r^2$ =0.049%.

### **Discussion of Findings**

The study was designed to explore the impact of Anambra Integrated Development Strategy (ANIDS) on the provision of infrastructure facilities in Anambra State. In an attempt to achieve the objective of this study, four hundred (400) copies of questionnaire were administered on the respondents, out of which, three hundred and seventy five (375) copies of the questionnaire were returned, and subsequently used for the analysis.

In an attempt to facilitate the discussion of this study, it is expedient to re-state the specific objectives in order to guide the discussion accordingly. The first objective was to determine the extent to which

ANIDS has reduced poverty through massive rural road expansion in Anambra State. To achieve the stated objective, it was further transformed to testable null hypothesis. A preliminary diagnosis was conducted to ascertain the degree of sampling adequacy, construct validation of the loaded scale and reliability analysis using the Cronbach's alpha. The Bartlett Test of Sphericity of ( $\chi^2$  352.075, p<0.050) and the Kaiser-Meyer-Olkin measure of sampling adequacy was also greater than 0.5 (KMO = 0.675), which showed that the loaded instruments for the stated hypothesis were appropriate. Conversely, there was a high communality across the corresponding component scale. The internal validity was conducted to measure construct validity of the instrument using Principal Component Factor Analysis.

As indicated from above, the used response data on massive expansion of rural roads and objective of poverty reduction as drawn from table 6, items 2-4 and items 7-8, respectively. Their respective scales were extracted, sum up, and correlated. The result of the correlation coefficient between massive expansion of rural roads and objective of poverty reduction of ANIDS has weak correlation (r = -0.23;  $r^2 =$ 0.0529; n = 375). This implies that there is still need for ANIDS to adequately expand more rural roads to have optimally reduced poverty in the area. The result of the coefficient of determination  $(r^2)$  was 0.0529. This shows 0.053% extent to which ANIDS has reduced poverty through massive rural roads expansion in Anambra State. Furthermore, a change in the level of massive rural roads expansion, will lead to significant increase of 0.053% on poverty reduction in Anambra State. More so, the calculated t-value of 4.56 was greater than the critical t-value of 1.96, as a result, the null hypothesis was rejected, hence accepted the alternate hypothesis. This result is consistent with the findings of Edeh, Nwakamma and Ugba (2017) who found that poor condition of life in the Nigerian rural areas is as a result of inadequate national provision of socio-infrastructure facilities. Emma and Chijindu (2013), also noted that despite budgetary allocations to the state, Anambra State still has a long way to go in terms of meeting the demands and expectations of its citizenry as infrastructure facilities are not adequately provided. The implication of the above finding is that there is still more to do in terms of provision of construction and re-construction of rural roads in the state as this singular infrastructure (road) that facilitate agricultural activities and by extension poverty reduction in the state is not adequate.

The second objective was to ascertain the level to which ANIDS has contributed in the rehabilitation of dilapidated primary and secondary schools in Anambra State. In achieving this objective, questionnaire items in table 7, items 9-11 were collated and loaded as a measuring construct of ANIDS contributions on infrastructural development and responses on table 7, items 12-14 were equally collected to measure rehabilitation of dilapidated primary and secondary schools in Anambra State. The component factor analysis via varimax rotation shown a Bartlett Test of Sphericity of ( $\chi 2$  339.681, p<0.050). This, however, shows that the construct components of questionnaire items collected and scaled were appropriate. More so, Kaiser-Meyer-Olkin measure of sampling adequacy was also greater than 0.5 (KMO, 0.643).

The result of the correlation between ANIDS contributions on infrastructural development and rehabilitation of dilapidated primary and secondary schools was positive and significant (above average) (r=0.76,  $r^2=0.5776$ , n=375). This implies that there is a significant positive relationship between ANIDS contributions on infrastructural development and rehabilitation of dilapidated primary and secondary schools in Anambra State. The result of the coefficient of determination ( $r^2$ ) was 0.5776. It implies that ANIDS contributions on infrastructural development will result to 58% level of rehabilitation of dilapidated primary and secondary schools in Anambra State. This result shows that ANIDS has done relatively well in the rehabilitation of both primary and secondary schools in Anambra State. Also, the calculated t-value of 22.58 was greater than the critical t-value of 1.96, as a result, the null hypothesis was rejected, hence accepted the alternate hypothesis. This result is in congruence with the findings of Oguzor (2011) who found that a significant presence of socio-infrastructural facilities such as electricity,

education and health facilities can enhance economic activities. This finding is also consistent with the highlights of the educational sector of ANIDS programme 2012. It revealed that:

- 1. As at 2011, the Anambra State Agency for Adult and Non-Formal Education (ANFB) had 238 centres, 26,340 student learners and 625 facilitators. However, between 2011 and 2013, there were therefore additional 37 ANFE centres with the student-learner enrolment increase of 2,225 and so more facilitators. Within the period under review, Anambra State Agency for Adult and Non-formal Education (ANFE) had 285 centres with 705 facilitators. There were 28,965 adult-student learners spread across the six educational zones of the state.
- Prior to 2011, the state had 11 Technical and Vocational Education Centres. This figure increased to 16 in 2013. Also out of a total of nineteen (19) technical subjects/skills or trades taught in these, 8 were accredited by NBTE. During the period under review, total enrolment in Technical and Vocational Educational Colleges in the state increased from 1346 (170 males and 1176 females) in 2011 to 474 (2794 males and 1947 females) in 2013.
- 3. In an effort to improve students' performance in schools, the state government returned 1000 primary and 38 secondary schools to their original owners (with supporting grant of N20,000,000.00 to each school) for proper management.
- 4. Rehabilitation of one hundred and seventy four (174) out of 253 libraries.
- 5. Distribution of over 200 14-seater buses to public and private secondary schools' and teachers' movement among others.

The implication of the above result is the efficient performance of students witnessed within the period under review. This has to be sustained through enhanced quality of teaching and learning otherwise, the problem of educational development may persist.

The objective three was to verify the extent to which ANIDS has improved access to safe drinking water for people of Anambra State. In an attempt to establish the measuring construct of ANIDS supply of basic amenities, response data on table 8, items 15-17 were collected, and loaded while responses in table 8, items 19-20 were also collected, summed and scaled to measure the level of access to safe drinking water for the people in Anambra State. The Bartlett Test of Sphericity was significant ( $\chi^2$  439.681, p < 0.050). Kaiser-Meyer-Olkin measure of sampling adequacy was also greater than 0.5 (KMO, 0.619). This affirms that the measuring scale was appropriate in measuring ANIDS supply of basic amenities and improved access to water supply in the area.

The result of hypothesis three shows that there is a significant positive relationship between ANIDS supply of basic amenities and improved access to safe drinking water. This was shown by the result of the correlation coefficient (r = 0.61,  $r^2 = 0.3721$ , n = 375). The result of the coefficient of determination was 0.3721. This implies that a change in ANIDS level of supply of basic amenities, will contributes to a significant increase of 37% access to safe drinking water for the people in Anambra State. This result also agrees with the findings of Salisu (2016), who found that the provision of infrastructure was far below what is required for the country to attain the desired national development.

The implication of the above is that there is need for government to meet the daily requirements of water for her citizens. Government inability to resolve water issues has resulted to incessant cases of water borne diseases such as cholera, typhoid fever, among others. These diseases often result to preventable death. Onus therefore lies on stakeholders to address water problems in the state.

Objective four was to determine the extent to which ANIDS has reduced transportation problems of the major cities in Anambra State. In a bid to achieve objective four, questionnaire items in table 9, items 21-23 and 24-26 were collated and also loaded as a measuring construct of ANIDS provision of busses in the urban cities and conveyance of products at reduced transportation cost. The component factor analysis via varimax rotation shown a Bartlett Test of Sphericity of ( $\chi^2$  352.681, p<0.050). This, however, shows that the construct components of questionnaire items collected and scaled were appropriate. More so, Kaiser-Meyer-Olkin measure of sampling adequacy was also greater than 0.5 (KMO, 0.623). This implies that the suitability and adequacy of the research instrument was appropriate since Kaiser-Meyer-Olkin was greater than 0.5. More so, construct validity for the loaded scale were also fit for testing hypothesis four. The Bartlett Test of Sphericity of ( $\chi^2$  452.681, p<0.050) was significant, indicating appropriateness in measuring the construct validity of the instrument.

Having established this, the result on hypothesis four showed a significant positive (weak) relationship between ANIDS provision of busses in the urban cities and reduced transportation cost in Anambra State (r= 0.22,  $r^2=0.0484$  n=375). The weak correlation of the coefficient suggests that more busses are required to have significant effect on the people especially in the conveyance of their agricultural yields from rural to urban cities. The result of the coefficient of determination was 0.0484, suggesting that, the more and more ANIDS procure more busses, it will contribute significantly to .048% on conveyance of products at reduced transportation cost. This result is also consistent with the findings of Emma and Chukwujindu (2013) as they found poor implementation as a debilitating factor that impaired the provision of infrastructural facilities in Anambra State.

The implication of the above is that a lot needs to be done in the area of transportation in the major cities of the state. Failure to do so has some consequences which include slow pace of commercial activities in the state.

#### **Conclusion and Recommendations**

Under Governor Peter Obi, the Anambra State policy thrust was the Anambra State Integrated Development Strategies (ANIDS). ANIDS started with the identification of needs and gaps in various sectors of the state economy, and simultaneously focused on diverse aspects of development. There has been concerted effort in this study to ascertain the impact of ANIDS on provision of infrastructure facilities in Anambra State. Specifically, the study considered basic infrastructures such as rural roads, rehabilitation of primary and secondary schools, access to safe drinking water and transportation infrastructure. Attempt was made to determine the nexus between these infrastructures and the general standard of living of the people. Some previous state development programmes in Nigeria including Anambra State were reviewed to include Operation Feed the Nation (OFN); The Universal Basic Education Scheme (UPE); Agricultural Development Programmes (ADPs); the Low Cost Housing Scheme; Rural Water Supply Schemes; the National Accelerated Food Production Programme (NAFPP); to mention just few. The study concludes that ANIDS made some useful impact in some areas such as rehabilitation of some primary and secondary schools in the state; provision of pipe borne water through micro water projects in the 177 communities of the state but failed in her major objective of poverty reduction through massive expansion of rural roads. The general impression of the study is that although ANIDS performed well in some areas such as education, the development strategy did not achieve much in terms of provision of infrastructure facilities to drive development of the state.

From the findings and conclusion drawn, the following recommendations are made:

1. Anambra State Government through the management of Anambra State Integrated Development

Strategy (ANIDS) should pay adequate attention to issues relating to the provision of infrastructure facilities especially on the massive rural road expansion because of its potentiality of driving socioeconomic activities in the area. Access to good road-network would enable the conveyance of agricultural products from their farm locations to commercial cities in the state, such as Onitsha, Nnewi, and Awka to market their products, which in turn, enhances the economic well-being of the people in Anambra State.

- 2. The Anambra State government should take effective measure to improve on the perceived value of standard of education by adequately rehabilitating some of the dilapidated primary and secondary schools building in the State. From the findings, ANIDS has done relatively well in the rehabilitation of some schools within the commercial cities of the state as opposed to some schools in the rural areas. There is need for ANIDS and future development programmes to direct their attention specifically to the rehabilitation of those dilapidated primary and secondary schools in the rural areas.
- 3. ANIDS should adequately provide mass transit busses that would be plying virtually all the rural route into the commercial cities of the state for easy flow of economic activities. This is imperative because there is unprecedented influx of people into the cities as commercial hubs in the State.
- 4. In order to meet the daily water needs of the people, government and relevant stakeholders in the state should complement the efforts of ANIDS by providing pipe borne water to reduce the number of cases of cholera and other water borne diseases especially in the rural areas.

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