Impact Analysis Of Poverty Intervention Schemes In Nigeria Using Delta State Recipients: The Challenge Of Proffering Long-Term Solutions

Eko-Raphaels, Melvin Urhoromu*[1], Enaruna, Dubem Victor[1], Aruwei, Porwekobowei[1], Ajiboye, Araoye Olarinkoye[2] & Apinoko, Raphael[3]

[1]Department of Maritime Economics and Finance, Nigeria Maritime University, Okerenkoko, Delta State.

[2]Department of Logistics and Transport, Federal University of Technology, Minna, Niger State, Nigeria.

[3]University of Port Harcourt, Choba, Rivers State, Nigeria.
Correspondence: aruweiporwe@yahoo.com

ABSTRACT
The study examined the Impact of Poverty Intervention Schemes in Nigeria, using Delta State Recipients, with a view to proffering Long-term Solutions. The study used the N-power and GEEP Recipients as its Sample. Radius and Kernel Matching Technique based on Propensity Score of Micro-Econometric Framework was used to analyse the Primary Data gathered through Interview and Observation to establish counterfactual for Recipients. The fundamental evaluation problem of selection bias was also treated. The Findings show the Significance of the Programme on the Income levels of Recipients, but with minimum Impact on their General Living Conditions. The Study is timely, considering the turnover of Policies in that regard and conclude that the Federal Government of Nigeria Poverty Invention Schemes are Ineffective, Short lived and cannot fast track Economic Growth. The Delivery Methodology should be tailored after their Operational Strategy and target at Recipients Poverty. Commercial Objectives should be differentiated from Poverty targeting. Appropriate Feedback mechanism should be built into the Schemes to encourage Impact Evaluation, thereby, providing relevant Inputs for the formulation of effective National Poverty Reduction Policy. The need to harmonize the numerous Schemes for proper coordination to ensure transparency and build confidence among Citizens.
Keywords: Poverty intervention scheme, National poverty reduction policy, Living conditions, Income levels.

INTRODUCTION
Poverty is a Hydra-headed Macroeconomic continuum defiling several Treatments. Many studies on poverty and its mitigation have been conducted in the past like; Abdullahi, (2008), Anyebe, (2015) and Eko-Raphaels & Aruwei, (2021), but recommendations appear ineffective or somehow neglected. The need to fully analyse the impact of newly introduced schemes on recipients in recent times becomes imperative. The growing need to extend financial freedom to the Able Poor and Vulnerable in the Society to enable them realize Legitimate Economic Diversification to survive and improve their Economic Goals cannot be overstated. Several Schemes have been advance by the Government to provide the well sort after financial relief to this Target Group, but were characterized by problems such as Corruption, Bias

Allocation, high Default Rates, Poor Implementation and Fragile Policy support (Eko-Raphaels & Osadume, 2020).

Poverty and corresponding Inequality induced by Unemployment have been a long existed Macroeconomic Cancer slowly responding to myriads of Economic Treatments Globally. Worst hit are the Developing Countries, Nigeria inclusive. Efforts to reduce this phenomenon to an acceptable limit become imperative for its negative impact on the lives of Nigerians. There has been an increasing interest by the Federal Government of Nigeria since the inception of the President Muhammadu Buhari led Regime in 2015, towards extending support to Young Graduates, Entrepreneurs, Artisans, Traders and other select Groups. Despite these efforts, Nigeria like India ranks amongst the Nations with high Poverty rating. It is expected that these Supports would facilitate the Production and Consumption of Goods and Services by the Poor in the Society, in the face of uncertainty and exit the Poverty trap. Human Capital Development access such as Healthcare Services, good Education, Land, Credit facilities etc. to the Poor have been a major struggle. Also, Population and Economic Growth Rates are at variance, leaving a Gap to be filled by Poverty. With a Population of over 200Million People and rapidly growing, Nigeria ranks as the most populous Nation with people of Brown Chocolate Colour in the African Continent, happy, despite several Economic challenges and remain very energetic amidst Disease and Hunger (Eko-Raphaels & Aruwei, 2021; Okon & Thompson, 2019; Nwosu, 2007). Of this Population, over 60 percent mainly comprising of her Youths are trapped in the net of unexplained Unemployment, Poverty and Inequality due to poorly conceive Economic Policies and their Implementation by successive Governments. This figure may have 91 million Nigerians trapped in Poverty by the year, 2023 according to the World Bank estimate. As noted by Shodare & Tunde (2012), Economists world over are yet to converge on an agreeable causes and cure for Unemployment. The Classical view was that Unemployment was at Will and Natural Market Forces could cause Equilibrium. The Neo-Classical opines that a Natural Rate of Unemployment exist, characterized by a given Rate of Technology, Culture, Endowments and Specific Preferences. With flexible Wages in a Competitive Labour Market, Wages adjust to steer the Market and any Unemployment that remains is at will. The Keynesian explanation is that Enterprises absorb too little Labour because of poor Aggregate Consumption. The Neo-classical Theory was held by Milton Friedman and strongly influenced Governments' Policies in the later part of the Twentieth Century, but with little success. In essence, no simple explanation can be canvassed for Problems and Solutions to Unemployment, Poverty and Inequality.

Poverty defines a state of Hopelessness, the inability to meet one`s Socio-Economic Needs and heavy reliance on Others for survival with its attendant humiliating and painful effects (Okon & Thompson, 2019; World Bank, 2000).

Several Regimes in Nigeria from Military to Date have launched one form of Poverty Intervention Scheme or the other. In fact, the Country is not lacking in Schemes, but worrisome are their Methods and questionable Impact on the Lives of Recipients. The Public has perceived these Schemes as Ineffective and Avenue to enrich People in the helms of affairs in Government and their influential Cronies. Accordingly, (Kpelai 2013) notes that 50 percent of Nigerians are in Poverty and sustaining as a dynasty, where Poverty is Intra and Inter-generational due to the expanding Gap in access to Human Capital Development facilities.

As earlier stated, several Schemes have been put in place by pasts and present Government namely Operation Feed the Nation (OFN) in 1978, Green Revolution (GR) in 1982, Better Life for Rural Women (BLP) in 1985, Directorate of Food, Roads and Rural Infrastructure (DFRRI), Family Economic Advancement Programme (FEAP), National Poverty Eradication Programme (NAPEP), National Directorate of Employment (NDE), Poverty Alleviation programme (PAP) and recently, The Government Enterprises and Empowerment Programme (GEEP), comprising *TraderMoni; FarmerMoni* and *ArtisanMoni*, Conditional Cash Transfer, Covid-19 Intervention for MSMES, 774 Local Government Special Works, Young Graduates Employment Programme (YAGEP), N-Power for Graduates, National Youth Investment Fund (NYIF) etc. A key enquiry is how justifiable are these Schemes and how far they have impacted on the Recipients.

Theoretical Framework
The Resource-Based Entrepreneurship Theory by Alvarez and Buseritz (2001). Emphasizes that access to Resources by Entrepreneurs is a Catalyst for Opportunity-based Entrepreneurship and new Venture Growth. Accordingly, (Davidson & Honing, 2003; Aldrich, 1999) emphasized the Theory indicates the imperatives of Financial, Social and Human Resources and concludes that access to Resources boost the capacity of Individual to see and Action on Opportunities. The Meta-Theory of Empowerment by Elisheva Sadan, posits Poverty Reduction as a process of Transition from a State of Disadvantage to relative control over one`s Destiny. Anyebe (2015) also added that, empowerment is therefore, a Transition from a State of Worthlessness to a position of Strength. This could be at specific (Individual) or Macro (Collective) levels.

RESEARCH METHODS
Sources of Data and Description
This Study made use of Cross-section Data of Primary nature, with a Sample of a Thousand, Two Hundred and Eighty (1,280) GEEP and N-Power Recipients of Delta state extraction. The Poverty Scores were Calibrated as: Least Poor = 0 – 27, Code (1); Less Poor = 28 – 45, Code (2); Average Poor = 46 - 63, Code (3); Poor = 64 – 82, Code (4) and Poorest = 83 - 100 Code (5). High Scores are assigned to Low level Poverty Indicators. A Recipient is profiled if His or Her Poverty Score is at least 46 (i.e. Average Poor to Poorest). Thus, placement is determined by a "Proxy Means Test" (Assignment of a Score to all Recipients as a Function of observable characteristics) as often used for targeting Anti-Poverty Programmes in Developing Countries (Ravallion, 2005).

Sample Selection
The Sample was drawn from Ten (10) of the Twenty five (25) Local Government Areas (LGAs) spread across the Three (3) Senatorial Districts namely Delta North, Delta Central and Delta South of the State. The observable characteristics of interest include: Age, Sex, previous Business experience (in years), Payment Stage, Payment Type, and Location. Data were also collected on Marital Status, Education level, Primary Business and Poverty Scores. Also, as noted by Heckman, Lalonde, and smith (1999), the Data for both the Treated and Untreat Groups are from the same Population, a basic Requirement for Matching. All Variables were categorical Data, hence reflecting only the Direction of Change and not the exact Magnitude.

In addition to the Comparator, this Study also employed the Radius and Kernel Matching Techniques based on Propensity Scores to analyse the Impact of these Schemes. Propensity Score Matching (PSM) to correct for selection bias. Analysis of the characteristics of all Recipients was used to create the Control Group. To validate these Observables, we carried out a Qualitative Fieldwork of a Sample of Recipients. Hence, PMS allows Estimation of Mean Impacts without arbitrary assumptions about Functional forms and Error Distributions. This facilitates testing for the presence of potentially, complex interaction Effects.

Model Specification
For an Anti-Poverty Scheme, the Household Income or Expenditure on Consumption usually defines the Objective and normalised by a Household specific Poverty Score. Given that the Impact on Poverty is known, then set Y = 1 as the Treated Outcome and Y = 0 as the Untreated Outcome. According to Essama-Nssah, 2006; Ravallion, 2005 and Wooldridge, 2002, an Individual cannot be in both Treated and Untreated States, such that it is not possible to observe Y = 0 and Y = 1 for the same Individual thereby leading to the problem of missing Data.

To guard against the possibility of the case where the Treatment of one unit affects another`s Outcome as may be in general equilibrium effect (Heckman et al, 1998), the Sample from the Population is assumed to be independently and identically distributed. In many cases the Outcomes Y = 0 and Y = 1 are binary.

Let the Variable T be a binary Treatment Indicator, such that T = 1 implies Treated and T = 0 denotes Untreated, presuming that the Data include an Observation Y_1 for each unit 1 in a Sample of size n. The value Y_1 under Treatment is Y_1^T and Y_1^c under the counterfactual of not receiving treatment. The value (Gain) to unit, who was treated is given as:

$G_i = Y_i^T - Y_i^{C/T} = 1$ 3.1

As noted above, due to the problem of missing Data, we assume that we can only observe $T_1 Y_1^T$ for $T_i = 1$; $Y_i^c = 0$ and thus, the fundamental problem of evaluating this individual Treatment Effect arises because the observed Outcome for each individual is given by:

$Y_i = T_i Y_i^T + (1 - T_i) Y_i^C$ 3.2

The average gain, which is the Mean of all the Gs gives the Sample Mean gain for all the Treated. This is called the Average Effect on the Treated (ATET) given by:

$ATET = E(G|T=1) = E(Y^T|T=1) - E(Y^C|T=1)$ 3.3

Equation (3.3) is the Mean Impact on Poverty among Recipients. In other words, ATET is the Difference between Expected Outcome with and without Treatment for those who actually participated in Treatment. Similarly, the Average Treatment Effect on the Untreated (ATEUT) is given as:

$ATEUT = E(G|T=0) = E(Y^T|T=0) - E(Y^C|T=0)$ 3.4

The overall Mean Impact of the Scheme is the Sum of Equations (3.3) and (3.4) called the Average Treatment given by:

$Ate = E(G) = ATET + ATEUT$ 3.5

Consider X as a Vector of Covariates (observable characteristics), then interest may be on the following conditional Mean Impacts.

$ATET (X) = E(G|X, T = 1)$

$ATET (X) = E(G|X, T = 0)$

$ATE (X) = E(G|X)$

Frolic (2006), Ravallion (2005) and Wooldridge (2002) agree that the most common Method of introduction X assumes that the Y`s are linear in their Parameters and the Error terms (T and C). Hence we have Regression Equations given as:

$Y_i T = X_i \beta T +_{iT} (i = 1, ..., n)$ 3.6

$Y_i T = X_i \beta c +_{iC} (i = 1, ..., n)$...3.7

Basically in Equations (3.6) and (3.7), X is assumed to be Exogenous, hence, $E(^T|X) = E(^c|X) = 0$

The Mean Impacts are derived as:

$ATE(X) = X(\beta^T \beta c)$ 3.8

$ATET(X) = ATE(X) + E(^{TC}|X, T1)$ 3.9

$ATEUT(X) = ATE(X) + E(^{T-C}|X, T=0)$ 3.10

$D(X) = E(Y_i^T|X_i, T_i=0)$ 3.11

Equation (3.11) can be estimated by the difference in the corresponding Sample Means or equivalently by the Ordinary Least Squares (OLS) Regression Coefficient of Y and T. For the Parametric Model with controls, Equation (3.6) can be estimated on the Sample of Treated while Equation (3.7) on the rest of the Sample, therefore resulting in the following estimable Model.

$Y_i^T = X_i \beta^T + T_i f T_i = 1$ 3.12

$Y_i^c = X_i \beta^C +_i{}^C if T_i = 0$ 3.13

Ravallion (2005) explains that the common practice is to estimate a simple "Switching" Regression for the observed Outcome measure on the Pooled Sample, leading to a "Random Coefficient" Specification. Substituting Equations (3.12) and (3.13) into the identity $Y_i = T_i Y_i^T + (1 - T_i) Y_i^C$ at Equation (3.18), then we have:

$Y_i = X_i \beta C + X_I (\beta T - \beta C) T_i + \varepsilon_i; (i = 1, ... n)$ 3.14

Where $\varepsilon_i = T_i (_i{}^T -_i{}^C) +_i{}^C$

Adopting the Common-Impact Model for which $G_i = G$, then Equation (3.14) becomes a Regression of Y and T and X given by:

$Y_i = (\beta_0^T - \beta_0^C) T_i + X_i \beta^C + \varepsilon_i$ 3.15

Where β_0^T and β_0^C are the Intercepts in Equations (3.12) and (3.13) and $\varepsilon_i =_i{}^C$

To obtain unbiased Impact Estimates, we first consider the difference in Mean Outcome between the treated and non-treated at Equation (3.11). This can be re-written as:

$D(X) = ATE(X) + BLAS^{ATET}(X)$..3.16

Hence, the bias is:

$BLAS^{ATET}(X)=E(Y^C|X,T=1)–E(Y^C|X,T=0)$ 3.17

Also, for the Untreated, the Bias is obtained as:

$BIAS^{ATEUT}(X)=E(Y^T|X,T=1)–E(Y^T|X,T=0)$ 3.18

Then the Bias for the Average Treatment Effect is:

$BIAS^{ATE}(X)=BIAS^{ATET}(X),Pr(T=1)–BIAS^{ATEUT}(X),Pr(T=0)$ 3.19

If we assume that $BIAS^{ATET} = 0$, then OLS applied to Equation (3.15) will produce consistent Estimation.

RESULTS

Characteristics of Recipients

In terms of Gender targeting, about 83% of the Recipients are Females. This is consistent with the Government's mission of empowering Poor Clients who are locked out of Institutional Credit due to lack of Command over Land, Stocks and other forms of acceptable Collaterals.

Table 4.1: Gender Distribution of Sampled Recipients

Sex	Treated Group		Untreated Group		All Recipients	
	No. 1046	%	No. 234	%	No. 1280	%
Male	180	17.2	24	10.3	204	17.2
Female	866	82.8	210	89.7	1076	82.8

Source: Authors computation, 2022

Table 4.2: Age Distribution of Sampled Recipients

Age (years)	Treated Group		Untreated Group		All Recipients	
	No. 1046	%	No. 234	%	No. 1280	%
18-25	36	3.4	12	5.1	48	3.8
26-35	348	33.3	96	41.0	444	34.7
36-45	396	37.9	86	36.8	482	37.7
46-55	206	19.7	24	10.3	230	18.0
56-65	46	4.4	14	6.0	60	4.7
66 and above	14	1.3	2	0.9	16	1.3

Source: Authors computation, 2022

About 94% of the sampled Recipients are between 26 and 55years of Age. This Age bracket constitute the Bedrock of the economically active Population. It reflects a good targeting for the Schemes whose mission is to assist the Active Poor to build Viable and Sustainable Micro-Enterprises.

Table 4.3: Level of Education of Sampled Recipients at Registration

Education	Treated Group		Untreated Group		All Recipients	
	No. 1046	%	No. 234	%	No. 1280	%
No Education	40	3.8	10	4.3	50	3.9
Half Primary	76	7.3	8	3.4	84	6.6
Full Primary	330	31.5	58	24.8	388	30.3
Half Secondary	180	17.2	48	20.5	228	17.8
Full Secondary	392	37.5	102	43.6	494	38.6
Tertiary	28	2.7	8	3.4	36	2.8

Source: Authors computation, 2022

About 89% of Recipients have a minimum of full Primary Education. This facilitates better communication between the Authorities and Recipients. Also, it helps Recipients to quickly understand the Scheme's Philosophy and enhancing their Skills in new Business Development.

Table 4.4: Marital Status of Sampled Recipients

Marital Status	Treated Group		Untreated Group		All Recipients	
	No. 1046	%	No. 234	%	No. 1280	%
Married	834	79.7	182	77.8	1016	79.4
Living with a Companion	60	5.7	22	9.4	82	6.4
Single/never Married	52	5.0	12	5.1	64	5.0
Single/Divorced	32	3.1	10	4.3	42	3.3
Single/Widowed	68	6.5	8	4.3	42	3.3

Source: Authors computation, 2022

About 90% of the Recipients sampled have lived with a Partner or have been married. This is a good Parameter in Group Formation as only 5.0% of them had not been involved in Marital Affairs. There is implied sense of responsibilities among Recipients as the Schemes are expected to be directed towards the Well-Being of their Families.

Table 4.5: Location of Sampled Recipients

Location	Treated Group		Untreated Group		All Recipients	
	No. 1046	%	No. 234	%	No. 1280	%
Urban/Semi-Urban	624	59.7	140	59.8	764	59.7
Rural	422	40.3	94	40.2	516	40.3

Source: Authors computation, 2022

About 60% of the Recipients are in the Urban/Semi-Urban areas because of high Population density. This facilitates group formation at Low Cost. However, most Rural Poor are excluded from benefiting from such Services because of Risk-Return considerations.

Table 4.6: Previous Business Experience of Sampled Recipients

Years of previous business experience	Treated Group		Untreated Group		All Recipients	
	No. 1046	%	No. 234	%	No. 1280	%
Less than 1 year	14	1.3	8	3.4	22	1.7
1-3 years	242	23.1	60	25.6	302	23.6
4-6 years	260	24.9	98	41.9	358	28.0
7-9 years	302	28.9	44	18.8	346	27.0
10 years and above	228	21.8	124	10.3	252	19.7

Source: Authors computation, 2022

Prior knowledge of Business may be an attraction for eligibility to benefit from the Schemes. This is expected to guard against Money loss and thus ensure that Recipients use the Micro Loans for intended purpose (improving their Businesses) and thus translate to Improvement in the general Wellbeing of their Families.

Table 4.7: Payment Stage of Sampled Recipients

Payment Stage	Treated Group		Untreated Group		All Recipients	
	No. 1046	%	No. 234	%	No. 1280	%
0	0	0.0	234	100.0	234	18.3
1	0	0.0	0	0.0	0	0.0
2	476	45.5	0	0.0	476	37.2
3	74	7.1	0	0.0	74	5.8
4	154	14.7	0	0.0	154	12.0
5	102	9.8	0	0.0	102	8.0
6	56	5.4	0	0.0	56	4.4
7	80	7.6	0	0.0	80	36.3
8	66	6.3	0	0.0	66	5.2
9 and above	38	3.6	0	0.0	38	3.0

Source: Authors computation, 2022

It is evident that Members of the treated group are Recipients in their second payment stage or more while the untreated group consists of yet to receive any Payment. This enhances the construction of appropriate counterfactual.

Table 4.8: Poverty Targeting of Recipients at Registration

Poverty score	Treated group		Untreated Group		All Recipients	
	No. 1046	%	No. 234	%	No. 1280	%
Least Poor (0-27)	0	0.0	0	0.0	0	0.0
Less Poor (28-45)	20	1.9	4	1.7	24	1.9
Average Poor (45-63)	622	59.5	124	53.0	746	58.3
Poor (64-81)	380	36.3	100	42.7	480	37.5
Poorest (84-100)	24	2.3	6	2.6	30	2.3

Source: Authors computation, 2022

In consonance with Scheme's mission, the targeting tool employed enhanced the participation of the Poor. From the sampled Recipients, about 98% are considered at least to be Average Poor. This participation criterion is a major variable in using the Propensity Score Matching Methods to establish the adequacy of the untreated group.

Table 4.9: Primary Business of Recipients at Registration

Primary Business	Treated Group		Untreated Group		All Recipients	
	No. 1046	%	No. 234	%	No. 1280	%
Crop farming	122	11.7	8	3.4	130	10.2
Animal farming	16	1.5	2	0.9	18	1.4
Soap making	16	1.5	4	1.7	20	1.6
Outdoor Catering services	14	1.3	12	5.1	26	2.0
	38	3.6	16	6.8	54	4.2
Restaurant/Bar services	48	4.6	6	2.6	54	4.2
Cloth making	36	3.4	16	6.8	52	4.1
Hair Styling	56	5.4	6	2.6	62	4.8
Selling `Tokunbo` clothes	28	2.7	28	12.0	56	4.4
Selling new clubs	32	3.1	10	4.3	42	3.3
Selling Agro Crops	106	10.1	42	17.9	148	11.6
Shop for Foodstuff	136	13.0	28	12.0	164	12.8
Provision/cosmetic shop	20	1.9	4	1.7	24	1.9
Selling Livestock	46	4.4	14	6.0	60	4.7
Kiosk for Foodstuff	32	3.1	10	4.3	42	3.3
Provision/Cosmetic stand	6	0.6	2	0.9	8	0.6
Employed worker	4	0.4	2	0.9	6	0.5
Labourer	288	27.5	24	10.3	312	24.2
Farming	2	0.2	0	0.0	2	0.2
Others						

Source: Authors computation, 2022

About 60% of the sampled Recipients are high turnover Business of petty trading which is usually a pre-condition for regular repayment. These types of small Enterprises are usually supported through Micro-Loans (Pagura, 2003).

Table 4.10: Level of Poverty Reduction in Treated Group

Poverty Score	Treated group	
	No. 1046	%
Reduced by 56 points and above	8	0.8
Reduced by 46-55 points	4	0.4
Reduced by 36-45 points	26	2.5
Reduced by 26-35 points	52	5.0
Reduced by 16-25 points	26	21.6
Reduced by 1-15 points	552	52.8
No change (zero points)	128	12.2
Increased by 1-15 points	48	4.6
Increased by 16-25 points	2	0.2

Source: Authors computation, 2022

The level of Poverty reduction among the treated group indicates 82% of the Recipients noticed a reduction in their Poverty score as a result of assessing Loans from Schemes. The reduction in Poverty level cuts across the eligibility criteria: irregular Household Income, Poor Nutritional Status, unhealthy condition of dwelling place, etc. Nonetheless, 4.8% claim that their level of Poverty has worsened while about 12.2% did not notice any change in their Poverty status, reason being that the Loan amount is too small to meet their Business expansion requirements.

CONCLUSION

Impact Assessment of these Schemes became a major issue in the Development paradigm. In recent years, Studies on Impact Evaluation produced mixed Results due to Environmental peculiarities, Evaluation Method applied and Operational Methodologies by the various Researchers. Nonetheless, despite the conflicting findings, attempts are still being made to ascertain the efficacy of these schemes in delivering the desired promise of poverty reduction. Therefore, this study is part of the ongoing efforts in the application of the growing field of Micro econometrics in Impact Evaluation Programmes. The Findings in the Study used a successful delivery mechanism such as Proper Recipient Targeting, Appropriate Product Design, and Flexible Regulatory Stance as Central to Operational Methodology. In particular, the study confirmed the assertion that long and sizeable loan or grant are an important feature in achieving its poverty reduction objectives. The study therefore recommends that;

i. Delivery Methodology of these Schemes should be tailored after their individual Operational Strategy and target at Recipients.

ii. Feedback mechanism should be built into Product delivery to enable Impact Evaluation of target participants` responses.

iii. The Schemes should differentiate between Commercial Objective and Poverty targeting.

iv. As at today, the Citizens have lost Count of these Schemes, with eroding Confidence. The need to have a Poverty Alleviation Commission becomes imperative, to coordinate and harmonize the numerous Schemes. As it stands in Operation and Strategy, Corruption cannot be ruled out.

REFERENCES

Abdullahi, M. I. (2008). Social Policy and Poverty Alleviation in Gombe State (1996-2006). PhD Thesis, School of Postgraduate Studies, Ahmadu Bello University, Zaria, Nigeria.

Aldrich, H.E. (1999). *Organisations Evolving*. Sage Publications.

Alvarez, S. & Buseritz, L. (2001). The Entrepreneurship of Resource Based Theory. *Journal of Management.* 27; 755 – 775.

Anyebe, A. A. (2015). An Assessment of Poverty Eradication Programme (NAPEP) in Nigeria. *Journal of the Faculty of Economics and Administrative Sciences.* 5(1); 13 – 28.

Davidson, P. & Honing, B. (2003). The Role of Social and Human Capital among Nascent Entrepreneurs. *Journal of Business Venturing, 20;* 121.

Eko-Raphaels, M.U & Aruwei, P. (2021). Macroeconomic Effect of Unemployment, Poverty and Inequality on Entrepreneurship: The Nigeria Example (1983 – 2017). *International Journal of Maritime and Interdisciplinary Research Vol. 2*(1); 99 – 111.

Eko-Raphaels, M.U. & Osadume, R.C. (2020). Effectiveness of Microfinance Policy in Nigeria, 2010 – 2017. *Journal of Economics and Sustainable Development. Vol. 11*(2); 3 – 17.

Essama – Nssah, B. (2006). *Propensity Score Matching and Policy impact Analysis*. Poverty Reduction Group, World Bank, Washington, D.C, May.

Frolich, M. (2006). *Propensity Score Matching without Conditional Independence Assumptions with an Application to the gender wage gap in the UK*. University of St. Gallen.

Heckman, J., Ichimura, H., Smith, J & Todd, P. (1998). Characterizing Selection Bias Using Experimental data. *Econometrica , 66*(5); 1017-1098.

Heckman, J., Lalonde, R., & Smith, j. (1999). *The Economics and Econometric of Active Labour Market Programmes.* In a Handbook of labour Economics Vo1. 111. Ed. By Ashenfelter and card, D., 1865- 2097. Elsevier, Amsterdam.

Kpelai, S.T. (2013). An Assessment of National Poverty Eradication Programme on Wealth Creation in Benue state. *European Journal of Business and Management 5;* 19.

Nigeria Unemployment and Development Statistics, Q_2, 2020. *National Bureau of Statistics, NBS.@nigerianstat.*

Nwosu, I.E. (2007). *How Ethnic Groups in Nigeria has affected the Growth of the Country*. Enugu: Prime Targets Limited.

Okon, D.E. & Thomson, H.O. (2019). Poverty Reduction Programmes and its Impact on Livelihood in Nigeria: A study of N – Power Beneficiaries in Akwa –Ibom state. *Port Harcourt Journal of Social Sciences, Vol 9,* 2019; 1 – 13.

Ravallion, M. (2005). *Evaluating Anti – Poverty Programmes*. Handbook of Development Economics, 4.

Shodare, O.A. & Tunde, E.S. (2012). Graduate Unemployment in Nigeria: Causes, Effects and Remedies. *British Journal of Arts and Social Sciences, 5*(2); 142454.

Wooldridge, J.M. (2002). *Econometric Analysis of Cross Section and Panel data*. London: The MIT Press, Ambridge, Massachusetts.

World Bank, (2000). *World development Report 2000/2001: Attacking Poverty*. New York: Oxford University Press.

The Lead Author, **Melvin Urhoromu Eko-Raphaels** hold Master Degrees (MSc and MEPE) in Economics; Petroleum and Energy Economics and near completion of a PhD in Transport and Logistics Management with focus on Maritime Transport Economics and Finance. Currently a Lecturer at the Department of Maritime Economics and Finance, Nigeria Maritime University, Okerenkoko, Delta state, Nigeria. His Research interests are focused on Institutional Development, Energy, and Maritime Economics. He is a Fellow of the Institute of Management Consultants (IMC), Chartered Member Institute of Logistics and Transport (CILT), Member Chartered Institute of Transport Administrators (CIoTA), Member, Nigeria Economic Society (NES) and Lead Auditor QMS & OHSAS, International Register of Certificated Auditors (IRCA).

ORCID: http://orcid.org/ 0000-0001-9793-1108