

DETERMINANTS OF ENGAGEMENT OUTCOMES OF N-POWER AGRIPRENEURSHIP GRADUATES' SOCIAL INVESTMENT PROGRAMME IN ABIA STATE, NIGERIA

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ABSTRACT

*This study analyzed the determinants of engagement outcomes of N-power agriprenurship graduates' social investment programme in Abia State, Nigeria. Simple random sampling was used in the selection of 80 graduate beneficiaries that participated in N-power programme. Data were collected with a structured questionnaire and analyzed using descriptive (frequency counts, percentages and mean scores) and inferential (multiple regression analysis) statistics. Results show that the participants had high engagement ($\bar{X} = 2.30$) and outcomes ($\bar{X} = 3.30$) from N-power agriprenurship programme trainings. Psychological development ($\beta = 3.81^{***}$), mastery of skills ($\beta = -3.99^{***}$), positive identity ($\beta = 2.63^{**}$), civic participation ($\beta = -2.68^{**}$) and understanding needs/wants ($\beta = 2.73^{**}$) influenced engagement outcomes derived by beneficiaries of N-power agriprenurship programme trainings. The study therefore recommended the provision and creation of an enabling environment for graduates to ensure psychological balance, skill acquisition and need assistance through provision of infrastructures for effective civic engagement in the programme.*

Key words: N-power, agro-graduates, social investment programme

INTRODUCTION

Nigeria have designed and executed several self-empowerment programmes to enhance the economic empowerment of the unemployed through training on different agriprenurship skills (Gonyok, 2016; Odey and Sambe, 2019). Agriprenurship is associated with innovative and dynamic developments within the Small, Micro and Medium Enterprise sector that are agriculture-oriented (United Nations Development Programme, UNDP, 2017). Agriprenurship justifies the wealth creation activities among economies of both developing and developed countries, being one of the major catalysts for economic growth and development in every emerging economy, solution for reducing unemployment that secures and allocates the necessary skill and resources of an agriprenur (Nwofoke *et al.*, 2020; Ume *et al.* 2020). The focus of youth engagement is on ensuring that young people participate in high quality agriprenurship programmes promoted by government and development agencies in order to reduce poverty (Nwaobiala *et al.*, 2021). In another vein, youth engagement emphasizes the value of youth voice and input, or having a say in matters that affect them.

The data show that massive unemployment exists among most graduates of tertiary institutions in the country; a situation that was said to be traceable to the disequilibrium between labour market requirements and essential employment skills of these graduates. The situation is pathetic because as the labour force grows, with an increasing proportion of youth, employment growth is inadequate to absorb labour market entrants (Aiyedogbon and Ohwofasa, 2018). In spite of the various strategies of successive governments, one wonders if the desired goal of empowering the youth can be achieved through the N-Power or that unemployment will continue to increase unabated. The N-power which is a National Social Investment Programme was aimed specifically at job creation and youth empowerment through human capital development both for the educated and non-educated, who had minimal hope of securing jobs (Department for International Development (DFID), 2017; N-Power, 2017; Okoro and Bassey, 2018). To address this, the endemic situation of unemployment and its perceived relationship with poverty and disempowerment, the Federal Government of Nigeria, through the Ministry of Agriculture and

Rural Development developed the strategic intervention. The intervention has a double-pronged advantage of creating employment for the teeming population of unemployed graduates and also improving agricultural extension delivery services (N-Power (Agro), 2017). In view of the above, it seems there is paucity of information on whether the agripreneurship programme have attained its mandate of job creation and to what extent it has benefited the target beneficiaries who engaged in its activities in the study area. Hence this study was undertaken to analyze the determinants of engagement outcomes of N-power agripreneurship graduates' social investment programme in Abia State, Nigeria. The specific objectives were to: assess the motives of N-power agripreneurship graduates for enrolling in the programme; ascertain extent of engagement of respondents in N-power agripreneurship trainings activities; and examine the outcomes derived by respondents engaging in N-power agripreneurship training activities. Hypothesis of the study (H₀₁): Engagement of graduates was not significantly influenced by outcomes they derive from N-power agripreneurship trainings activities.

METHODOLOGY

Study Area

The study was conducted in Abia State, Nigeria. The State is situated in the south-eastern part of Nigeria and lies between Longitudes 7° 23' and 8° 2' E of the equator and latitudes 4°47' and 6°12' N of the Greenwich Meridian. The state is located east of Imo State and shares common boundaries with Anambra, Enugu and Ebonyi States on the North West, North, and North-East, respectively. On the East and South-East it is bounded by Cross River and Akwa Ibom States and by Rivers State to the South. Abia State has a total population of 2,833.99 people (National Population Commission, 2016). The State is made up of 17 Local Government Areas (LGAs) which are subsumed into three agricultural zones namely; Umuahia, Aba and Ohafia (Agricultural Development Programme (ADP), 2018).

Sample Size and Data Analysis

Simple random sampling was used in data collection. A list of N-Power agripreneurship programme beneficiaries were obtained from the Abia State Desk Office, Government House, Umuahia where active second batch of 80 participants were randomly selected across the State which formed the sample size for the study.

Measurement of Variables

To assess the motives for enrolling in N-Power agripreneurship activities, nine different reasons were generated and four response options of “to large extent”, “to a lesser extent”, “rarely”, and “not at all” with scores of 4, 3, 2, and 1 were assigned respectively. A midpoint was obtained thus: $4, 3 + 2 + 1 = 10/4 = 2.50$. The following decision rule was

used: Mean scores between 1.00-1.49 = no extent, 1.50-1.99 = low extent, 2.0-2.49 = moderate extent; and above 2.50 = high extent. In ascertaining the extent of engagement of respondents in N-Power agripreneurship trainings activities, the 10 item statements of the programme activities were measured and rated on a 3-point rating scale of; always (3), rarely (2) and never (1). A midpoint was obtained thus: $3 + 2 + 1 = 6/3 = 2.0$. The following decision rule was used: mean scores between 1.00-1.49 = low engagement, 1.50-1.99 = moderate engagement, 2.00 and above = high engagement. The outcomes derived by respondents participating in N-Power agripreneurship activities were measured by providing the respondents with 12 engagement outcomes in accordance with Satio and Sullivan (2011). Thereafter, they were asked to state to what extent they derived these outcomes from N-Power agripreneurship trainings activities with five (5) response options of “very high extent” (5), “high extent” (4), “moderately high extent” (3), “low extent” (2) and “very low extent” (1). A midpoint was obtained thus; $5 + 4, 3 + 2 + 1 = 15/3 = 3.00$. Mean score greater than or equal to 3.00, implied high extent and otherwise, low extent.

Model Specification

The hypothesis was tested with multiple regression at 95% confidence level. The four functional forms of regression model viz: linear, semi-log, exponential and Cobb-Douglas were tried. The best fit was chosen as the lead equation based on its conformity with econometric and statistical criteria such as magnitude of R², F-ratio and number of significant variables. The four functional forms are expressed as follows:

i. **Linear function**

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + e_i$$

ii. **Semi-log function**

$$Y = L_n \beta_0 + \beta_1 L_n X_1 + \beta_2 L_n X_2 + \beta_3 L_n X_3 + \beta_4 L_n X_4 + \beta_5 L_n X_5 + \beta_6 L_n X_6 + \beta_7 L_n X_7 + \beta_8 L_n X_8 + \beta_9 L_n X_9 + \beta_{10} L_n X_{10} + \beta_{11} L_n X_{11} + e_i$$

iii. **Exponential function**

$$L_n Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + e_i$$

iv. **Cobb Douglas function**

$$L_n Y = L_n \beta_0 + \beta_1 L_n X_1 + \beta_2 L_n X_2 + \beta_3 L_n X_3 + \beta_4 L_n X_4 + \beta_5 L_n X_5 + \beta_6 L_n X_6 + \beta_7 L_n X_7 + \beta_8 L_n X_8 + \beta_9 L_n X_9 + \beta_{10} L_n X_{10} + \beta_{11} L_n X_{11} + e_i$$

where Y is engagement in agripreneurship activities (measured by likert rating); β_1 = psychosocial development (mean scores); β_2 is academic achievement (mean scores); β_3 is physical fitness (mean scores); β_4 is mastery of skills (mean scores); β_5 is reduced risk taking (mean scores); β_6 is positive identity (mean scores); β_7 is civic participation (mean scores); β_8 is gateway to other engagements (mean scores); β_9 is market access opportunities (mean scores); β_{10} is elimination of barriers (mean scores); β_{11} is understand needs/wants (mean scores); and e_i is error term.

RESULTS AND DISCUSSION

Motives of Graduate Beneficiaries for Enrolling in N-Power Agripreneurship Programme Activities

The mean distribution of respondents according to motives of beneficiaries' enrolling in the programme is shown in Figure 1. The results indicate that respondents recorded high motives in eight out of nine item statements, except for family influence that had a moderate motive mean rating of 2.70. The mean motive score was high ($\bar{X} = 2.90$) and is above the mean decision of score of 2.50. The result suggests that the reason for beneficiaries' enrolment may be attributed to the expected benefits they intend to derive after engagement in the programme. World Bank (2018) Akpabio (2019) asserted that motives for youth engagement in any agricultural development programmes are based on the intended participants' personal characteristics which affects their enrollment. In the same vein, Onuekwusi and Odoemelam, (2016) affirmed that youth diversify their motives to different employment options in order to be self-employed and generate income.

Extent of Engagement of Beneficiaries N-Power Agripreneurship Trainings

The mean distribution of respondents according to their extent of engagement in the N-Power agripreneurship programme trainings is shown in Figure 2. The results showed that respondents recorded high engagements in nine out of the 10 N-Power agripreneurship trainings, except gender and family nutrition that had a moderate engagement ($\bar{X} = 1.9$). The mean engagement score was high ($\bar{X} = 2.3$) and is above the mean decision score of 2.0. The result implies that high engagement in programme may be due to diversified agripreneurship training activities at the disposal of the beneficiaries which were targeted towards their felt needs. This result corroborates with the findings of Tijani (2018) and Yekinni *et al.* (2019), that engagement of youths in programmes is dependent on the availability of empowerment options for the beneficiaries to participate.

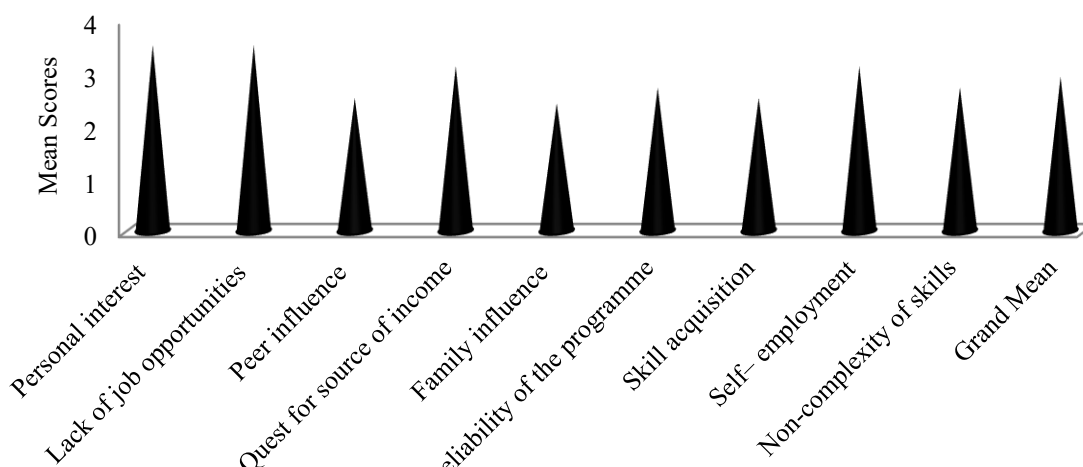


Figure 1: Graduate motives for enrolling in N-power agripreneurship trainings

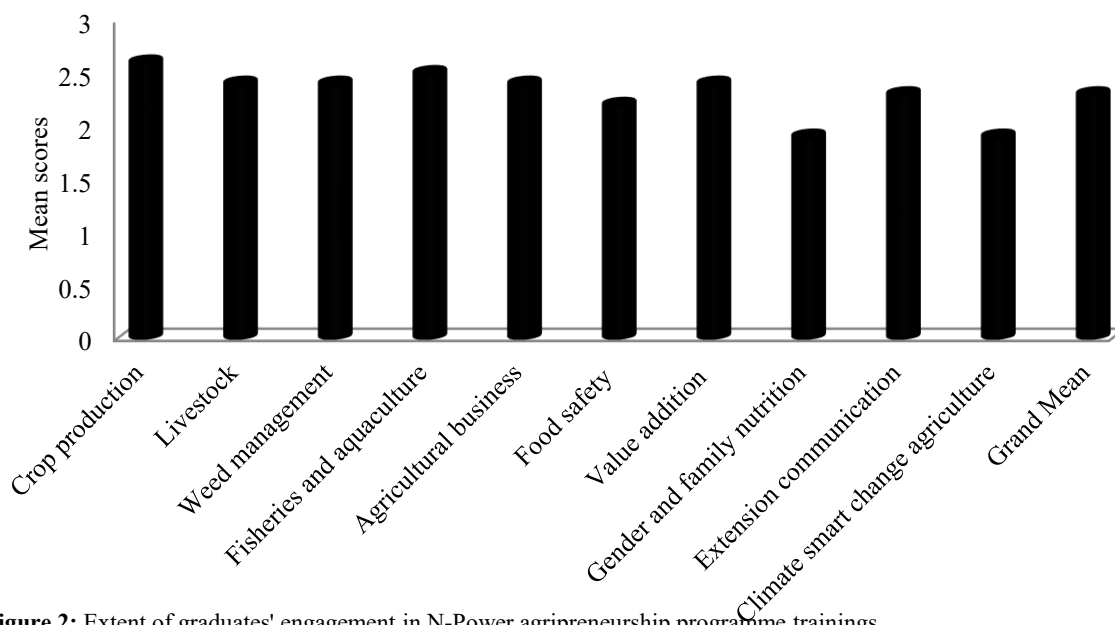


Figure 2: Extent of graduates' engagement in N-Power agripreneurship programme trainings

Engagement Outcomes Derived from N-Power Graduates in Agripreneurship Programme Trainings

The mean frequency distribution of respondents according to engagement outcomes derived by graduates in the programme trainings is shown in Figure 3. The respondents recorded high engagement outcomes in all the N-Power agripreneurship programme activities. The respondents had high engagement outcomes ($\bar{X} = 3.30$) which is greater than the decision bench mark of 2.00. The high engagement of beneficiaries in the trainings, suggests that the programme mandates were designed to empower the youths especially in human capacity development which is key to their self-reliant in any any of the trainings undertaken. The result support the findings of Coker *et al.* (2017), Atala and Issa (2018), Nwaobiala and Nnamdi (2018), Odey and Sambe (2019), that outcomes from development programmes are good indications that the mandate has achieved its set targets.

Determinants of Engagement Outcomes Derived from N-Power Agripreneurship Programme Trainings

The results in Table 1 show the regression estimates of determinants of engagement of graduate beneficiaries in N-Power agripreneurship programme trainings in Abia State, Nigeria. Among the four functional forms estimated, the linear form was chosen as the lead equation based on a high R^2 value, number of significant factors and agreement with *a priori expectations*. The F-value was highly significant at 1% level indicating a regression of best fit.

The R^2 value of 0.5611 showed that 56.11% of the variability in N-Power (Agro) activities engagement was explained by the independent variables.

The results showed that coefficient for psychological development (3.81***) was positive and significant at 1% level of probability. This indicated that any increase in psychological development of the beneficiaries will lead to increase in N-Power agripreneurship programme in the study area. This is expected as the programme has to do with being entrepreneur in agro-related fields. Nnorom and Adegbesan, (2018) noted that psychological development is needed for proper articulation and selection of areas of investment in agriculture and hence prompt effective engagement. Although empowerment traits also known as psychological characteristics are 'born' and that the behaviour of an individual is determined by his/her attitudes, values, beliefs and drives (Federal Government of Nigeria (FGN), 2017). The coefficient for mastery of skills (-3.99***) had a negative relationship with the engagement of graduate in N-Power programme and significant at 1% level of probability. This implies that increase in mastery of skills will lead to a corresponding decrease in N-power programme engagement in the study area. This is against a *prior expectation* probably because those that had and the skills will prefer to establish their own businesses rather than being employed by the government. Ogbette *et al.* (2019) stated that N-Power agro volunteers will provide advisory services to farmers across the country. Based on their work, those that have mastery

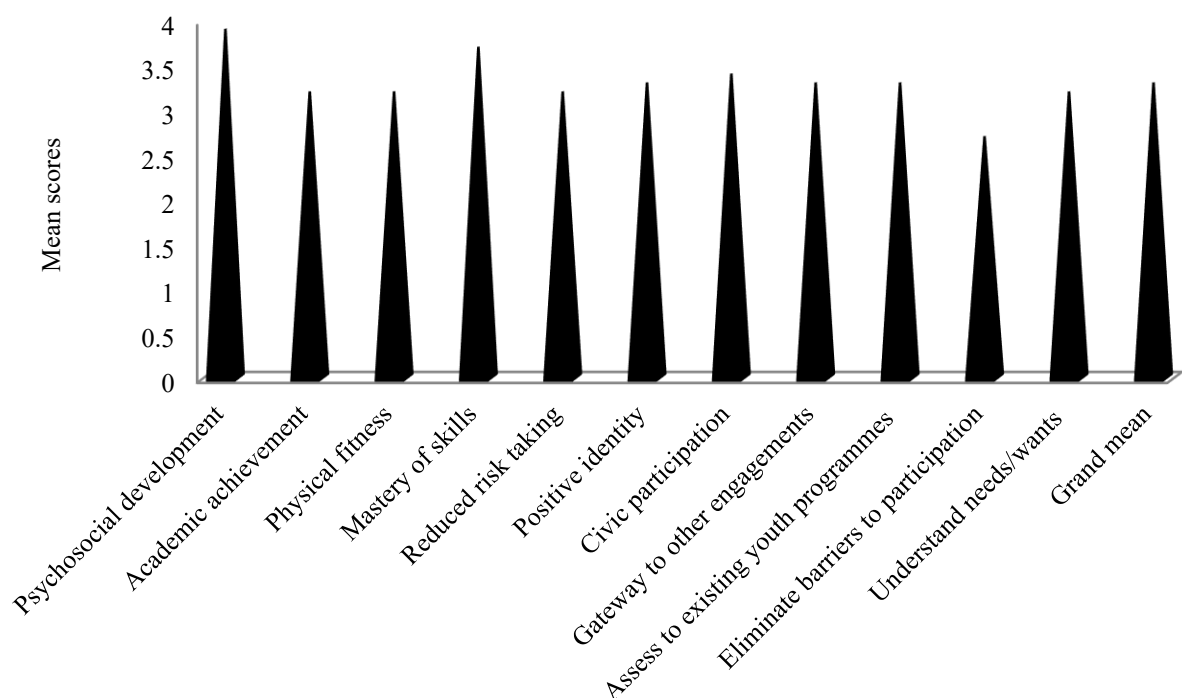


Figure 3: Engagement outcomes of respondents from N-power agripreneurship programme trainings

Table 1: Multiple regression estimates of determinants of engagement outcomes of graduate beneficiaries in N-Power agripreneurship programme trainings

Variables	Parameters	Linear	Exponential	Double log	Semi-log
Constant	β_0	22.4450 (5.68)***	3.0597 (17.18)***	2.9404 (15.61)***	2.9315 (4.76)***
Psychological development	β_1	0.6082 (3.81)***	0.0322 (2.47)**	0.15776 (2.36)**	2.3108 (2.01)*
Academic achievement	β_2	-0.4691 (-1.19)	-0.0199 (-0.75)	-0.0597 (-0.72)	-1.3661 (-1.10)
Physical fitness	β_3	0.2920 (1.46)	0.0121 (1.32)	0.0305 (0.53)	0.7173 (0.56)
Mastery of skills	β_4	-0.2998 (-3.99)***	-0.0153 (-0.67)	-0.0593 (-0.95)	-1.4779 (-2.46)**
Reduced risk taking	β_5	0.0803 (0.14)	0.0041 (0.16)	-0.0014 (-0.02)	0.0324 (0.02)
Positive identity	β_6	1.3887 (2.63)**	0.0622 (2.50)**	0.1936 (2.78)**	4.3260 (2.81)**
Civic participation	β_7	-1.2679 (-2.68)**	-0.0540 (-2.67)**	-0.1097 (-1.99)*	-2.7365 (-2.70)**
Gateway to other engagements	β_8	-0.1107 (-0.16)	-0.0073 (-0.23)	-0.0464 (-0.52)	-0.8139 (-0.41)
Market access	β_9	-0.0492 (-0.09)	0.0006 (0.02)	-0.0048 (-0.07)	-0.2758 (-0.18)
Barrier elimination	β_{10}	0.1285 (0.23)	0.0058 (0.23)	0.0492 (0.69)	-0.9759 (0.67)
Understand needs	β_{11}	0.3506 (2.73)**	0.0133 (0.65)	-0.0367 (-1.77)*	-0.9759 (-1.07)
R^2		0.5611	0.4307	0.4532	0.5137
R -adjusted		0.5013	.04087	0.4121	0.4842
F -ratio		7.10***	3.03**	3.16**	6.521***

Field survey, 2020. * - $p \leq 0.10$, ** - $p \leq 0.05$, *** - $p \leq 0.01$. Figures in parentheses are t -values.

of the skills will rather engage in own business than being advisor. The coefficient for positive identity (2.63**) was positive and significant at 5% level of probability. This implied that those who had positive identity and clean records are more likely to participate in N-Power programme than their counterparts who have defaults in their identity. This is expected as N-Power programme due screening for individuals and take qualify ones for empowerment. N-Power is designed for Nigerian citizens between the ages of 18 and 35 with minimum requirements (if any) for the respective programme. Aderonmu (2017) listed the selection bases as one's expression of a genuine interest in whichever area you decide; passing the relevant tests; willingness to push beyond comfort zone; and ability to show a flair to develop the skills you need to be the best you can be. The coefficient for civic engagement (-2.68**) was negative and significant at 5% level of probability. This indicates that increase in graduate with civic backgrounds will decrease engagement in N-Power programme. This is expected as they will go for other areas of N-Power specialization rather than agro fields. The coefficient for understanding needs/wants (2.73**) was significant at 5% and positively related with the level of engagement in N-Power empowerment development programmes. This implies that graduates who are focused and understand their need tend to engage in the programme than their counterpart who are in other areas. The coefficient for civic participation (-2.68**) was negative and significant at 5% level of probability. This indicates

that increase in graduate with civic backgrounds will decrease engagement in N-power programme. This is expected as they will go for other areas of N-Power specialization rather than agro fields.

The coefficient for understanding needs/wants (2.73**) was significant at 5% and positively related with the level of engagement in N-Power agripreneurship programme trainings. This implies that graduates who are focused and understand their need tend to engage in the programme than their counterpart who are in other areas. This result is in tandem with the findings of Esiobu *et al.*, (2015) as the reported that N-Power Volunteer Corps as a post-tertiary engagement initiative for graduates assist them to meet their needs within the period of engagement in the programme.

CONCLUSION AND RECOMMENDATIONS

This study concluded that the beneficiaries had high engagement and outcomes from N-power (Agro) programme trainings. Psychological development, mastery of skills, positive identity, civic participation and understanding needs/wants were determinants of engagement outcomes derived by beneficiaries of N-Power agripreneurship programme trainings. The study therefore recommended the provision and creation of an enabling environment for graduates to ensure psychological balance, skill acquisition and need assistance through provision of infrastructures for effective civic engagement in the programme.

REFERENCES

- Aderonmu J.A. (2017). Poverty eradication in rural Nigeria: The role of Local Government. Conf. Paper, Empowerment of Rural People, Centre for Advancement and Rural Empowerment, Abuja, Nigeria
- Agricultural Development Programme (ADP) (2018). Annual bulletin report. Abia State Agricultural Development Programme, **20 (4)**
- Aiyedogbon J.O. and Ohwofasa B.O. (2018). Poverty and youth unemployment in Nigeria, 1987-2011. *Int. J. Bus. Soc. Sci.*, **3 (20)**, 269-279
- Akpabio I.A. (2019). Sustainable agricultural development in the era of rural insecurity. Keynote address, 2nd Ann. Conf. Soc. Comm. Res., Michael Okpara University of Agriculture Umudike, Abia State, Nigeria, pp. 1-15
- Atala T.K. and Issa F.O. (2018). Rural social protection interventions in some African countries: Implications for Nigeria. Proc. 27th Ann. Nat. Congr. Rural Soc. Asso. Nig., Ahmadu Bello University, Zaria, pp.175-179
- Coker A.A.A., Akogun E.O., Adebayo C.O. and Mohammed U.S. (2017). Assessment of implementation modalities of the Anchors' Borrowers Programme in Nigeria. *Agro-Science*, **17 (1)**, 44-52. <https://dx.doi.org/10/4314/as.v17i1.6>
- Department for International Development (DFID) (2017). Job creation and youth empowerment in Nigeria. A Policy Development Facility Phase II (PDF II) of a Flexible, Rapid-Response Programme. Retrieved 23/03/2019 from <https://www.dai.com/uploads/Job-Creation-and-Youth-Empowerment-in-Nigeria.pdf>
- Esiobu N.S., Onubuogu G.C. and Ibe G.O. (2015). Analysis of entrepreneurship development in agriculture among arable crop farmers in Imo State, Nigeria. *Int. J. Afr. Stud.*, **7 (2)**, 92-99
- Federal Government of Nigeria (FGN) (2017). Generic operations manual. Youth Empowerment and Social Support Operation (YESSO), Federal Republic of Nigeria, World Bank Assisted, p. 178
- Gonyok R. (2016). Towards better opportunity for Nigerian youths. National Press Centre, Abuja. Retrieved from <https://www.gamyi.com/article800/news8219html>
- National Bureau of Statistics (NBS) (2021). Poverty index report of the thirty-six States and Federal Capital Territory Abuja, Nigeria
- National Population Commission (2016). National population census for the thirty-six states and federal capital territory Abuja, Nigeria
- Nnorom N. and Adegbesan E. (2018). Unemployed Nigerians increase by 3.3m to 20.9m — NBS. Vanguard Online Newspaper. Retrieved 19/04/2019 from <https://www.vanguardngr.com/2018/12/unemployed-nigerians-increase-by-3-3m-to-20-9m-nbs/>
- N-Power (2017). N-Power information guide. National Social Investment Programme, Federal Government of Nigeria, Abuja, Nigeria
- N-Power (Agro) (2017). Agricultural extension master trainers' manual. Federal Government Empowerment Initiative and Federal Ministry of Agriculture and Rural Development, National Social Investment Programme, Federal Government of Nigeria, Abuja
- Nwaobiala C.U. and Nnamdi U.S. (2018). Perception of National Directorate of Employment Graduate Agricultural Training Scheme on cassava farmers' production in Imo State, Nigeria. *Int. J. Agric. Dev. Stud.*, **3 (1)**, 12-17
- Nwaobiala C.U., Udomba T.O. and Aboh J.A. (2021). Socio-economic determinants of graduate beneficiaries' participation in N-Power Agripreneurship Social Development Programme in Abia State, Nigeria. *Afr. J. Agric. Al. Sci.*, **1 (1)**, 147-162
- Nwofoke C., Nwibo S.U., Umeh N.G., Igboji C., Ezech A.N. and Nbam N.B. (2020). Socioeconomic determinants of agripreneurship choice among youths in Ebonyi State, Nigeria. *J. Agric. Ext.*, **24 (1)**, 24-33
- Odey S.A. and Sambe N. (2019). Assessment of the contribution of N-Power programme to youth empowerment in Cross River State, Nigeria. *Int. J. Sociol. Anthropol. Res.*, **5 (4)**, 1-13
- Ogbette A.S., Bernard-Oyoyo C. and Okoh J.O. (2019) All Progressives Congress (APC), N-Power programmes and unemployed Nigerians in Nigeria. *J. Res. Dev. Manage.*, **54 (1)**, 65-69
- Okoro S.N. and Bassey U.E. (2018). N-Power teacher's competence and resource utilization: Implication for effective and efficient teaching in Nigerian primary and post primary schools. *Int. J. Edu. Eval.*, **4 (1)**, 43-54
- Onuekwusi G.C. and Odoemelam L.E. (2016). Pattern of occupational diversification among rural youths in Abia State, Nigeria. *Int. J. Trad. Res. Dev.*, **3 (4)**, 62-65
- Saito R.N. and Sullivan T.K. (2011). The many faces, features and outcomes of youth engagement: Bridging research and practice. *J. Youth. Dev.*, **6 (3)**, 1-17
- Tijani S.A. (2018). Sustainability of the youth agriculture empowerment programmes in Osun and Oyo States. *Nig. J. Rural Sociol.*, **18 (2)**, 90-99
- Umeh N.G., Nwibo S.U., Nwofoke C., Igboji C., Ezech A.N. and Mbam N.B. (2020). Socio-economic determinants of agripreneurship choice among youths in Ebonyi State, Nigeria. *J. Agric. Ext.*, **24 (1)**, 22-33
- United Nations Development Programme, UNDP (2017). Nigeria: Sustainable Development Goals. Indicators Baseline Report, National Bureau of Statistics (NBS), Abuja, Nigeria
- World Bank (2018). Youth employment and social support operation. international development association project on a proposed additional credit and restructuring. Social Protection and Labour Global Practice, African Region, p. 46
- Yekinni O.T., Ladigbolu T.A., Adeniyi R.T. and Bashiru O.M. (2019). Determinants of youths' involvement in agricultural vocational training in Oyo State, Nigeria. *Nig. J. Rural Sociol.*, **19 (1)**, 17-23