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**Effects of N-Power Agro intervention programme on youth empowerment and employment generation in Nasarawa Local Government Area of Nasarawa State, Nigeria**

\*Adamu, Isyaku Ibrahim<sup>1</sup>, Hussaini, H. Tukur<sup>2</sup>, and Kokona, Bulus Patrick<sup>3</sup>

<sup>1,3</sup>*Department of Public Administration, Federal Polytechnic Nasarawa, Nigeria.*

<sup>2</sup>*Department of Public Administration, Nasarawa State University, Keffi – Nigeria.*

\*Corresponding Email: [isyakaadamu88@gmail.com](mailto:isyakaadamu88@gmail.com)

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**Abstract**

*This study investigates the effect of the N-Power Agro programme on youth empowerment and employment generation in Nasarawa Local Government Area, Nasarawa State, Nigeria. The study adopted survey design method, targeting all 350 beneficiaries of the program, with data collected through a structured 5-point Likert-scale questionnaire. Using Google Forms, questionnaires were electronically distributed via social media platforms, achieving a 98.57% response rate with 345 completed questionnaires retrieved. The Partial Least Squares Structural Equation Modeling (PLS-SEM), was employed for assessing both measurement and structural models for reliability, validity, and predictive relevance. Results reveal that NPAG significantly and positively affected youth empowerment and employment in the study area, as evidenced by strong path coefficients and statistically significant relationships between constructs. The study underscores NPAG's role in enhancing beneficiaries' socio-economic status by providing empowerment and employment opportunities. Recommendations include expanding the Program's reach to rural areas, increasing funding, and incorporating training in sustainable agricultural practices and entrepreneurship to ensure long-term benefits. Such interventions will enhance participants' skills, enabling them to establish self-sustaining agricultural businesses and further reduce unemployment.*

**Keywords:** Employment generation, Empowerment, N-Power Agro, Youth unemployment

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**1. Introduction**

Youth unemployment is a frightening situation that have scourge effect on the economy of many nations. It has not only prevented many nations from attaining developmental aspirations but has move them far backward and placed them among countries without job-growth economy (Olukayode, 2017). Unemployment youths are easily recruited into insurgencies groups. Patial Participation of youths in productive activities increase the number of persons moving into Labour market, causing retardation in achieving unsustainable economic growth. The problem of youth restiveness in most states and in particular Nasarawa state has been attributed to lack of employment among the youths in the state. Even though,

Nasarawa State is ranked among the least population of youths without employment, Nasarawa state has 0.5% rate of unemployment among young people in the state (National Bureau of Statistics, 2023). In the past various policies and programme with good intention of addressing these problems were initiated to ensure there is improvement in the standard of living of most citizens in Nigerian. Ezeanokwasa and Nwanchukwu (2014) in Adewale and Victor, (2020) states that between 1985 and 2019, the government of Nigeria had introduced different programme to address the economic, political social problems that mostly affect the youths. In 2016 the Federal Government of Nigeria roll out the N-Power Policy programme for Youths between the ages of 15-35 years.



Although the main target of the programme in the first instance was graduates of tertiary institutions in the country, but it was later expanded to accommodate the non-graduates unemployed. The aims of N-Power programme include, reducing the rate of unemployment in the country, provide technical skills and employability, facilitate the entrepreneurship government diversification policy and to bring active solution to public service especially in the area of Agriculture, Education and Health (Ogbette, et al., 2019). N-Power program has three major components specifically for graduate's volunteers, they are, N-Power teach, N-Power Health and N-Power Agro.

The N-Power Agro is a subcomponent of the N-Power programme of National Social Investment Programme (N-SIP) by the Federal Government of Nigeria. The major aim of N-Power Agro is to train and equip young Nigerians with the necessary skills and knowledge of agricultural extension service, so as to boost productivity and outputs in Agribusinesses as well as to generate employment for the youths in the country. As rightly captured in the N-Power information Guide (2017), N-Power Agro is designed for equipping the beneficiaries with necessary and very important skills by way of training them to become self-employed and employers of labour in the economy. The N-Power Agro scheme has been in place for about five years of implementation, and to a large extent it is argued not much success have been recorded, which empiricists attributes to many factors such as poor funding, lack of interest in agriculture by youths, lack of trainers and insufficient facilities which are among the factors that hampered the achievement of N-Power Agro scheme. Furthermore, the intention of making agriculture a source for self-employment has been challenged by many scholars. Ogunmodede *et al.* (2020) for instance reports that many youths ended up leaving agribusiness the moment white collar job is

available for them, thereby making self-employment objective a mirage. Although, on the part of government there has been a claim that the program has been successful and has recorded a lot of achievement.

The role of agriculture in employment generation cannot be overemphasized. The participation of youths in agriculture would create more employment and reduce poverty among them. The young people in Nigeria have the potential to be a driving force in agriculture in which the government can leverage on. According to Yemi, *et al* (2019) governments and development partners have not employed an integrated approach for the implementation of various interventions to inspire the youth to engage in agribusiness. Agriculture in Nigeria has not received the substantial support it ought to get from the government. The country has also failed to implement the 10% minimum budgetary allocation to agriculture following the Mozambique Maputo declaration in 2014 (Yunusa & Giroh, 2017). Since then, Agricultural development has been a mirage in Nigeria. Ebelechukwu, *et al* (2021) state that Empowerment programs in Nigeria failed due to factors such as corruption, delayed in releasing funds, as well as lack of deliberate Plan to transit the beneficiaries to more meaningful ventures in the economy. Thus, addressing these challenges and also creating an enabling environment, require Nigerian Government to unlock the potential of its young people by making the youth to participate and transform the agricultural sector, ensure food security and massive employment of youths for the nation economy. N-Power Agro hold considerable potentials to provide opportunities for gainful employment for the teaming Nigerian youth. The agricultural sector, remains one of the most viable non-oil sectors of the nation's economy, particularly in terms of its employment potentials. Agriculture is the foundation for the development of stable



human communities, in both rural and urban communities (Kayinde & favour, 2020). Nasarawa local government Area is known for farming activities but most of their youths are unemployed. Nasarawa community is a potential in agricultural sector in the state. This is why in 2022 the Nasarawa State Government and Bank of Industry sign a memorandum of understanding and launched 500m Youth revolving scheme funds for Human Capital development in the state.

The intended objective is to create wealth through investment and employment opportunities for the Youths. The beneficiaries are going to be given soft loans to set up businesses that would help reduce restiveness among youths in the state. The programme is also design to boost agricultural economic activities in the 13 Local Government Areas of the state. As such, 54 persons only in the Agro related activities have benefited from the soft loan in Nasarawa Local Government Area (FGN, 2022).

The Nigeria COVID-19 Action Recovery and Economic Stimulus (NG- CARES) which is a Federal Government initiative supported by World Bank was design to respond to the consequences of COVID-19 on the economic activities in all the thirty-six states including Federal Capital Territory FCT Abuja. The programme was also implemented in the study area. The benefits are spread across all sectors in the State. It seeks to mitigate the impact of COVID-19 crisis on agricultural value chains, livelihoods of poor farmers, vulnerable households and the entire communities. Farmers in the study area were significantly supported financially. Under the Nasarawa State COVID-19 Action Recovery and Economic Stimulus (N-CARES) Programme, 8,200 farmers from across the state were given farm inputs, such as herbicide, fertilizer and seeds to increase their farm yield and livelihoods.

The study attempts to examine the implementation of Government empowerment programs such as N-Power Agro, as a strategy for Youth empowerment and employment in Nasarawa State.

Thus, the following hypotheses was developed:

H01: There is no significant effect of N-power Agro intervention on youth empowerment in Nasarawa local government Area, of Nasarawa state.

H01: There is no significant effect of N-power Agro intervention on employment generation in Nasarawa local government Area, of Nasarawa state.

## **2. Literature Review**

### **2.1 Conceptual Clarifications**

#### **Youth Empowerment**

Youth empowerment refers to diverse ways the youth can be mobilized to cause changes in their lifestyle. It implies a way of inculcating into youths, the spirit of transformation of ideas to creativeness. Idoko (2014), sees youth empowerment as a means of exposing youths to skills or training that makes them productive for sustainable paid and self-employment. Youth empowerment is a means of creating and supporting the enabling conditions under which young people can act on their own terms rather than at the direction of other. It implies supporting and assisting the young people to overcome the challenges preventing them from realizing their potentials.

Omotere (2016), further examine the concept of youth empowerment as a process whereby young people acquire the ability and authority to make decisions and implement changes in their lives. Such empowerment can be acquired from homes, schools, youth organization, non-governmental organization, government policy – making and community organization campaign.



Youth empowerment is a capacity building that involves giving vocational training skills development that prepare youths to be more productive in the society. It is further defined as a form of human development intervention that offers an opportunity for a wide range of vocational skills training for the youth due to their socio- economic situation which hinders their progress and general well – being. It encompasses different ways youth can be expose to different trades that will help them to engage in sustainable employment. Youth empowerment is the act of making opportunity available to youths to develop their skills to become solutions to the existing problems and be able to make concrete decisions in the society. Similarly, or non – governmental organization, stands for network (2019) cited in Evans (2021), described it as an attitudinal, and cultural process whereby young people gain ability, authority and agency to make decisions implement change that affect their own lives and the lives of other people, including youth and adult; in this regards youth empowerment implies the orientation and training of young people by either the government or non – governmental organizations in order to facilitate the youths toward realizing their potentials in the society for their own benefits and others.

### **Youth Employment**

One of the main trusts of this research is “Youth Employment”. The concept is about job creation for the youth in Nigeria. Youth employment refers to the process of creating employment for youths through the economy. Clement (2014), describe job creation as the increment in the number of employments in an economy. This is done by engaging the citizens, the youth in a productive activity. The government through its economic Policies and Programme will be to create employment and increase economy activities in agriculture, education, transportation, health and communication sector in the

society. Youth employment is more than just job creation. According to international labour organization, 2015 but also include the right, protection, voice and representation of youth in the economy activities that can contribute to creating job for other youths in the society. It also means establishing more employment opportunity for young people in the society.

Youth employment occur when certain solution has been identified in the society that can create jobs. For example, shortage of skilled manpower, insufficient training among the human resources in the country and skills necessary for employment or lack of marketable skills among graduates. Youth employment is a purposeful engagement of young people in productive activities in the economy. It is the engagement of the active population and younger work force in specific activities to make them realize their potentials. Youth employment is the provision of opportunities for the youth to participate and contribute to the development of their live hood and the general performance of the economy. It is a response both from the government and private sector to address the problem of unemployment particularly to vulnerable growths such as the youths. In recognition of the above definitions, youth employment within context of the study is the process and systematic engagement of young graduates and non-graduate in a productive economic activity to realize their potentials and to contribute to the economy.

### **N-Power Agro Programme**

N-Power Agro is an intervention Programme of the Federal government of Nigeria aimed at empowering it citizens particularly the youths through agricultural training, mentorship, and entrepreneurship support. The N-Power Agro scheme is among the subcomponent of N-Power Programme designed to address unemployment and enhance skill development among Nigerian youth. N-



Power Agro focuses on improving the economy through engagement of unemployed youth in agricultural training, enhancing their skills, and promoting entrepreneurship, thereby creating employment opportunities for youth in the country. The responsibility of the beneficiaries is to provide advisory services to farmers across Nigeria. They are expected to disseminate the knowledge that has been amassed to them by the Federal Ministry of Agriculture and Rural Development in the area of extension services. They are also required to collate data about Nigeria's agriculture assets. N-Power Agro beneficiaries are part of the 500,000 N-Power Corps participants that were to be empower through training to provide support and advisory service to farmers across the country by way of disseminating the required knowledge in the area of extension services as well as gathering data of Nigeria's agricultural assets.

N-Power Agro Programme have the potentials for empowering the youth since many of the youths involved in Agriculture during the production season often take non-farm jobs to ensure stable income during the off-season, hence the need for an intervention program that will ensure that youths are motivated and they are actively involved in agriculture all year round.

## **2.2 Underpinning Theory**

### **The Human Capital Theory**

A suitable theory to explain the relationship between government intervention schemes and employment is Human Capital Theory. This theory, developed by economists such as Gary Becker (1964), posits that investments in education, training, and health enhance an individual's productivity and employability, thereby leading to improved labor market outcomes. In the context of government intervention schemes, such as microfinance, employment guarantees, or youth empowerment Programs, the government's investment in human capital

through skill development, job creation, and financial support can lead to higher employment rates, particularly among disadvantaged groups.

Human Capital Theory suggests that when governments implement programs that improve individuals' skills, provide access to resources, or create job opportunities, they are investing in human capital. This, in turn, increases the employability of individuals, boosts their productivity, and reduces unemployment, especially in sectors with high youth unemployment. By supporting education, vocational training, and entrepreneurship, government intervention schemes can help individuals transition into the workforce or start their own businesses, fostering both individual and collective economic growth.

## **2.3 Empirical review**

Several studies have explored the effect of Government Programs on poverty alleviation and youth empowerment across different countries. Ahmed and Smith (2014) assessed the role of microfinance programs, particularly Grameen Bank, in Bangladesh, finding that access to microfinance improved household income and reduced youth unemployment, though the study's geographical scope and reliance on self-reported data were limitations. Kumar et al. (2015) examined India's Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), finding that it provided short-term employment but failed to alleviate poverty significantly due to insufficient wages. Johnson and Mwangi (2016) focused on Kenya's Youth Enterprise Development Fund (YEDF), revealing that it helped youth entrepreneurship, although its urban bias and limited rural outreach were noted. Bello and Yusuf (2017) studied Nigeria's N-Power program, noting positive impacts on job creation and skill acquisition but criticizing the lack of long-term data. Chen *et al.* (2018) explored China's vocational





training initiatives, which improved employability but had limited external validity due to their focus on well-supported regions. Williams and Sabi (2019) examined Ghana's LEAP program, which reduced food insecurity and improved healthcare, but the study's focus on cash transfers without considering complementary services was a critique. Nguyen and Tran (2020) analyzed Vietnam's National Employment Fund, highlighting increased youth employment in urban areas but overlooking rural outreach and transparency issues. Smith *et al.* (2021) evaluated Canada's Skills Boost initiative, finding significant improvements in employability but criticized for its high cost and limited accessibility for marginalized groups. Adams and Wanjiru (2021) explored Rwanda's Vision 2020 Umurenge Program (VUP), which successfully reduced poverty but was criticized for reliance on external funding and weak monitoring. Hassan and Khalid (2022) studied Saudi Arabia's SME support under Vision 2030, showing positive impacts on entrepreneurship, but the study pointed out regulatory bottlenecks and limited rural SME support. Across these studies, while government programs have contributed to youth empowerment and poverty alleviation, limitations such as geographical focus, data reliance, and program accessibility were common critiques.

### 3. Methodology

A survey research design was adopted for this study. The target population of the study is 350

N-Power beneficiaries in Nasarawa local government area, obtained from N-Power Liasson office at Lafiya, Nasarawa state. This was also made possible using different platforms of N-Power Agro beneficiaries. The entire number of respondents were considered for the study. The whole population were considered for the study

because they are relatively not too large and are reachable. The study employed primary source of data gathered through the administration of a structured 5- point Likert-scale questionnaire ranging from strongly disagree (1) to strongly agree (5), to quantify respondents' perceptions and attitudes, and this implies that the measurement scale is ordinal in nature focusing on respondents' opinions on the degree to which N-Power Agro affect their empowerment and help in employment generation. The questionnaire was titled N-Power Agro programme and Youths Empowerment Questionnaire (NAYEQ) designed by the researcher.

The questionnaire was designed using Google forms and administered electronically on WhatsApp, and other social media platforms with the help of an assistant at the office of the N-Power Nasarawa State coordinator at Lafia. Ethical considerations were also prioritized by ensuring informed consent, confidentiality, and voluntary participation. Respondents were assured of their confidentiality and they can withdraw from the study without repercussions. A total of 350 questionnaires were distributed. However, only 345 were retrieved and used for the analysis.

The data was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), a robust method adopted in this study for testing complex relationships between N-Power Agro intervention and Youth empowerment (Hair *et al.*, 2021). The PLS-SEM analysis involves two assessments- the measurement and structural model assessment. The Measurement Model Assessment tested reliability (Cronbach's Alpha > 0.7), convergent validity (outer loadings > 0.7, AVE > 0.5), and discriminant validity (HTMT < 0.85), ensuring construct validity and reliability (Hair *et al.*, 2014; Fornell & Larcker, 1981).

The Structural Model Assessment evaluated collinearity (VIF < 5),

explanatory power ( $R^2$ ), effect sizes ( $f^2$ ), and predictive relevance ( $Q^2 > 0$ ). Path coefficients and bootstrapping validated relationships three constructs- N-power

agro- programme, youths' empowerment, and youths' employment were modeled reflectively with five indicators each. The model is specified as:

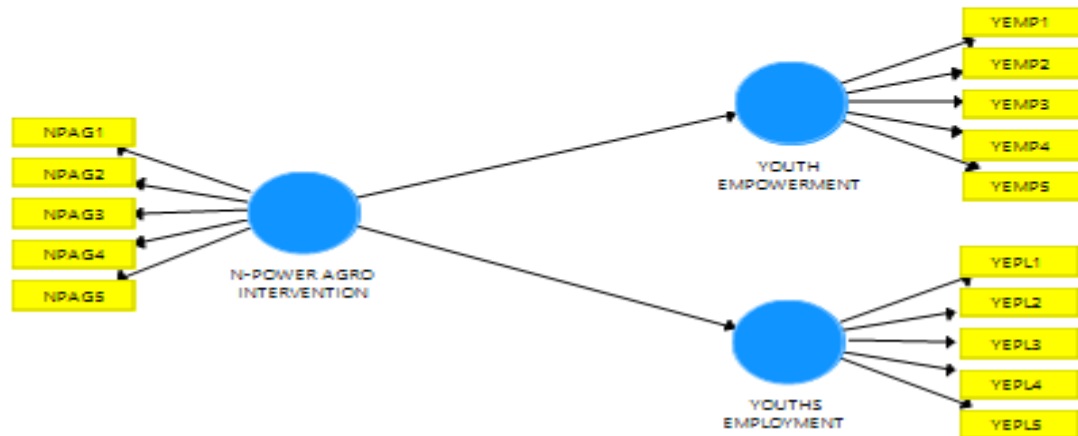


Figure 1: Partial Least Squares -SEM for the Study

Source: SmartPLS Output (2024)

Keys:

**NPAG 1 to NPAG 5:** Responses to the 5 items under the N-Power Agro Intervention Scheme construct.

**YEMP 1 to YEMP 5:** Responses to the 5 items under the Youth Empowerment construct.

**YEPL 1 to YEPL 5:** Responses to the 5 items under the Youth Employment construct.

Table 1 below outlines the measurement items for the variables used in this study. The scale described is a Likert-type scale, specifically a 5-point Likert agreement scale. This scale is ordinal in nature, measuring the extent of agreement or

disagreement with a series of statements and providing ordered categories (e.g., strongly disagree to strongly agree). While the intervals between categories are assumed to represent increasing levels of agreement, they are not strictly equal. It is commonly used to measure attitudes or perceptions, quantifying subjective opinions, attitudes, or behaviors related to constructs such as N-Power Agro Intervention, Youth Empowerment, and Youth Employment. As a self-reported measure, respondents express their level of agreement with statements, reflecting their perceptions or attitudes on the given variables.

**Table 1:**

*Variables Measurements*

S/N	Variables	No. of Measurements	Scale
1	N-Power Agro Intervention	5 Point Lickert Agreement Scale	Ordinal
2	Youth Empowerment	5 Point Lickert Agreement Scale	Ordinal
3	Youth Employment	5 Point Lickert Agreement Scale	Ordinal

**Sources:** Researcher's Compilation (2024)



## 4. Results and Discussion

### 4.1 Descriptive Statistics

**Table 2:**

*Descriptive Statistics*

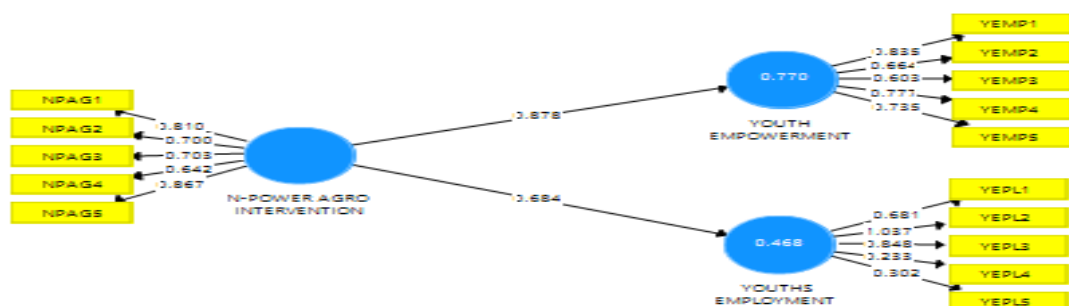
Items	Mean	Median	Min	Max	Std.Dev	Kurtosis	Skewness
NPAG1	3.596	4	1	5	1.297	-0.542	-0.806
NPAG2	3.478	4	1	5	1.283	-0.799	-0.51
NPAG3	3.25	4	1	5	1.365	-1.077	-0.515
NPAG4	3.265	4	1	5	1.436	-1.195	-0.475
NPAG5	3.544	4	1	5	1.328	-0.754	-0.677
YEMP1	3.559	4	1	5	1.387	-0.876	-0.675
YEMP2	3.353	4	1	5	1.185	-0.754	-0.555
YEMP3	3.471	4	1	5	1.236	-0.739	-0.581
YEMP4	4.007	4	1	5	1.088	0.98	-1.262
YEMP5	3.794	4	1	5	1.17	0.625	-1.178
YEPL1	3.926	4	1	5	1.264	0.692	-1.318
YEPL2	3.801	4	1	5	1.199	0.66	-1.213
YEPL3	3.706	4	1	5	1.176	-0.193	-0.806
YEPL4	3.471	4	1	5	1.188	-0.053	-0.901
YEPL5	3.353	4	1	5	1.198	-0.594	-0.634

**Source:** Author's computation via SmartPLS, 2024

The descriptive statistics for NPAG, YEMP, and YEPL variables show moderately positive responses, with mean values between 3.25 and 4, medians of 4, and full utilization of the response range (1–5). Standard deviations (1.088–1.436) indicate moderate variability, with NPAG4 showing the highest dispersion. Most items are platykurtic (negative kurtosis), except YEMP4, YEMP5, YEPL1, and YEPL2, which are more peaked. Negative skewness predominates, except for YEMP4 and YEMP5, which are strongly left-skewed. Overall, respondents view the initiatives favorably, though variability and skewness highlight nuances in perceptions.

### 4.2 Measurement Model Assessment

The measurement model was assessed from the PLS-SEM Path algorithm which is presented in figure 2 below; and the analysis below:



**Fig. 2**

*PLS-SEM Path algorithm*

**Source:** SmartPLS Output (2024)



**4.2.1 Convergent Validity**

Convergent validity is a crucial measure in Partial Least Squares Structural Equation Modelling (PLS-SEM) to confirm that each set of indicators effectively represents the construct it is intended to measure.

**Table 3***Convergent validity*

Variables	Indicator	Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted (AVE)
N-Power Agro Intervention Scheme	NPA G1	0.81	0.865	0.863	0.561
	NPA G2	0.7			
	NPA G3	0.703			
	NPA G4	0.642			
	NPA G5	0.867			
Youths Empowerment	YEM P1	0.835	0.85	0.847	0.529
	YEM P2	0.664			
	YEM P3	0.603			
	YEM P4	0.777			
	YEM P5	0.735			
Youths Employment	YEP L1	0.681	0.795	0.787	0.581
	YEP L2	1.037			
	YEP L3	0.848			
	YEP L4	0.233			
	YEP L5	0.302			

**Source:** Author's computation via SmartPLS, 2024

The convergent validity results indicate acceptable reliability and validity for the N-Power Agro Intervention Scheme (NPAG), Youth Empowerment (YEMP), and Youth Employment (YEPL) constructs. Cronbach's Alpha values (0.795–0.865) and Composite Reliability values (0.787–0.863) exceed the 0.7 threshold (Hair et al., 2017), confirming internal consistency. Average Variance Extracted (AVE) values for NPAG (0.561) and YEMP (0.529) meet the minimum 0.5 criterion (Hair et al., 2017), indicating adequate convergent validity, while YEPL (0.581) also aligns despite inconsistent loading for YEPL4 and YEPL5, which suggests potential measurement issues. In PLS-SEM, if the loadings are low but the Cronbach Alpha, Composite Reliability and AVE meets the acceptable thresholds, the disputed item in question is considered reliable (Hair et al., 2017). In this case, all the constructs are reliable.



#### 4.2.2 Discriminant Validity

**Table 4**

*Heterotrait-Monotrait Ratio (HTMT)*

	NPAG	YEMP	YEML
NPAG		0.749	
YEMP	0.878		0.727
YEML	0.684	0.814	0.693

**Source:** Author's computation via SmartPLS, 2024

The HTMT results demonstrate acceptable discriminant validity, with all ratios below the threshold of 0.9. The NPAG-YEMP ratio (0.878), NPAG-YEPL ratio (0.684), and YEMP-YEPL ratio (0.814) confirm that the constructs are distinct from one another, ensuring that the measures capture unique aspects of their respective variables.

**Table 5**

*Outer Loadings*

	N-POWER INTERVENTION	AGRO YOUTH EMPOWERMENT	YOUTHS EMPLOYMENT
NPAG1	0.81	0.754	0.503
NPAG2	0.7	0.602	0.494
NPAG3	0.703	0.601	0.5
NPAG4	0.642	0.459	0.564
NPAG5	0.867	0.821	0.522
YEMP1	0.733	0.835	0.621
YEMP2	0.583	0.664	0.576
YEMP3	0.529	0.603	0.493
YEMP4	0.682	0.777	0.61
YEMP5	0.645	0.735	0.654
YEPL1	0.466	0.697	0.681
YEPL2	0.71	0.698	1.037
YEPL3	0.58	0.726	0.848
YEPL4	0.16	0.168	0.233
YEPL5	0.207	0.342	0.302

**Source:** Author's computation via SmartPLS, 2024

The outer loadings indicate that most indicators load highly on their respective constructs, with values above the recommended threshold of 0.7 for key items like NPAG1 (0.81), NPAG5 (0.867), YEMP1 (0.835), and YEPL3 (0.848), confirming strong item-construct relationships. However, weaker loadings, particularly for YEPL4 (0.233) and YEPL5 (0.302), suggest these items may not adequately represent the Youth Employment construct, indicating potential refinement needs for these measures. Generally, the results support the reliability of most indicators while highlighting areas for improvement.

#### 4.3 Structural Model Assessment

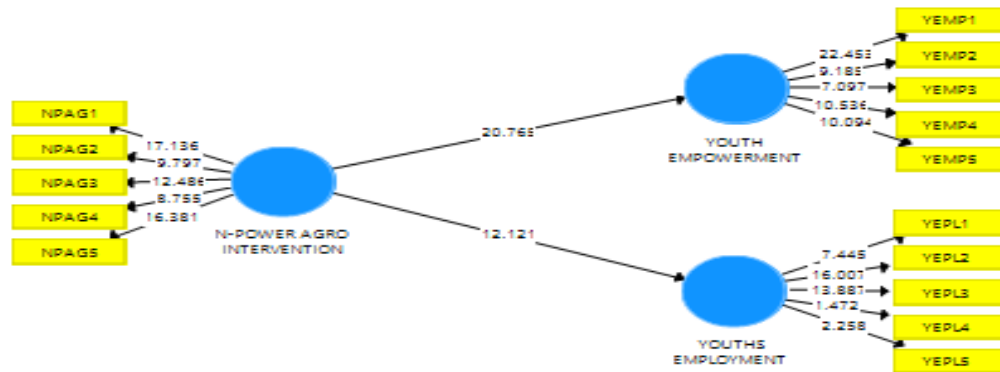
Before evaluating the structural relationships, it is essential to first assess collinearity to ensure it does not introduce bias into the regression results. Once collinearity assumptions are confirmed, the subsequent steps involve examining the model goodness of fit. Subsequently, the coefficient of determination ( $R^2$ ), effect size ( $f^2$ ), and the predictive relevance ( $q^2$ ) of the endogenous constructs can be assessed. The structural model assessment was conducted using



the PLS-SEM bootstrapping procedures. See figure 3 for the output and the subsequent tables for the presentation of the reports from the model.

Fig. 3

PLS-SEM Bootstrapping Path algoi



**Source:** SmartPLS Output, 2024

Following are the analysis and their interpretations

#### 4.3.1 Collinearity Analysis

**Table 6**

*Collinearity Tests*

Variables	Indicators	VIF
N-Power Agro Intervention Scheme	NPAG1	2.453
	NPAG2	2.332
	NPAG3	2.599
	NPAG4	1.633
	NPAG5	1.775
Youth Empowerment	YEMP1	2.121
	YEMP2	2.284
	YEMP3	2.035
	YEMP4	1.989
	YEMP5	2.082
Youth Employment	YEPL1	2.392
	YEPL2	2.355
	YEPL3	2.415
	YEPL4	1.618
	YEPL5	1.806

**Source:** Author's computation via SmartPLS, 2024

The collinearity test shows that all indicators have Variance Inflation Factor (VIF) values below the threshold of 5, ranging from 1.618 to 2.599, indicating no significant multicollinearity issues. This suggests that the indicators within the N-Power Agro Intervention Scheme, Youth Empowerment, and Youth Employment constructs are not excessively correlated, supporting the reliability of the regression analysis.



#### 4.3.2 Model Explanatory Power

**Table 7**

*Explanatory Power of the Model*

	<b>R Square</b>	<b>R Square Adjusted</b>
YOUTH EMPOWERMENT	0.77	0.768
YOUTHS EMPLOYMENT	0.468	0.464

**Source:** Author's computation via SmartPLS, 2024

Table 7 shows the model's explanatory power, with the R-Square for Youth Empowerment at 0.77 (adjusted 0.768), indicating that 77% of its variance is explained by the predictors, demonstrating strong explanatory power. For Youth Employment, the R-Square is 0.468 (adjusted 0.464), meaning 46.8% of its variance is explained, reflecting moderate explanatory power. This highlights the model's effectiveness in explaining Youth Empowerment and a fair explanation of Youth Employment.

#### 4.3.3 Model Goodness of Fit Test

Evaluating model goodness of fit (GOF) in Partial Least Squares Structural Equation Modeling (PLS-SEM) is essential to determine how well the model aligns with the data. Although PLS-SEM does not focus on GOF measures to the same extent as covariance-based SEM, several indicators help evaluate model fit, including the Standardized Root Mean Square Residual (SRMR), d\_ULS, d\_G, Chi-square, and Normed Fit Index (NFI) (Hair et al., 2019). Table 7 presents the GOF measures for both the Saturated and Estimated Models, providing a comprehensive assessment of the model's alignment with the data.

**Table 8**

*Model Goodness of Fit*

	<b>Saturated Model</b>	<b>Estimated Model</b>
SRMR	0.04	0.04
d_ULS	1.292	1.582
d_G	1.065	1.059
Chi-Square	774.951	709.39
NFI	0.81	0.927

**Source:** Author's computation via SmartPLS, 2024

Table 8 presents the model's goodness of fit, with an SRMR of 0.04 for both the saturated and estimated models, indicating an excellent fit (threshold <0.08). The Chi-Square values (774.951 for the saturated model and 709.39 for the estimated model) suggest a good overall model fit. The NFI improves from 0.81 in the saturated model to 0.927 in the estimated model, demonstrating a substantial improvement in model quality. These results confirm that the model adequately fits the data and supports its reliability for analysis.

#### 4.3.4 Effect Size ( $F^2$ ) Predictive Relevance ( $Q^2$ )

**Table 9**

*$F^2$  and  $Q^2$  Values*

<b>Indicator</b>	<b><math>Q^2_{predict}</math></b>	<b><math>F^2</math></b>
YEMP1	0.454	1.32
YEMP2	0.28	1.21
YEMP3	0.217	2.42
YEMP4	0.383	3.12
YEMP5	0.349	3.35
YEPL1	0.164	2.14
YEPL2	0.415	1.52



Indicator	Q <sup>2</sup> predict	F <sup>2</sup>
YEPL3	0.28	3.54
YEPL4	-0.008	2.1
YEPL5	0.001	0.881

**Source:** Author's computation via SmartPLS, 2024

Table 9 shows the F<sup>2</sup> and Q<sup>2</sup> values, which assess the effect size and predictive relevance of the indicators. The Q<sup>2</sup> values, ranging from 0.10 to 0.454, indicate good predictive relevance for most indicators, with YEMP1 (0.454) and YEPL2 (0.415) showing the highest predictive relevance. The F<sup>2</sup> values suggest varying effect sizes, with YEMP5 (3.35) and YEPL3 (3.54) showing large effect sizes, indicating their strong influence on their respective constructs. However, YEPL5 has a lower F<sup>2</sup> value of 0.881, indicating a smaller effect size. Overall, the model demonstrates strong predictive relevance and substantial effect sizes for most indicators, except YEPL5.

#### 4.3.5 Test of Hypotheses

**Table 10**

*Results of the Structural Model Analysis (Hypotheses Testing)*

Hypotheses	Relationship	Path Coeff. (β)	Std. Error	t-Stat.	P-Value
H <sub>01</sub>	NPAG-> YEMP	0.878	0.042	20.765	0.000
H <sub>02</sub>	NPAG -> YEML	0.684	0.056	12.121	0.000

**Source:** Author's computation via SmartPLS, 2024

Table 10 presents the results of the structural model analysis for hypothesis testing. Both hypotheses show significant relationships, with Path Coefficients (β) of 0.878 for NPAG → YEMP and 0.684 for NPAG → YEML. The t-statistics (20.765 and 12.121, respectively) are well above the critical value of 1.96, and the p-values (both 0.000) are below the 0.05 significance threshold. These results indicate strong and statistically significant positive effects of the N-Power Agro Intervention Scheme (NPAG) on both Youth Empowerment (YEMP) and Youth Employment (YEML), in Nasaeawa LGA, Nasarawa State rejecting the null hypotheses.

The findings of this test reveals;

1. That N-Power Agro Programme significantly and positively affected youth empowerment and employment in the study area, as evidenced by strong path coefficients and statistically significant relationships between constructs. These findings align with previous studies such as Bello and Yusuf (2017) noted the positive impacts of Nigeria's Youth

empowerment programs on job creation and skill acquisition. This implies that more investment in Empowerment programs will create more employment especially for the Youths as advocated by Human Capital theory applied in this study.

- 2.The relevance of Empowerment programs to achieve economic development. These findings support the Human Capital Theory, which suggests that investments in skills, training, and job creation enhance employability and labor market outcomes. The positive impact of the N-Power Agro programme on youth empowerment and employment aligns with the theory's emphasis on human capital development as a driver of improved labor market performance.

#### 5. Conclusion and Recommendations

Based on the study's findings from Table 10, the study concludes that the N-Power Agro Intervention Scheme (NPAG) has a significant and positive effects on both Youth Empowerment (YEMP) and Youth





Employment (YEML) in Nasarawa LGA, Nasarawa State -Nigeria. The strong path coefficients and the statistical significance of the results support the effectiveness of the NPAG program in enhancing the socio-economic status of youth, particularly through empowerment and employment opportunities.

It is therefore recommended that:

1. Given the positive impact of N-Power Agro Intervention Scheme on youth empowerment, it is recommended that the Nigerian government should expand the reach of this program to accommodate more beneficiaries, especially in rural areas. Increasing funding and resources will ensure that more youth gain access to these empowering opportunities.
2. To maximize the long-term benefits of N-Power Agro Intervention Scheme, the government should incorporate training in sustainable agricultural practices and entrepreneurship. This will equip participants not only with skills for immediate employment but also with the capacity to create self-sustaining agricultural businesses, further reducing unemployment in the country.

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