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Impact of Second National Fadama Development Programme (NFDP-II) on Income Inequality in Surulere Local Government Area of Oyo State, Nigeria

***Sanusi, W.A., Akintola, A.N. and Salam, S.A.**
*Sanusi, W.A.: Corresponding Author: Department of Agricultural Economics Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria. Email id: wasanusi@lautech.edu.ng
Akintola, A.N. Department of Agricultural Economics Ladoke Akintola University of Technology, Ogbomoso, Oyo State. email id: bonjour3k5@gmail.com
Salam, S.A. Department of Agricultural Economics Ladoke Akintola University of Technology, Ogbomoso, Oyo State. email id: salamsofiya@gmail.com

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Abstract **– This study examined the impact of NFDP-II on poverty alleviation and income inequality in Surulere Local Government, Ogbomoso, Oyo State, Nigeria. Data were collected using structured questionnaire and analyzed with descriptive statistics, Foster-Greer-Thorbecke (FGT) and Gini-coefficient. The result obtained from the descriptive statistics showed that majority of the farmers 84.3% were male, 85.7% had household size between members of 4-6, farmers had an average farming experience of 20.99 years and more than half of them 58.6% practiced crop farming. The result from Foster-Greer-Thorbecke (FGT) model showed that there was an increase in the level of poverty after the program than before the program because the FGT indices 1419.90 were greater after participation than the indices 7035.41 obtained before participation. Also, the result from Gini-coefficient revealed that there was higher income inequality after the program than before the program commences which increased from 23.3% to 24.9 %. The study also revealed that major problems faced by participants' farmers were poor funding, inadequate information about the program and ineffective training among other problems. Despite the constraints facing the respondents in the study area, the study revealed that there was an increase in the income and expenditure of participants after participating in the program. The results obtained however suggest that with continuous government support, slight adjustment in terms of protocol and further reduction in counterpart fund, the National Fadama development program II might alleviate poverty and improve income inequality among participant farmers.**

Keywords **– Poverty Status, Inequality, FADAMA and Poverty Alleviation.**

I. INTRODUCTION

Poverty is a multi-faceted concept with definition that could be culturally and geographically specific, depending on the particular society we are dealing with, mainly in variations in the society's welfare basket. Poverty is related to having little or no access to basic needs of a normal human being, the needs are defined to include both primary (food, water, clothing and shelter); and secondary (education, health, security, liberty, individual's right to property, access to employment and credit) needs (Bello Monsur,2010).

Poverty is defined as inability of individual or a group of individuals to attain a reasonable minimum level of well-being, by the standard of that society, especially in basic necessities of life such as food, clothing and shelter. From all indications, poverty is said to be deeply rooted in Africa with Sub-Sahara Africans being among the poorest in the world, both in real income and in access to social services, which expose their minds to criminal activities (World Bank, 1996).

Despite Nigeria's endowment in physical and human resources the country still experience worsening welfare conditions due to impoverishment at the household level. The crucial objective of rural development in Nigeria involves raising incomes and outputs as well as increasing assets in order to improve the welfare of rural people in totality (Adepoju, 2012).

Poverty exists in both urban and rural areas; however, in Nigeria like other developing countries, poverty is importantly a rural feature, this is because most of the poor people live in the rural areas, where they derive their livelihood mainly from farming activities. Although, poverty also exists in the urban areas as well and it is also becoming of increasing concern, as reflected in the worsening trend in urban welfare, rural poverty is a wider issue than the urban counterpart. It is known that about 68 percent of the extreme poor are dependent on agriculture and live in the rural communities (Etim and Ukoha, 2010). The Federal Office Statistic with World Bank in their analysis of the poverty trend in Nigeria noted that poor families are in higher proportion in farming household that are mainly in the rural areas (Kudi *et.al, 2008).* This implies that people living in poverty are more prevalent in the dwellers of rural areas than dwellers of urban metropolitan areas.

Regardless of the fact that these rural economies constitute the greater share of agricultural labour force, they earn low proceeds from their farming activities because of an array of problems which include, uncertainty in production output, poor marketing facilities, poor storage and preservation techniques, bad road network, poor health facilities, farm insecurity, low educational level, unfavourable government policies and programmes, and lack of technological know-how. This further leads to additional impoverishment, and / or increased inequality.

Income inequality generally explains the distribution of income among people in an economy. The problem of income inequality and poverty which are critical limiting factors on the way to development has for a long time

been a cause for concern to the Nigerian government. Levels of inequalities have been aggravated in Nigeria as a result of the new causes associated with technology change, lack of good governance, corruption, weak democratic institutions and past military rule which did not allow free discussion of issues or formulation of truly representative governance organs in the society. (Akinlade *et.al*, 2011).

FAO has consistently listed Nigeria among countries that are technically unable to meet their food needs from rain fed agriculture at low level inputs (Banta, *et.al 2008)*. Also, the devastating effect of desertification and drought in the last three decades on the dry sub-humid and semi-arid agro-ecological zones of Nigeria have made the Nigerian government to embark on massive investment in small-holder irrigation (Adeolu and Taiwo, 2004).

In an attempt to deal with the problem of poverty through poverty alleviation program in an agrarian country like Nigeria, knowledge of poverty profile is essential. It has been empirically established that low productivity in agriculture is the cause of high incidence of poverty in Nigeria. This is obvious as agriculture is the mainstay of Nigeria's economy contributing about 42% to total GDP and employing about 77% of the working population (Adeolu and Taiwo, 2004). It therefore imperative that any policy measure aimed at alleviating poverty must take agriculture and rural development into consideration. The federal government has put in place policies, programs and projects over the years aimed at boosting food production, encouraging economic growth and alleviating rural poverty in the country with the persistence of poverty.

The implementation of the second National FADAMA Development Programme (NFDP II) commenced in January 2004 and it is expected to last for 6 years with expected results of increase in income of farmers, employment and reduction in poverty as the major outcome (Kudi *et.al, 2008)*. Fadama II project was introduced in 2004 to be implemented in 11 states (Adamawa, Bauchi, Ogun, Gombe, Imo, Kaduna, Kebbi, Lagos, Niger, Oyo and Taraba) and the Federal Capital Territory (FCT). The major objective was to address noted shortcomings in the implementation of Fadama I project. Fadama II project used Community-Driven Development (CDD) approach as a targeting instrument bottom-up approach which is a negation of top bottom approach employed in Fadama I project (Muhammad *et.al,* 2011***).***

The word "Fadama" in Hausa local language (one of the Nigeria's largest tribes) means a low lying area which is susceptible periodic seasonal flooding. Fadama farming therefore implies cultivation or growing of crop under irrigation in the river flood plain. This implies that it is a farming that operates in the dry seasons. This is because the flood plains are inaccessible during the normal farming season. Vivian., *et al (2012)* explained that the Federal Government impressed by the achievement of FADAMA I, approached the African Development Bank (ADB) for support in expanding the achievement of FADAMA I in scope and in size. To achieve its broad objective, Fadama Development Project (FDP) adopted the community-driven development (CDD) approach much in line with the development bank policies and strategies for Nigeria which emphases in poverty reduction, private sector leadership and beneficiary participation. The NFDP II is a follow up of the first phase of the NFDP I, which had it main objective of exploiting ground water using simple drilling technique for increased Fadama production. The Fadama II objective was to sustainably increase the income of Fadama Resources Users (FRUs). Those who depend directly or indirectly on Fadama resources (that is, farmers, pastoralist, fisher-men, hunters, gatherers and service providers) through empowering communities to take charge of their development agenda (that is, each community would decide what they want before funding any project) and by so doing reducing conflicts between Fadama users. The objective of the Fadama project comprises of five components which includes: capacity building, Fadama infrastructure, pilot assets acquisition support, demand advisory services and project management, monitoring and evaluation.

According to Ephraim (2007), the Nigerian government launched Fadama II in 2005, a World Bank-funded project intended to increase the income of farmers, fishers, and other poor people in the low-lying floodplains, or Fadama areas, where poverty is concentrated. The incentives of the NFDP program are to reduce the rising index of standard of poor standard of living in some states across Nigeria. Since the mid 70's, an increasingly persuasive argument has emerged that if development project are to have any sustained impact on rural poverty, then the rural people themselves should participate and have some say in the planning and implementation of such rural projects. Those involved in ruraldevelopment projects are constantly seeking to understand theapparentinability of such projects to have a sustained impact on poverty. New strategies such as "integrated development" and basic needs" for example are suggested and tried, we have had decades with emphases on an economic growth, but we have not had "distribution". It is argued that if we are to meaningfully tackle rural poverty, then the rural poor must be brought into the development process and participation in the planning process (World conference on agrarian reform and rural development, 1988).

In view of the above, this study is broadly designed to examine the impact of the NFDP II on the socio-economic status of the farmers and specifically to assess the extent to which participation in the program has significant effect on the alleviation of the poverty level and income inequality of farmers in the Surulere local government area of Ogbomoso, Oyo state.

Thus, the study aims at providing answers to the following research questions.

1. What are the socio-economic characteristics of the participants in the study area?
2. What are the major benefits derived from participating in the NFDP - II?
3. What are the major problems encountered in participating in NFDP - II?
4. What is the poverty level and income inequality of farmers involved in NFDP - II before and after the pr--ogram was established in the study area?

The remainder of this paper is organized as follows; section II presents the methodology. In section III we discuss our results. Finally, the last section is conclusion and recommendation.

II. Methodology

Surulere Local Government was created out of the then Ogbomosho Local Government area (LGA), an agricultur--al zone of Oyo State on the 11th of May 1989. The LGA comprises of different villages, which are rural in nature. It has an area of 23km^2 with population was approximately 142,070 at the 2006 census. The Local Government is divided into ten political wards which comprises of towns and villages. They are Oko, Igbon-Ganbari, Iresaadu, Iregba, Iresaapa, Arolu, Ilajue, Iwofin, Manyin, and Baya Oje. Each of these towns have their own traditional leader with a given titles. The main economic activities of the residents of the towns that make up Surulere local government area is farming and the main produce from their farming activity are yam, cocoa, palm oil, maize and tobacco.

III. Population of the Study Area

Farmers who participated in second National Fadama Development Project (NFDP-II) in the study area.

IV. Sampling Technique and Ample Size

The primary data for this study were obtained through the use of well-structured questionnaire to administer selected participating farmers in NFDP - II program. A multistage sampling technique was employed for the study. The first stage was the simple random selection of two towns; Oko and Iresaapa in Surulere local governmemt area of Oyo stste, Nigeria. The second stage involved the selection of FADAMA user's group (FUG) from each town. And the last stage was selection of thirty five (35) respondents from each FUG. The number of respondents used in each state was proportionate to the population size of the local government. In all, seventy (70) respondents were sampled in Surulere local government of Oyo state, Nigeria.

V. Data Analysis

Data collected were analysed using descriptive analysis, Foster Greer Thorbecke (FGT) Poverty for poverty measurement and Gini-coeffent for measuring income inequality. While the descriptive analysis involved the use of tables, percentages, frequency count, and mean.

VI. Model Specification

FGT Poverty Measures FGT (1984) poverty index was employed to ascertain the poverty status of farmers and this was then used to profile them based on their socio economic characteristics. The measure relates to different dimensions of poverty, Po, P_1, and P_2 for head count (Incidence), depth (gap) and severity of poverty respectively. The three measures were based on a single formula but each index puts different weights on the degree to which a household or individual falls below the poverty line. The popularly used FGT (Foster Greer Thorbecke) weighted poverty index for quantitative poverty assessment used is as specified below:

$$P \propto = \frac{1}{N}\sum_{i=1}^{q}\left(\frac{Z_i - Y_i}{Z_i}\right) \quad (1)$$

Where,

$P\alpha$ = The weighted poverty index for the i_{th} sub-group.

α = Foster-Greer-Thorbecke (FGT) index and takes on the values of 0, 1 and 2 for incidence, gap and severity of poverty measures respectively.

Z_l = The poverty line for the ith sub-group.

q = The number of individuals below the poverty line.

N = The total number of individuals in the reference population.

Y_i = The per capita income of household j in the sub-group i.

$Z_l - Y_{ij}$ = Poverty gap of the i_{th} household.

$\frac{Z_l - Y_i}{Z}$ = Poverty gap ratio.

The quantity in bracket is the proportionate shortfall of expenditure/income below the poverty line.

$\frac{q}{n}$ = The proportion of the population that falls below the poverty line.

If $\alpha = 0$, then FGT measures the incidence of poverty.

If $\alpha = 1$, then FGT measures the gap of poverty.

If $\alpha = 2$, then FGT measures the severity of poverty.

Income inequality of Fadama participants' farmer was achieved by using Gini-coefficient. The Gini coefficient estimate provides information with respects to the level of income inequality among the respondents in the study area. The closer of the coefficient to 1 the higher the inequalities while the closer to zero indicates low income inequality. To calculate Gini - coefficient, Morduch and Sicular (2002) noted that where incomes are considered so that $Y_1 \leq Y_2 \leq Y_3 \leq \ldots \leq Y_n$.

The Gini coefficient is given by

$$I_{Gini}(Y) = \sum_{i=1}^{n} a_i\,(Y)Y \quad (2)$$

$$a_i(Y) = \frac{2}{n^2\mu}\left[i - \frac{n+1}{2}\right] \quad (3)$$

$$I_{Gini}(Y) = \frac{2}{n^2\mu}\sum_{i=1}^{n}\left[i - \frac{n+1}{2}\right]Y_i \quad (4)$$

Where

n = Number of observations.

μ = Mean of the distribution.

Y_i = Income of the ith household $a_i(Y_i)$ is the weight.

i = Corresponding rank of total income.

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VII. Results and Discussion

Socio-Economic Characteristics of Respondents

Distribution of respondents by age: Table I shows that majority of respondents were within the age range of 51-60 with 51.5% in the study area. This was followed by age of the respondents within the range of 41-50 with 25.7%. Respondens' ages above 60 were the least with 2.7%. On average, the mean age was 53.29 years, showing that most of the respondents are within active and virile age group.

Distribution of Respondents by sex: The percentage of male (84.3%) was rated above female percentage (15.7%) in the study area. Low percentage of female respondents might be due to the belief that agricultural activities were tedious and involved a lot of energy.

Distribution of respondents by marital status: Again, table I shows that majority of the famers in the study area were married with the percentage of 81.4%, percentage of single respondents was 5.7%, while divorced and widow were 1.4% and 11.4% respectively.

Distribution of respondents by the number of years spent in school: majority of the respondents 35.7% attended primary school. 25.7% had no formal education, also 25.7% of the respondents attended secondary school while 12.9% attended tertiary institution. This implies that majority of the respondents did have formal education.

Distribution of respondents by religion: majority of the respondents in the study area were Christians which accounted for 85.7 % of respondent while 7.1% accounts for Muslims, also 7.1% of the respondents were traditional worshippers

Distribution of respondents by occupation: more than half of respondents 58.6% in the study area were practicing crop farming. 27.1% of the respondents practiced livestock farming, 5.7% of the respondents were food processors, and also 5.7% of he respondents were artisans while only 2.9% were civil servants together with crop farming.

Distribution of respondents by their farm size: Table I also shows that 92.9% of the respondents had farm size between 1-2 hectares while 7.1% had 2.1-3 hectares of farm land. This might be as result of land fragmentation due to land ownership

Distribution of respondents by their farm year experience: It can be shown from table I that farmers with 11-20 years of experience constituted the highest percentage by 35.7%. While 32.9% of respondents had farming experience within the ranges of 21-30 years. Respondents within the range of 1-10 years of experience and more than 30 years of experience were 18.6% and 12.9% respectively.

Distribution of respondents by their household size: majority of the respondents in the study area had family size within the range of 4-6 children or dependents which accounted for about 85.7% of the whole respondents. It was discovered that their farming activities were enhanced by this large family size through easy division of labour and reduction in the cost of labour. 7.1% were with family size within the range of 7-9, 5.7% had household size within the range of 1-3 children or dependents while the l-east percentage 1.4% were above 9 household size.

Table I. Socio-economic characteristics of respondents.

Variables	Frequency	Percentage
Age (years)		
<30	0	0
31-40	4	5.7
41-50	18	25.7
51-60	36	51.5
>60	12	17.1
Sex		
Male	59	84.3
Female	11	15.7
Marital Status		
Single	4	5.7
Married	57	81.4
Divorced	1	1.4
Widow	8	11.4
Educational status		
No formal education	18	25.7
Primary school	25	35.7
Secondary school	18	25.7
Tertiary institution	9	12.9
Religion		
Christianity	60	85.7
Islam	5	7.1
Traditional	5	7.1
Occupation		
Crop farming	41	58.6
Livestock farming	19	27.1
Food processing	4	5.7
Civil Servant	2	2.9
Artisan	4	5.7
Farm size(hectares)		
1-2	65	92.9
2.1-3	5	7.1
Experience (Years)		
1-10	13	18.6
11-20	25	35.7
21-30	23	32.9
>30	9	12.9
household size		
1-3	4	5.7
4-6	60	85.7
7-9	5	7.1
>9	1	1.4

Source: Field Survey 2012

VIII. Poverty Level of Respondents before and after the NFDP-II Program

Monthly Income of Respondents before Participating in Program:

Table II indicates that 40% of the respondents had monthly income of above 50,000, this may be as a result of their high level of literacy and ability to accommodate innovation. 15.7% had monthly income within 21,000-30,000 and 41,000-50,000. Only 4.3% made income less than 10,000. The average income before participation was 47714.29 Naira.

Table II: Frequency and percentage distribution by monthly income before program.

Monthly income (naira)	Frequency	Percentage
10,000-20,000	3	4.3
21,000-30,000	11	15.7
31,000-40,000	17	24.3
41,000-50,000	11	15.7
>50,000	28	40
Total	70	100

Source: field survey, 2012

Monthly Expenses of respondents before Participating in Program:

Table III indicates that 45.7% of the respondents spent between 21,000-30,000 naira which implies that some of the respondents had to look for external sources to sustain themselves 22.9% and 18.6% spent between 31,000-40,000 and 41,000-50,000 naira respectively. 5.7% of the respondents spent within the amount of 10,000-20,000. The least of the percentage of the respondents spent 50,000 naira and above. The average expenses before participation is at 37242.86 Naira

Table III. Frequency and percentage distribution by monthly expenses before program.

Monthly expenses (naira)	Frequency	Percentage
10,000-20,000	4	5.7
21,000-30,000	32	45.7
31,000-40,000	16	22.9
41,000-50,000	13	18.6
>50,000	5	7.1
Total	70	100

Source: field survey, 2012

Monthly Income of Respondents after Participating in program:

Table IV indicates that majority 48.5% of the respondents had monthly income above 70,000. About 17.2% and 5.7% of the respondents had monthly income within the range of 61,000-70,000 and 51,000-60,000 respectively. Only 20% of the respondents made within the range of 41,000 - 50,000 and 31,000 - 40,000. None of the respondents earned 30,000 naira and less. The average income after participation is at 78928.57 Naira.

III.

Table IV. Frequency and percentage distribution by monthly income after program.

Monthly income (naira)	Frequency	Percentage
< 30,000	0	0
31,000-40,000	6	20
41,000-50,000	14	20
51,000-60,000	4	5.7
61,000-70,000	12	17.2
> 70,000	34	48.5
Total	70	100

Source: field survey, 2012

Monthly Expenses of Respondents after Participating in Program:

Table V indicates that 27.2% of the respondents spent within the amount of 31,000-40,000. 18.6% and 17.1% spent within the amount of 41,000 - 50,000 and 61,000-70,000 naira respectively, 11.4% spent the least amount within the range of 21,000-30,000, while 20% spent 70,000 naira and above. Least of the respondents 5.7% spent within the range amount of 51,000-60,000. The average expenses after participation is at 54514.29 Naira.

Table V. Frequency and percentage distribution by monthly expenses after program.

Monthly expenses (naira)	Frequency	Percentage
21,000-30,000	8	11.4
31,000-40,000	19	27.2
41,000-50,000	13	18.6
51,000-60,000	4	5.7
61,000-70,000	12	17.1
>70,000	14	20
Total	70	100

Source: field survey, 2012

IX. Major Benefits Derived by Respondents in Participating in NFDP-II Program

Table VI shows that respondents significantly derived benefit mainly from opportunity to training, access to advisory service, increased awareness and understanding of the program with 84.3%, 60.0% and 55.7% respectively. While 47.1%, 32.9% and 25.7% of the respondents derived benefit in dispute management, improved standard of living, and access to housing facility respectively. 21.4% of respondents benefited from encouraged cooperation among rural dwellers.

Table VI. Frequency and percentage distribution by major benefit derived.

Assets	Frequency	Percentage
Opportunity to training	59	84.3
Increased awareness and	39	55.7
Understanding of program		
Encourage cooperation among	15	21.4
Rural dwellers		
Dispute management	33	47.1
Access to advisory service	42	60.0
Improved standard of living	23	32.9
Access to better housing facilities	18	25.7

Source: Field survey, 2012 *multiple responses

X. Introduction of Project to Respondents

Table VII shows that most of respondents were introduced to various projects in the study area. This was indicated by borehole and knapsack sprayer having highest percentage of 31.4% each. This might be due to majority of the farmers involving in crop production. The least been introduced was feed mill and palm kernel having 0% and 7.1% respectively.

Table VII. Frequency and percentage distribution of introduction to project.

Introduced Project	Frequency	Frequency
Borehole	22	31.4
Feed mill	0	0

Palm kernel Processing centre	5	7.1
Road rehabilitation	19	27.1
Drainage	20	28.5
Fish pond construction	13	18.6
Knapsack sprayer	22	31.4
Goat and sheep pen	8	11.4

Source: Field survey, 2012. *Multiple responses

XI. Participation in Introduced Project to Respondents

Table VIII shows that most of respondents in the study area participated lowly in various project.

This might be due to inadequate access to information. This was indicated by knapsack sprayer having highest percentage of 25.7% and palm kernel processing centre having 1.4%.

Table VIII: Frequency and percentage distribution of participation of introduced project.

Introduced Project	Frequency	Frequency
Borehole	13	18.6
Feed mill	0	0
Palm kernel Processing centre	1	1.4
Road rehabilitation	12	17.1
Drainage	8	11.4
Fish pond construction	11	15.7
Knapsack sprayer	18	25.7
Goat and sheep pen	7	10.0

Source: field survey, 2012. *Multiple Responses

XII. Problems Encountered in Participating in NFDH-II Program

Table IX shows that source various problems encountered in participating in the program. All the respondents faced one problem or the other. Majority of the respondents encountered in adequate access to information with 62.9% and socio - cultural belief being the least problem encountered with 2.9%.

Table IX. Frequency and percentage distribution of problem encountered.

Problems encountered	Frequency	Percentage
Socio-cultural belief	2	2.9
Inadequate access to information	44	62.9
Ineffective training	41	58.6
Poor group leadership	10	14.3
Poor attendance at meeting	16	22.9
Poor funding	3.8	54.3
High cost of maintenance of Irrigation equipment	15	21.4
Time wasting in processing	11	15.7

Source: field survey, 2012. *Multiple responses

XIII. Suggestions on Improving the Problems Encountered

It can be shown from table X that most respondents with 48.6% suggested that there should be slight adjustment in terms of protocol guiding Fadama project execution while 14.3% suggested a complete overhaul of project with in other to aid effective planning of subsequent program.

Table X. Frequency and distribution of suggestions.

Suggestions	Frequency	Percentage
Continued commitment on the part of govt.	28	40
Complete project overhaul	10	14.3
Further reduction in counterpart funds	19	27.1
Effective input support services	32	45.7
Slight adjustment in term of protocol	34	48.6

Source: field survey, 2012. *Multiple responses

XIV. Result of FGT Poverty Estimates and Gini Inequality

This section provides in-depth analysis of poverty status and income inequality status of Fadama users in the study area. The estimated poverty line of the participants sampled in NDFP-II program is presented in the table 19 below

Estimation of Poverty Line:

The poverty line is the value of expenditure that is needed to cover food and other items for healthy living. The relative poverty line was adopted in this study, the poverty line was estimated to be two-third per mean capital expenditure and this was estimated to be seven thousand and thirty five naira, forty one kobo (₦7035.41) before the program and eleven thousand, four hundreds and nineteen naira, ninety kobo (N11419.90) after the program as shown in table XI below.

Based on these two poverty lines, the FGT indices and the Gini-coefficient index were estimate for the two periods.

Table XI. Poverty line of respondents before and after Fadama II program.

Period	Poverty line (₦)
Before	7035.41
After	11419.90

Source: field survey, 2012

FGT Poverty Estimates:

Taking $G_{0:\ Gini}$ –income inequality

$P_{0:}$ Poverty head count index

$P_{1:}$ Depth of poverty

$P_{2:}$ Poverty severity of respondents

A critical look at the table XII below revealed that more of the respondents who participated in NDFP-II program (57.14%) fell below the poverty line before and after the participation in the program. This revealed that there was no significant increase in the poverty headcount index of respondents sampled before and after the program. The poverty depth of Fadama users defined as the average gap or distance between the income of the average poor and poverty line. The result in table XII reveals that the income of respondents must be raised by 16.14 % before participation and 17.75% after the program for the respondents to move out of poverty.

The result on severity of poverty among the respondents shows that poverty is severe after the participation in the program compared to before participation. i.e. 6.8% before and 7.2 after the program.

Table XII. Percentage of Poverty and income inequality among respondents.

Period	G_0	P_0	P_1	P_2
Before	0.233405080	0.57142860	0.16143703	0.06843074
After	0.24967112	0.57142860	0.17758457	0.07249737

Source: field survey, 2012.

Gini /S-Gini Inequality Estimates:

The result in table XIII below shows that the respondents had higher income inequality after the program compared to the one obtained before participa- -tion in the program. The relatively low income inequality might be as a result of low level of educated people participating in the NFDP-II program.

Table XIII. Percentage of Gini-coefficient before and after the program

Period	Percentage (%)	G_0
Before	23.3	0.23340508
After	24.9	0.24967112

Source: field survey, 2012.

This results obtained in FGT model and Gini-coefficientcorrelate and is in line with the findings of Oni et al (2007) in their study, the beneficiary impact assessment of Fadama user, with Gini-coefficient of 0.59 and 0.65 for year 2005 and 2006 and there was an increase in the FGT poverty level indices.

XV. Conclusion

The study found out that the respondents in the study area were adults; mostly married males with large family size were actively involved in agricultural production. The FGT indices showed that the poverty level of the respondents was higher after participation in the program than before participation in the program, while the Gini -coefficient also increased after participation in the NFDP-II. Thus, from all indices obtained from this study, it can be concluded that participation in NFDP-II program had no positive impact on alleviating poverty and reduction in income inequality among participating farmer in Surulere local government of Oyo state area.

Therefore the following recommendations were drawn based on the result of the findings:

i. There is need to encourage the funding of infrastructural facilities among participants to encourage increased standard of living and continuous commitment on the part of the government in other to increase the impact it would have on the participants
ii. Though farmers participation in the NFDP is high, efforts should be intensified to diversify agricultural practices in terms of emphasizing on other branches of agriculture other than crop farming such as live stocks, fisheries, modern bee keeping practices, agro processing etc which could lead to improvement in Nigeria's GDP and farmers rate of return on investment.
iii. It is recommended that efforts be made by concerned authorities and bodies to further reduce counterpart fund to be paid by farmers in order to benefit from project components
iv. Slight adjustment in terms of protocols should be made in other to increase farmers' access to funds.

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AUTHOR'S PROFILE

Sanusi, Wasiu Adekunle was born in Oyo State, Nigeria on 19th May, 1969. He holds a B. Agric. in general Agriculture from the University of Ilorin, Kwara state in 1992. In 1987 and 2012 he obtained his M.Sc. and Ph.D. in Agricultural Economics from the University of Ibadan and Federal University of Agriculture, Abeokuta Nigeria respectively. He is an Associate Professor at the Ladoke Akintola University of Technology, Ogbomoso, Oyo State. In this position, he teaches and conduct research in agricultural economics. He specialized in agricultural policy. His field of interest includes household welfare, poverty and food security in policy making. Among his published articles are:

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Dr. Sanusi is member of the Nigerian Association of Agricultural Economics (NAAE), Farm Management Association of Nigeria (FAMAN), Agricultural Society of Nigeria (ASN), and a member of Nigerian Rural Sociological Association.