Managing national poverty eradication programme for food security among all farmers Association in Nigeria

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The study evaluated the impact of National Poverty Eradication programme (NAPEP) on food security among the All Farmers Association of Nigeria (AFAN), using data from Kogi State of Nigeria. The study is borne out of the curiosity to address the problems of poverty and hunger in Kogi State of Nigeria. The z-test statistics was used to test the hypothesis at 5% level of significance. The study showed that beneficiaries of NAPEPs intervention had significantly greater output in crops and that their income significantly exceeded that of non-beneficiaries. One of the two major problems that hindered the success of NAPEP is that only a few beneficiaries selected among the numerous individuals are within the low income bracket. The second problem is inadequate loan granted to beneficiaries. Based on this, the paper recommended that NAPEP should increase the number of beneficiaries, increase their loans, intensify provision of central productive input and focus on the processing of agricultural produce. This will add value to the produce, command high prices, increase varieties, generate more employment opportunities, enhance food security and reduce poverty incidence.

Key words: National poverty eradication programme, food security, all farmers association of Nigeria, small scale farmers, industrialists.

INTRODUCTION

The Federal Government of Nigeria has at various times committed millions of naira to programmes aimed at increasing agricultural production and reducing poverty. Yet, contemporary studies and the government itself attest that poverty and hunger still prevail in the country. As noted by Jibril et al. (2009), poverty is currently one problem in Nigeria whose level contradicts the immense resources in this country.

Several studies on agricultural development implication and evaluation of government programmes as well as poverty have been carried out. No study has been conducted to evaluate the impact of National Poverty Eradication programme (NAPEP) on All Farmers Association of Nigeria (AFAN) in Kogi State. This study is carried out to re-focus and make NAPEP more proactive and consequently to make its objective more realistic.

There is no universally accepted definition of poverty but some countries have established poverty line that demarcates the poor from the non-poor. The first conceptual approach to poverty was based chiefly on monetary poverty measured in terms of household income and consumption (Kankwenda, 2000). Poverty
has been seen as lack of money and material resources as well as lack of access to economic and social opportunities (Alegieuno and Attah, 2005).

The multidimensional nature of poverty is increasingly being acknowledged. It is now a concept that transcends the absence of sufficient monetary income. The characteristics of poverty comprehensively include lack of employment opportunities, lack of land and production credit, food insecurity and malnutrition, lack of shelter, physical isolation and vulnerability to external shocks and diseases (Coote et al., 2000). Due to the multidimensional nature of poverty and its grave consequences on both humans and the economy, government have embarked on public expenditure to eliminate poverty. For most Saharan African countries, it is believed that agriculture offers the best and most sustainable way out of poverty (Fan, 2008). It was in line with this school of thought that successive Nigerian governments adopted several programmes aimed at tackling poverty, using small scale farmers as a focus group.

Government's focus on small scale farmers is predicted on two major reasons. Idachaba (1993) and Ajakaiya (1993) gave these two reasons. Firstly, poverty in Nigeria is rural in nature and small scale farmers dominate the population of rural areas in Nigeria. Secondly, small scale farmers produce about 75% of the food consumed in the country.

Therefore, any measure that reduces the pervasive poverty among the rural populace will result in the reduction of the level of poverty in the nation.

The proceeding concept has held sway among policymakers in Nigeria because the dominant poverty characteristics relate to agriculture. It is no longer news that agriculture was the mainstay of Nigerian economic before it was replaced by oil.

Also, it is a common knowledge that agriculture is the chief employer of both skilled and non-skilled labour in Nigeria (IFPRI, 2007). In order to increase food productivity and reduce poverty, several programmes have been launched. Agricultural programmes and policies have become institutionalised as far back as 1900. Since then, numerous programmes have emerged to tackle low crop productivity and poverty. Some of these programmes include: Agricultural Development Project, National Accelerated Food Production Programme, Operation Feed the Nation, National Special Programme on Food Security, National Fadama Development Project, Family Economic Advancement Programme and Better life Programme.

The NAPEP was established in 2001 as the primary agency of the Federal Government of Nigeria to eradicate extreme poverty in Nigeria. The functions of NAPEP are to:

(1) Coordinate all poverty eradication efforts in the Federation.

Between 2001 and 2005, NAPEP has trained 142,112 youth participants across the nation generating a multiple of three- spi apprentices to a participant. This gives a total of 711400 trained youths within the period, with an average of 177850 trained annually drawing from the experience of the implementation of capacity acquisition.

Coordinated Agricultural Programme (CAP) after the first phase was repackaged in 2004 to provide for the collaboration of 12 State governments. In 2005, up to 247,1999999.80 naira was released for the setting up of participants. It is expected that this arrangement would create about 140,000 jobs in the affected states (NAPEP, 2007). In 2002, Kogi State NAPEP received 5,000,000.00 naira for Farmers Empowerment Programme (FEP). This facility was extended as loan to poultry keepers, fish farmers in the state. Sixteen cooperative groups across Kogi State benefited from this facility (Gunwa, 2007).

According to NAPEP (2007), one strategy for alleviating poverty is to empower the poor masses to leverage resources and tools for well being and sustainable livelihood. NAPEP identifies access to micro credit to attacking one of the principal challenges facing the poor. All along, poor people have been unable to access credit facilities which are usually available to entrepreneurs operating in both the formal and informal sectors. The simple reason has been the lack of requisite collateral by the poor.

Subsequently, the failure of the formal financial system to extend credit facilities and other vital services to small and micro enterprises in the informal sector has shortchanged a large number of people from activity participating in the economic development process. To a large extent, this trend has increased the number of people defined as poor, thereby exacerbating the poverty rate in Nigeria.

The provision of micro-credit presupposes the existence of micro-entrepreneurs or low-income borrowers who are already mobilised to use their loans with the view to repaying promptly and with ease. In other words, micro-credit cannot be practiced in a vacuum (Gunwa, 2007). The capacity of the prospective borrowers must be built, their skills developed and strengthened and right environment should be created for the repayment of loans.

In line with the above concept, Kogi State NAPEP recognised the need to partner with institutions that have poverty contents in their activities across the State. Thus,
Kogi NAPEP selected credible non-governmental organisations and community banks referred several viable cooperative groups, with at least ten members each, which are into micro-economic activities. The selection of the beneficiaries spread across the entire Kogi State; it involved up to 11 micro financing institutions. One of the Kogi State NAPEP major micro finance institutions is the All Farmers Institutions of Nigeria (AFAN).

In 2002, for instance, AFAN disbursed about 50% of the Micro-Partner Matching Fund (MPMF) to 105 farmers' cooperative groups across the 21 Local Government Areas in the State (Gunwa, 2007).

In line with its predecessors as well as its mandate, NAPEP identifies agriculture as one of its key sector and focuses on those who organise themselves into cooperative societies that benefit from NAPEP intervention in Kogi State, which is All Farmers Association of Nigeria (AFAN).

The AFAN is both microfinance institute and a group of cooperative societies. The Kogi State chapter of AFAN comprises 118 cooperative societies which are spread across the 21 Local Government Areas of the State. The cooperative societies are involved in agricultural activities raising from arable cash crops enterprises to poultry and processing. Loans which these groups have benefited range from N200,000 to N500,000 per cooperative society. AFAN in Kogi State is a conglomerate of various cooperative groups whose type of grade of farming under the auspices of AFAN, the various component cooperative groups benefit from the loan facilities extended by NAPEP in the State (Gunwa, 2007). The basis of this loan facility is to mitigate the financial constraint which is the bane of small scale farmers in Nigeria.

Programme evaluation studies are carried out at three stages: re-evaluation, on-going and post-evaluation studies. Primarily, post-evaluation studies aim at identifying the impact which a certain intervention has made on the beneficiaries (Jitinger, 1987). The subject of evaluation in this study is the impact of NAPEP's intervention on the output and income of AFAN members of Kogi State.

Several studies on agricultural development implications and evaluation of government programmes have been carried out. For instance, Ejebi and Ejebi (2005) analysed the production decisions of female livestock producers in Makurdi Local Government Area and its implication for agricultural Development. Also, Ogbanje (2008) evaluated the special programme for food security in Benue State. Furthermore, Apouj et al. (2006) appraised the participation of women in Kano State Agricultural and Rural Development Authority Extension Delivery Programmes. In addition, Abeng and Onunuugbo (2006) reviewed the impact of ICT for agricultural development on poverty alleviation. No study has been conducted to evaluate the impact of NAPEP on AFAN members of Kogi State of Nigeria.

The overall objective of this study is to evaluate the impact of NAPEP's intervention on AFAN members in Kogi State. The specific objectives are to:

(i) Determine the membership profile of AFAN in Kogi State;
(ii) Analyse the socio-economic characteristics of the respondent;
(iii) Assess NAPEP's agricultural programmes in Kogi State;
(iv) Evaluate the implication of NAPEP's intervention in Kogi State; and
(v) Evaluate the impact of NAPEP's agricultural programmes on AFAN members in Kogi State.

In order to achieve specific objective, the following hypotheses were stated and tested:

(i) There is no significant difference between the total output value of NAPEP beneficiaries and non-beneficiaries;
(ii) There is no significant difference between the income of NAPEP beneficiaries and non-beneficiaries.

Evaluation studies mostly aim at refocusing the attention of programmes and agencies on their set goals and objectives. The study benefits the operators of NAPEP, the stake holders, the economy, members of AFAN, peasant farmers etc. The on-going evaluation study will help to strengthen the focus of the operators of NAPEP in Kogi State in particular and Nigeria at large. The findings of the study will draw the attention of NAPEP stakeholders and collaborators/partnerships to further areas of intervention. Thus more beneficiaries will come on board, and existing ones will receive further boost.

For a nation like Nigeria, agriculture remains the surest way out of poverty, the best attentive sources of foreign exchange, employment and food sufficiency. In the light of this fact, finding of this study will increase the scope of NAPEPs intervention in agriculture.

Members of AFAN as well as other peasants farmers in Kogi State will benefit from the findings of this study with more micro-credits extended to them; hence the farmers will witness increased income level and productivity. With these key variables of poverty under control, it is expected that sustainable poverty reduction will be attained.

METHODOLOGY

The study area is Kogi State located in the North central Zone of Nigeria. It is the confluence of River Niger and River Benue; its capital is Lokoja, which is the first administrative capital of modern-day Nigeria. Kogi State was created in 1991 from parts of Kwara State and Benue State. It comprises the peoples of the default Kabba Province of Northern Nigeria. The four main ethnic groups in
Kogi State are Igala, Ebira, Okun (Yoruba), Bassa and Yaba (Yoruba). It has a population of 3,595,789 (National Census, 2006).

Agriculture is the mainstay of the economy. The principal cash crops are notably coffee, cocoa, palm oil, cashews, peanuts, maize cassava, yam rice and melon. The mineral resources include coal, limestone, iron, petroleum and tin. The state is home to the largest iron and steel industry in Nigeria and one of the largest cement factories in Africa is currently being built there. Up to 118 cooperative societies have so far registered as members of AFAN, which are spread across the 21 Local Government Area of Kogi State, consisting of beneficiaries and non-beneficiaries of NAPEP’s intervention. They are engaged in various agriculture and agro-allied ventures.

The study is limited to members of AFAN in Kogi State who have benefited from the intervention of NAPEPs and members of AFAN in the State who have not benefited from the intervention of NAPEPs. Emphasis was laid on the income and total output value of these respondents to determine the impact of NAPEP programme on the beneficiaries. Furthermore, the focus of this study was limited to evaluating the impact of NAPEP on its beneficiaries with respect to four key agricultural services offered to NAPEP beneficiaries (AFAN members): loan facility, agrochemical supplies, provision of improved crop varieties and marketing assistance rendered.

The population for the study comprises all small scale farmers who are members of All Farmers Association of Nigeria (AFAN). A two-stage stratified random sampling technique was used to select respondents for the study. In the first stage, two local government areas were randomly selected from each of the 3 Senatorial Zones in the State. In the second stage, small scale farmers who are AFAN members were selected from each local government area based on an unbiased sampling proportion of 0.021%. The sampling proportion was applied to the population of AFAN members in each local government area. Based on this, the sample size for the study was 199.

Data for the study were collected mainly from both primary and secondary sources. The primary data were obtained through the use of structured questionnaires that were given to the selected respondents. Secondary data were collected from the records of AFAN and NAPEP.

The adequacy of the research instrument was determined using content validity. In the process, the instrument was thoroughly examined by appropriate experts independently. The observations of the experts were harmonised and necessary corrections effected on the instrument before field survey commenced. This is in line with the recommendation of Kerlinger (1973).

The test–retest method was used to ascertain the reliability of the instrument. In this case, the instrument was administered to 50 farmers in the study area twice within an interval of two weeks. The results of these surveys were correlated using Pearson product moment correlation which was found to be 0.75 at the significant level of 0.1. Thus, the instrument was adjudged reliable.

The data for the study were analysed using both descriptive and inferential statistics. The descriptive statistics was used to analyze objectives i-iv of this study while income change comparison and t-test were used to analyze specific objective v. The statements of hypotheses were tested using t-test.

In order to evaluate the impact of NAPEP’s agricultural programmes on AFAN members in Kogi State, a comparison of the income change of respondents with NAPEP intervention to the income change of respondents without NAPEP intervention was made as follows.

Income change of respondent without NEPEP intervention = Income of Beneficiaries AFTER NEPEP intervention — Income of Beneficiaries BEFORE NEPEP intervention.

Assuming income change without intervention is the same for Beneficiaries and Non-Beneficiaries, then,

Income change of respondent without NEPEP intervention = Income of Non-Beneficiaries AFTER NEPEP intervention — Income of Non-Beneficiaries BEFORE NEPEP intervention.

RESULTS AND DISCUSSION

The membership profile of AFAN is presented in Table 1. Findings revealed that majority of the respondents acquired their membership of AFAN through cooperative societies (72.4%). In other words, they first registered with a cooperative society as a prerequisite for acquiring the membership of AFAN where as 27.6% of the respondents joined AFAN as individuals that is, they joined AFAN directly. This analysis shows that membership of AFAN can be acquired directly (as an individual) and indirectly (through cooperative societies).

As seen in Table 1, the major enterprise of most of the respondents was arable crop production (45.7%), whereas, 21.1% of them were mainly involved in tree crop production. Furthermore, 14.1, 8.0, 6.0 and 5.0% were engaged in livestock production, fishery, trading and processing enterprises, respectively. Majority of the respondents were involved in one form of agricultural activity or the other. This finding is in conformity with the report of the International Food Policy Research Institute (IFPRI) (2007) that agriculture is the major occupation of most rural Nigerians. Fans (2007) held that agriculture offers the most sustainable way out of poverty in most developing countries. Gunwa (2007) indicated that the Phase II of farmers Empowerment Programme (FEP), that includes Kogi State, was designed to boost the production of arable crops as well as livestock.

Furthermore, findings in Table 1 showed that most of the respondents (67.3%) benefited from the agency’s intervention programme. According to NAPEP (2007), financial assistance from the agency is expected to mitigate critical production constraints faced by small scale farmers. This finding is in line with Gunwa (2007) that AFAN is one of the groups targeted to benefit from NAPEP.

The socio-economic characteristics of the respondents are presented in Table 2. Findings revealed that males constituted 63.8% whereas females constituted 36.2% of the respondents. Thus males constituted the majority of the respondents. Although females account for a high proportion of agricultural activities (Adepoju et al., 2006), they are usually discriminated against by agricultural development agents. According to Mohammed et al. (2009), men tend to benefit more than women from development programmes.

Majority of the respondents (37.2%) were aged between 40 and less than 50 years old. Those aged 30 and less than 40 years, 50 and less than 60 years, 20 and less than 30 years, and greater 60 years represented 33.20, 19.60, 7.0, 2.50 and 0.50% respectively, of the respondents. The age of most of the respondents was
Table 1. Profile of AFAN membership.

| Options                        | Frequency | Percentage |
|--------------------------------|-----------|------------|
| **Acquisition of membership** |           |            |
| Individual                     | 55        | 27.6       |
| Through cooperative society    | 144       | 72.4       |
| **Total**                      | 199       | 100        |
| **Major enterprise**           |           |            |
| Arable crop                    | 91        | 45.7       |
| Tree crop                      | 42        | 21.1       |
| Livestock                      | 28        | 14.1       |
| Fishery                        | 16        | 8.0        |
| Processing                     | 10        | 5.0        |
| Trading                        | 12        | 6.0        |
| **Total**                      | 199       | 100.0      |
| **Beneficiary status**         |           |            |
| Beneficiary                    | 134       | 67.3       |
| Non-beneficiary                | 65        | 32.7       |
| **Total**                      | 199       | 100.0      |

Source: Field Survey, 2010.

Table 2. Socio-economic characteristics of respondents.

| Variable                | Frequency | Percentage |
|-------------------------|-----------|------------|
| **Sex**                 |           |            |
| Male                    | 127       | 63.3       |
| Female                  | 72        | 36.7       |
| **Total**               | 199       | 100.0      |
| **Age (years)**         |           |            |
| 0 and below             | 1         | 0.5        |
| 20 < 30                 | 14        | 7.0        |
| 30 < 40                 | 66        | 33.2       |
| 40 < 50                 | 74        | 37.2       |
| 50 < 60                 | 39        | 19.6       |
| ≥ 60                    | 5         | 2.5        |
| **Total**               | 199       | 100.0      |
| **Level of Education**  |           |            |
| Post graduate           | 14        | 12.1       |
| Post secondary          | 76        | 38.2       |
| Secondary               | 69        | 34.7       |
| Primary                 | 27        | 13.6       |
| Non-formal              | 3         | 1.4        |
| **Total**               | 199       | 100.0      |
| **Level of Income (N)** |           |            |
| 1,000 < 50,000          | 28        | 14.1       |
| 50,000 < 100,000        | 30        | 15.1       |
| 100,000 < 150,000       | 17        | 8.5        |
| 150,000 < 200,000       | 78        | 39.2       |
| ≥ 200,000               | 46        | 23.1       |
| **Total**               | 199       | 100.0      |

Source: Field Survey, 2010.
more than the 37 years which was found by Obinne et al. (2009). This was probably due to the fact that this population for the study comprised members of a social group other than those solely engaged in farming.

Findings in Table 2 further showed that majority of the respondents had post-secondary education such as National Diploma and National Certificate of Education. Holders of Secondary School Certificate constitute 34.7%, where as those with first school leaving certificate and post-graduate certificate were 13.6 and 12.1%, respectively. Respondents who had non-formal education were 1.4%. This analysis shows that the respondents attained various levels of education and can, thus give reliable opinions on the subject matter. The level of education of the respondents was above the literacy level used to characterize small scale farmers in Nigeria. The result shows farmers with a level of education which is higher than the secondary reported by Balogun et al. (2007). This is appropriate for successful interaction at the social level of farming membership of a formal cooperative society.

Income level distribution showed that majority of the respondents (39.2%) earned between N150, 000.00 and less than N200, 000.00 from their agricultural enterprises, whereas income class of greater than or equal to N200,000.00 constituted 23.1% of the respondents; 15.1, 14.1 and 8.5% of the respondents comprised those who earned between N50,000.00 and less than N100,000.00; N1,000.00 and less than N50,000.00, and N100,000.00 and less than N150,000.00, respectively. Those farmers earn an average income of N196, 685.00. Higher farm income encourages farmers to increase their level of productivity.

NAPEP’s provision of Agricultural Services in Kogi State is presented in a multiple response format in Table 3. Findings revealed that 27.6% of the respondents were assisted with loans by NAPEP. Lack of financial capital has been the major constraint faced by small scale farmers in developing countries. Asogwa et al. (2007) noted that farmers are poor and cannot invest adequately in agricultural productivity. Thus, the provision of loan to farmers by NAPEP is an appropriate strategy to mitigate the arduous labour associated with weeding.

Table 3. Reported NAPEP’S provision of agricultural services in Kogi State.

| Services                        | Frequency | Percentage |
|---------------------------------|-----------|------------|
| Provision of loan facilities    | 55        | 27.6       |
| Provision of agrochemicals      | 58        | 29.1       |
| Provision of improved crop varieties | 43        | 21.6       |
| Provision of marketing assistance | 43        | 21.6       |

Source: Field Survey, 2010.

The great pressure on land fast depletes soil fertility. This is where the use of inorganic fertilizer for soil fertility restoration and subsequent increased production become a valuable succour. Igwe et al. (2009) corroborate this axiom when they noted that the security of fertilizer is the bane of crop productivity among small scale farmers. In addition, the use of herbicide has been found to reduce the arduous labour associated with weeding.

Up to 21.6% of the respondents indicated that NAPEP assisted them with improved varieties of their various crops. Improved varieties of crops have various potentials including early maturity, higher productivity and resistance to pest and disease attack. Therefore, the provision of improved varieties of crops is an appropriate strategy for increasing agricultural productivity. Umeh (1998) reported that most farmers use farmers-saved-seed to assuage scarcity of seed for planting. Similarly, Anozie et al. (2008) indicated that improved varieties of crops are not easily accessible by small scale farmers.

Equally, 21.6% of the respondents showed that NAPEP assisted them with the marketing of their produce. Lack of easy access to market affects farmers in two major ways: one, where farmers do not have easy access to markets, they obtain low prices for their produce; and two, where farmers cannot easily sell their produce, and there can be large scale post harvest loss. Damiyal et al. (2007) maintained that post-harvest losses have been the bane of Nigerian’s agricultural sector.

The implications of the NAPEP intervention in Kogi State are presented in Table 4. Findings revealed that majority of the respondents (34.2%) repaid NAPEP’s loan with income from their farm enterprises. Whereas 33.2% indicated that they repaid their loans with income from other sources, 32.6% of respondents were indifferent. This analysis shows that NAPEP has no specific policy on loan repayment with respect to income source which would have served as a basis for monitoring by NAPEP. The situation could lead to large scale default in loan; loans are not often repaid and, hence, not recycled. This trend can cripple the sustainability of NAPEP. Findings in Table 4 also show that the expansion of the enterprise of most respondents (44.7%) was due to NAPEP intervention. While 22.6% of the respondents disagreed with this opinion, 32.7% of the respondents were simply indifferent. This finding implies that the impact of the NAPEP intervention has not been felt by all members.
Table 4. Implications of NAPEP intervention in Kogi State.

| Variable                        | Frequency | Percentage |
|---------------------------------|-----------|------------|
| Loan repayment sources          |           |            |
| Income from farm enterprise     | 68        | 34.2       |
| Income from other Sources       | 66        | 33.2       |
| Not Applicable                  | 65        | 32.6       |
| Total                           | 199       | 100.0      |

| Effect of NAPEP                  |           |            |
| Enterprise expansion due to NAPEP| 89        | 44.7*      |
| Increased in income due to NAPEP | 71        | 35.7*      |
| NAPEP’s capacity to reduce poverty| 104      | 52.3*      |
| NAPEP’s capacity to reduce unemployment| 48 | 62.3*      |

| Sector NAPEP should refocus     |           |            |
| Agro processing                 | 98        | 49.2       |
| Storage of agricultural produce | 68        | 34.2       |
| Produce transport               | 7         | 3.52       |
| Feeder road construction        | 9         | 4.52       |
| Agro-processing and produce     | 17        | 8.54       |
| Total                           | 199       | 100.0      |

Source: Field Survey, 2010. *Majority’s response.

of AFAN. Similarly, majority of the respondents (35.7%) agreed that NAPEP’s intervention accounted for their increase in income, although, 31.6% disagreed and 32.7% were indifferent. Expansion of enterprise and income of beneficiaries are critical to poverty reduction. One of NAPEP’s strategies for alleviating poverty is to empower the poor to utilize resources for their well being and sustainable livelihoods through enterprise expansion and increased income (NAPEP, 2007).

The foregoing attests positively to the impact of NAPEP. It is therefore not surprising that majority of the respondents indicated that NAPEP’s intervention has the capacity to reduce poverty (52.3%) as well reduce unemployment (62.3%). Nzekwu (2006) held that one of the basic causes of poverty in a developing country is lack of access to employment opportunities. Coote et al. (2000) too noted that the characteristics of poverty comprehensively include lack of employment opportunities, access to social services, land and production credit. Therefore, reduction of unemployment as a result of NAPEP’s intervention is credible.

There are varying opinions on the sector which NAPEP should re-focus, probably, having concentrated on health and education in the ongoing phase. Findings revealed that most of the respondents were in favour of agro-processing (49.2%) and storage of agricultural produce (34.2%). Post harvest losses have been the bane of agricultural productivity. The panacea to this problem revolves around processing of produce as well as good storage of the produce so as to minimise the losses incurred by farmers annually. Abdullahi (2001) put the annual post harvest losses at 25 million metric tonnes of agricultural commodities with an estimated value of 500 billion naira.

The analysis of the major problems of NAPEP is presented in Table 5. Findings revealed that the major problem of NAPEP in Kogi State was that just a few beneficiaries were selected (32.7%). Other serious problems which respondents associated with NAPEP in Kogi State were inadequate loan (20.7%) and a combination of inadequate loan and few beneficiaries (16.1%). The general perception is that there are relatively few beneficiaries of the intervention of NAPEP Programme. The lack of loan and credit facilities identified by KHAN (1994) as one of the critical characteristics features of the poverty and rural under-development actually indicate there are few beneficiaries of intervention packages. Duru (2002) pointed out that loan facilities often find their way into the hands of unintended beneficiaries. This is why Olaitan (2005) suggested that micro-finance institution enables the poor to create, own and accumulate assets. Sustainable access to micro-finance helps alleviate poverty by generating income, creating jobs, and generally empowering the people. The income change of beneficiaries and non-beneficiaries of the programme is presented in Table 6. The result shows that mean income change of beneficiaries is 11,945 naira while the mean income change of non-beneficiaries is 2,429 naira. This represents 99.09% change in income for beneficiaries.
Table 5. NAPEP’S Major Problems.

| Problem                                      | Frequency | Percentage |
|----------------------------------------------|-----------|------------|
| Inadequate loan                              | 41        | 20.7       |
| Few beneficiaries                            | 65        | 32.7       |
| Inadequate training                          | 2         | 1.0        |
| Inadequate input                             | 4         | 2.0        |
| Untimely loan                                | 6         | 3.0        |
| Short moratorium                             | 5         | 2.5        |
| Few beneficiaries and untimely loan          | 12        | 6.0        |
| Inadequate loan and few beneficiaries        | 32        | 16.1       |
| Inadequate loan and inadequate training      | 13        | 6.5        |
| Inadequate loan and input                    | 7         | 3.5        |
| Inadequate loan and untimely loan            | 6         | 3.0        |
| Few beneficiaries inadequate training         | 6         | 3.0        |
| Total                                        | 199       | 100.0      |

Source: Field Survey, 2010.

Table 6. Income change among the respondents.

| Variables                                      | Beneficiaries | Non-Beneficiaries |
|------------------------------------------------|---------------|-------------------|
| Income before NAPEP intervention              | 1,615,340     | 820,004           |
| Mean income before NAPEP intervention         | 12,054.78     | 12,615.45         |
| Income after NAPEP intervention               | 3,216,000     | 977,900           |
| Mean income after NAPEP intervention          | 24,000        | 15,044.62         |
| Income change                                | 1,600,660     | 157,896           |
| Mean Income change                           | 11,945.22     | 2,429.17          |
| Mean percentage change                       | 99.09         | 19.26             |

Source: Field Survey, 2010.

and 19.26% change in income for non-beneficiaries, indicating the high impact of the programme on the beneficiaries who are mostly poor small scale farmers.

The difference in total output value (in 00,000 naira) of crops of beneficiaries and non-beneficiaries is presented in Table 7. Out of the 10 crops used for this test of mean difference in total output value of beneficiaries and non-beneficiaries, the t-ratios of yam (3.397) and cassava (8.971) were positive. This implied that beneficiaries had output in yam and cassava than non-beneficiaries. The t-ratios were statistically significant at 0.01% level of significance, showing the positive impact which NAPEP’s intervention made on the beneficiaries. On the other hand, non-beneficiaries of NAPEP’s intervention had more output in maize and guinea corn than the beneficiaries.

The t-ratios of maize (-1.814) and guinea corn (-1.961) were statistically different at 10% level of significance. The implication of this result is that NAPEP’s intervention in Kogi State probably did not focus directly on the production of these food crops. The difference in income of beneficiaries and non-beneficiaries is presented in Table 8. The result of the t-test of difference of means of income showed that beneficiaries of NAPEP intervention had mean income of N535,970.00, while as non-beneficiaries had mean income of N371,293.00. The mean difference in income of beneficiaries and non-beneficiaries was as large as N164,677.00. The t-ratio of the difference is positive (2.85) and is significant (0.006) at 0.01 level of probability. Thus, the null hypothesis is rejected in favour of the alternative hypothesis. The implication is that there is significant difference in income of beneficiaries and non-beneficiaries of NAPEP services being evaluated in this study. This result, thus, underscores the successful impact of NAPEP’s intervention on poverty reduction among the beneficiaries in Kogi State.

Conclusion

The study evaluated the effect of the intervention of NAPEP on the members of AFAN in Kogi State. Membership of AFAN can be acquired both as an
Table 7. Differences in output of crops of beneficiaries and non-beneficiaries of NAPEP.

| Crop   | Group         | Output value | Mean difference | t-ratio | Sig. |
|--------|---------------|--------------|-----------------|---------|------|
| Yam    | Beneficiaries | 4.9125       | 1.2234          | 3.397   | 0.001* |
|        | Non-Beneficiaries | 3.6891     |                 |         |      |
| Cassava| Beneficiaries | 18.8277      | 10.8230         | 8.971   | 0.000* |
|        | Non-Beneficiaries | 8.0046     |                 |         |      |
| Maize  | Beneficiaries | 1.3739       | -8.8693         | -1.814  | 0.077** |
|        | Non-Beneficiaries | 2.2432     |                 |         |      |
| Cowpea | Beneficiaries | 2.2667       | -0.6833         | -0.364  | 0.751 |
|        | Non-Beneficiaries | 2.9500     |                 |         |      |
| Groundnut | Beneficiaries | 1.4115      | -0.2654         | -0.687  | 0.505 |
|        | Non-Beneficiaries | 1.6769     |                 |         |      |
| Rice   | Beneficiaries | 2.6400       | -0.62000        | -2.134  | 0.100 |
|        | Non-Beneficiaries | 3.2600     |                 |         |      |
| Guinea corn | Beneficiaries | 0.6077      | 0.4308          | -1.961  | 0.074** |
|        | Non-Beneficiaries | 1.0385     |                 |         |      |
| Millet | Beneficiaries | 0.4500       | -0.2500         | -1.667  | 0.344 |
|        | Non-Beneficiaries | 0.7000     |                 |         |      |
| Soybean| Beneficiaries | 1.2500       | 0.2000          | 0.667   | 0.626 |
|        | Non-Beneficiaries | 1.0500     |                 |         |      |
| Cashew | Beneficiaries | 6.3333       | 5.5167          | 1.155   | 0.300 |
|        | Non-Beneficiaries | 0.8167     |                 |         |      |

Source: Field Survey, 2010, *t-ratio is significant at the 1% level of probability (2-tail test), ** t-ratio is significant at the 10% level of probability.

Table 8. Difference in income between beneficiaries and non-beneficiaries.

| Beneficiary status | Mean income | Mean difference | Standard deviation | t-ratio | Sig. |
|--------------------|-------------|-----------------|--------------------|---------|------|
| Beneficiaries      | 535,970     | 164,677         | 439.9876           | 2.85    | 0.006 |
| Non-Beneficiaries  | 371,293     |                 |                    |         |      |

Source: Field Survey, 2010, *t-ratio is significant at 0.01 level of probability (2-tail test).

The majority of the respondents were involved in one agricultural enterprise or the other, but mostly arable crop production. The respondents were largely educated and were adults engaged in income generating activities. Majority of the respondents benefited from NAPEP’S intervention in one form or the other, and hence attributed the expansion of their enterprises in incomes and number of employees to NAPEP’S intervention. The phase one of NAPEP in Kogi State concentrated more on health and educational sectors of Kogi State economy. Hence, the sectors which NAPEP could re-focus, especially in the subsequent phase of the programme, are processing and storage of agricultural produce. The t-test for outputs in crop indicates that beneficiaries of NAPEP’s intervention had significantly greater output in crops like cassava, yam and maize than non-beneficiaries. On the other hand, non-beneficiaries
had significantly greater output in guinea corn than the beneficiaries. Furthermore, the income of the beneficiaries significantly exceeded that of the non-beneficiaries. Thus, the intervention of NAPEP had positive impact on members of AFAN who were beneficiaries of NAPEP intervention in Kogi State.

However, some major problems hindered the success of NAPEP. One of the problems was that only a few beneficiaries were selected among the numerous individuals who fall under the low-income bracket. Another problem was that the loan granted to the people was inadequate.

**RECOMMENDATIONS**

Based on the findings of the study, the following recommendations are made:

1. NAPEP should select more beneficiaries. In this way, the impact can spread wider.
2. NAPEP’s loan to beneficiaries should also be increased. This will enable beneficiaries to make more meaningful investment with the fund.
3. Since agriculture is the major occupation of rural people in Kogi State, NAPEP should intensify the provision of critical productive inputs. This will enhance productivity, especially of the beneficiaries.
4. In line with the popular community driven development strategy, NAPEP’s intervention should focus on the processing of agricultural produce. This will add value to the produce, make the produce to command higher prices, increase varieties and generate more employment opportunities.

**Conflict of Interest**

The authors have not declared any conflict of interest.

**REFERENCES**

Abeng MO, Onunuogbo NC (2006). ICT for Agricultural Development in Africa: A Synergy for Poverty Alleviation. Proceedings of the 20th Annual National Conference, FAMAN, Jos, Nigeria, pp. 190-196.

Adepoju SO, Umar AG, Agun JO (2006). An Appraisal of Participation of Women In Kano Agricultural and Rural Development Authority (KNARDA) Extension Delivery Programmes. Ajakaiye M (1993). The Challenges of National Food Security. J. Agric. Sci. Technol. 5(3):129-137.

Alegieuno J, Attah JAA (2005). Poverty Reduction through Micro Financing: The Case of Indonesia and Philippines. Bullion: A Publication I CBN, 30(3):1-10.

Anozie RO, Okorokwmo MO, Onyemairo EC (2008). Adoption of Improved Maize Variety by Farmers in Ishiagwu Ivo Local Government Area of Ebony State, Proceedings of the 42nd Annual National Conference of Agricultural Society of Nigeria, pp. 813-815.

Asogwa BC, Umeh JC, Ater PI (2007). Technical efficiency analysis of Nigerian Cassava farmers: A guide for food security policy, 9th Annual National Conference of the Nigerian Association of Agricultural Economists, Bauchi, pp. 2-10.

Coote C, Gordon A, Marter A (2000). International Trade in Agricultural Commodities. Liberalization and its Implications for Development and Poverty Reduction In ACP States, Policy series 5, Natural Resource Institute, the University of Greenwich P. 79.

Ejebi EP, Ejebi SA (2005). Analysis of the production decisions of female livestock Producers in Makurdi Local Government Area, Benue State: Implications for Agricultural development, Proceedings of Agricultural Extension Society of Nigeria, Bida, Pp.1-13.

Fans S (2007). Development Strategy and Governance. IFPRI bulletin. www.ifpri.org/divs/dsg.htm.

Gunwa G (2007), African Renaissance: Poverty Eradication the Role of Management, Management in Nigeria.

Idachaba FS (1993). Agriculture and rural Development under the Babangida Administration, J. Agric. Sci. Technol. pp. 109-120.

International Food Policy Research Institute (2007). Strengthening Communities, Reducing Poverty: Nigeria’s Fadama Project, http://www.ifpri.org/pubs/newsletters/ifppirforum/200710/if20fadamasp.21/07/2008.

Jibril SA, Haruna U, Okonu KS (2009). Assessment of poverty level among farmers in Bauchi Local Government Area of Bauchi State, Proceedings of the 43rd Ann. Confer. Agric. Soc. Nig. pp. 464-466.

Kankwenda M, Gregoire L, Legros H, Ouedraogo H (2000). Poverty Eradication where Stands Africa? Economic Ltd, London, P. 444.

Kerlinger NF (1973). Foundations of Behavioural Research, Holt Rinehart and Winston Inc. P. 657.

NAPEP (2007). NAPEP Success Stories Complete Solution IT Works Alliance Ltd. Abuja, P. 58.

National Population Commission (2009). Final result of 2006 National Population Census, National Population Commission, Abuja, P. 259.

Obinne CPO, Okoye CE, Saror S (2009). A comparative study of pictorial and verbal communication in extension works: A Case Study of Anambra State Farmers, Nigeria. Nig. J. Indigen. Knowl. Dev. (1):113-120.

Obgbanje EC, Umeh JC Ashiko TFG (2000). Preliminary Monitoring and Evaluation of the Special Programme on Food Security in Benue State, Proceedings of the 42nd Annual Conference of Agricultural Society of Nigeria, 19th -23rd October, Abakiliki, pp. 570-576.