



**Impact Evaluation of Justice Development and Peace Commission
Agricultural Services Intervention on Socio-Economic Status of
Farmers in Ogun East Senatorial District, Nigeria**

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Abstract

This study sought to evaluate the impact on socio-economic status of farmers in Ogun East Senatorial District of Nigeria. The study adopted a causal-comparative design supported with Antecedent, Transaction and Outcome (ATO) evaluation framework. Multi-stage sampling technique was used to select one hundred and eighty (n=180) participants for the study. Farmers' Socio-Economic Status Scale (FSESAS), Agricultural Productivity Assessment Scale (APAS) ($r = 6.2$) and Agric-Service Intervention Effectiveness Scale (ASIES) ($r = .74$) were used in data collection. Descriptive Statistics, t -test and ANOVA were used to analyse the data collected. The results indicate adequate social emancipation but inadequate economic capacity of farmer-beneficiaries of the intervention. However, significant difference ($t=4.961$; $p < .05$) exists in agricultural productivity between the farmer-beneficiaries and non-beneficiaries of the intervention. Accountability influence of the nine socio-economic indicators on beneficiary status of the farmers was high ($R^2 = .569$). Agricultural services of JDPC intervention as part of the results were effective (Mean=2.31). In conclusion, the intervention has been positively impactful on agricultural productivity and socio-economic well-being of the farmer. Amongst other recommendations, the intervention should be sustained, enhanced and expanded.

Keywords: Impact evaluation, Agricultural intervention, Agricultural productivity, Economic capacity, Social emancipation.

Introduction

A non-governmental organization (NGO) is an [organization](#) that is neither a part of a government nor a conventional profit oriented business. NGOs in their primordial character are social channels that give support and compliment the efforts of government. In other words, they are development alternatives. These organizations are major players in

development aid today; they have been given the right to speak for civil society in a number of national and international fora (Holmen & Jirstrom 2009). NGOs are owned and controlled by private institutions, organizations and in some cases individuals, they focus on philanthropy and render services that are not profit driven to the population. Consequently, NGOs serve as instruments and vehicles meaning to drive social change and transformation through action plans and programmes that are non-governmental.

Non-governmental organizations can be veritable assets in their provision of cost-effective services and in the tackling of the challenges of social development. NGOs vary in terms of affluence, resources, programme, bureaucracy and execution. Some are faith-based while others are purely secular. Some are focused on meeting the short term needs of their beneficiaries while others look at the long term effect. In any case, NGOs are driven to achieve the result of social emancipation.

Justice Development and Peace Commission Ijebu Ode is one such non-governmental organization that responds to the yearnings of people to be free from the stronghold of poverty and social inequality. The JDPC of the Catholic Diocese of Ijebu Ode is a structural Diocesan response of the Second Vatican Council (1962-1965) appealing for the church's involvement in building a just and peaceful world. The social clarion of the Church led to the creation of the Pontifical Commission known as JUSTICIA ET PAX (Justice and Peace) on January 6, 1967 (JDPC Ijebu-Ode, 2015). The commission's task was to reignite in people the full awareness of becoming emancipators and contributors towards social justice and empowerment. In addition, the commission was charged with the herculean task of furthering the progress of poorer nations and international social justice, as well as their own development for more justice and peace in the world. The Justice Development and Peace Commission Ijebu Ode is a brainchild of the said Pontifical Commission of 1967 in response to the challenge of providing services for the growth and development of the people of Ijebu Ode catholic diocese. JDPC, Ijebu Ode is registered as a Non-Governmental Organization (NGO) with the Corporate Affairs Commission of Nigeria (Reg. No. 10,414). It covers nine (9) (Ogun-East Senatorial District) of the 20 Local Government Areas of Ogun State, Nigeria and covering 36,410.56 square kilometers (JDPC Ijebu-Ode, 2015).

JDPC has the objective of promoting sustainable and integral human development, using a holistic empowerment approach to enhance effective structural transformation of society, without any form of discrimination as stipulated in Article one of the United Nations Declaration of Human Rights. JDPC adapts participatory approaches that empower poor people to meet their basic needs so that they become full actors of their destinies. JDPC is an organization focused on grassroots mobilization to enable those excluded to take local action in order to overcome oppressive structures that keep them in bondage. JDPC believes in creative and cooperative solidarity, partnering with a wide range of civil actors to promote a pro-poor policy environment, where the basic rights of people are secured.

To fulfill the said objective, JDPC follows a strategic plan that directs it towards accomplishing its organizational goals, namely to serve the beneficiaries better by achieving improved results with enhanced teamwork, learning and commitment among staff and beneficiaries (www.jdpcijebuode.org).

The strategic plan of JDPC identifies the following goals:

1. Empower organizations of the civil society for people's participation in governance.
2. Build the capacity of farmers and rural communities in Ijebu and Remo land for self
3. determination.
4. Promote gender equality by increasing the recognition and integration of women as partners of men in the care of the world.
5. Provide credit facilities to the beneficiaries of JDPC programmes who do not have the capacity to access credit from formal financial institutions.
6. Create a forum for information gathering and dissemination as a community empowerment tool.
7. Build in the youth the capacity for life enhancing skills to enable them live a meaningful and dignified life as well as contribute meaningfully to the society.
8. Build capacity of those that are physically or mentally incapacitated so that they can help themselves and contribute meaningfully to the society.
9. Propagate or popularize the Catholic Social teachings so as to contribute to the process of a value-based social transformation.
10. Establish a functional monitoring and evaluation system for JDPC.

In order to achieve these organizational goals JDPC operates three main programmes namely:

1. The Diocesan Agricultural Development Programme (DADP)
2. The Human Rights Programme (HRP)
3. The Gender Equality and Women Empowerment Programme (GEWEP)

To ensure the success of these three main programmes, JDPC also operates three (3) support services namely, Microfinance, Caritas, and Resource Centre.

However, this study is focused on one of the major goals of the Justice Development and Peace Commission namely, the building of the capacity of farmers and rural communities in Ijebu and Remo land geared towards self-determination of people. This objective relates closely to the Diocesan Agricultural Development Programme (DADP) of JDPC. DADP is the agricultural the programme that supports small and medium scale farmers in Ogun-East Senatorial District in the effort to improve their farming and living conditions in a sustainable way.

DADP has been engaging farmers in Ogun East Senatorial District for many years, providing agricultural services to improve the productivity of farmers and their living standard. DADP is a direct response to enormous challenges that farmers face in the district. It was discovered that many farmers in the rural communities of Ogun East Senatorial District are relatively poor with low standard of living. They are predominantly peasants and low-level people in terms of socio-economic stratification in the society. Illiteracy, endemic poverty, low yields and productivity, poor public perception, and low monetary value for long hours of hard work on the farms are some of the challenges that farmers face in the rural communities. Thus, it has been averred that poverty was more pronounced in the rural communities of Nigeria because of underdevelopment (Aderonmu, 2010).

It has also been noted that rural farmers are mostly isolated, under-educated and lack the wherewithal to maximize agricultural development strategies such as input subsidization, marketing strategies, lobbying for policy formulations that support rural farmers, increased crop production, access to credit facilities, and poor organization structures. Their standard of living has been regarded as poor with inadequate levels of agricultural productivity particularly in food production, high level of poverty and poor level of infrastructure facilities (Shiru, 2008). To overcome these challenges, governments in the Federal and State levels have put up programmes and projects to tackle the challenge. These include the FADAMA Development Programme, OGADEP (Ogun State Agriculture Development Programme). There have been Operation Feed the Nation (1976), Green Revolution of 1980, Agricultural Development Programmes in Nigerian states (ADPs) (Iwuchukwu & Igbokwe, 2012). Non-governmental organizations like Farmers Development Union (FADU) and DADP have also wielded in the situation providing services aimed at alleviating the problems of farmers. Arguably, despite the intervention of both government and private organisations in the district there still exists many rural farmers living below poverty line. The question of the positive effect of the agricultural interventions and programmes of government and private institutions therefore arises. The question of whether they even make any difference in the lives of their beneficiaries is an important one.

The study therefore evaluates the impact of the DADP as an agricultural intervention in the District in terms of the socio-economic indices of the farmers who are the beneficiaries.

Statement of the Problem

The problem investigated in this study was the uncertainty that surrounds the positive impact of agricultural interventions on socio-economic development and well-being of farmers. Many agricultural interventions and projects have been developed in Nigeria but, only in rare cases has a rigorous attempt been made to assess economic

return or the impact of such on farmers' productivity and income. It should be noted that annual or periodic reports given of many agricultural interventions cannot be counted as impact evaluation. For instance, there are a number of intervention programmes relating to agriculture in Ogun state, with little being shown for it considering the socio-economic conditions of farmers. Hence, the persistent challenge of poverty among the in the district. This provides justification for the study which was to evaluate the impact of JDPC agricultural services intervention on the socio-economic status of farmers in Ogun East Senatorial District of Nigeria.

Purpose of the Research

This study investigates the extent to which JDPC agricultural services intervention of Ijebu Ode Catholic Diocese has been able to address the socio-economic needs of rural farmer beneficiaries in Ogun East Senatorial District of Nigeria. The study attempts to specifically determine:

1. the adequacy of economic capacity of farmer-beneficiaries of the agricultural services intervention of JDPC in Ogun East Senatorial District of Nigeria.
2. the adequacy of social emancipation of farmer-beneficiaries of the agricultural services intervention of JDPC in Ogun East Senatorial District of Nigeria.
3. the effectiveness of agricultural service delivery intervention of JDPC.

Research Questions

- 1: How adequate is the economic capacity of farmer-beneficiaries of the agricultural services intervention of JDPC?
2. How adequate is the social emancipation of the farmer-beneficiaries of the agricultural services intervention of JDPC?
3. Is there any significant difference in the socio-economic status of farmer-beneficiaries and non-farmer beneficiaries of JDPC Agric-services intervention?

Methodology

The study adopts the causal-comparative design. The research is considered most appropriate considering the fact that it addresses cause and effect relationships among the variables by observing some existing consequences and probing back for possible causal factors through data collected and interpreted

Table 1 Evaluation Framework Based on ATO (Stake’s Model 1969)

Components	Variable Indicator	Data Source	Instrument for Data Collection	Research Questions	Statistical Tools
Antecedents	-----	-----	-----	-----	-----
Transaction	-----	-----	-----	-----	-----
Outcome	i. Agric. Productivity ii. Social Emancipation iii Economic Capacity	i. Agric Services Intervention Beneficiaries ii.Non-Beneficiaries of Agric Services Intervention	APAS & FSESAS	1, 2, 3	Frequency Counts, Simple Percentages & ANOVA

The population of the study comprises all beneficiaries of JDPC Agric-service intervention in the six (6) Local Government areas of Ijebu Division of Ogun State and other rural farmers who are non-beneficiaries of JDPC in these areas. Multistage sampling technique was used in sample selection. Four (4) Local Government Areas were randomly selected from the six Local Government Areas of Ijebu Division of Ogun State. Two cluster groups of farmer-beneficiaries of JDPC Agric Services were randomly selected in each of the four (4) Local Government Areas of the study. In each cluster fifteen (15) farmers were randomly selected. Hence, fifteen (15) farmers in eight (8) groups from four (4) Local Government Areas gives a total of 120 participants for the study. The study also employed snowball sampling technique to select in addition a sub sample of 60 farmer non-beneficiaries of the JDPC Agric-service extension programme at 30 per LGA. The two sub samples of beneficiaries and non-beneficiaries put together give a sample of 180 participants.

This study employed the use of three instruments namely: Farmers' Socio-Economic Status Assessment Scale (FSESAS) and Agricultural Productivity Assessment Scale (APAS). Farmers' Socio-Economic Status Assessment (FSESAS) is a 12-item scale designed to measure socio-economic status of farmers. This instrument was personally developed based on literature review and dialogue with sociologists, and anthropologists. The different items of the scale measure different aspects of the individual's socio-economic status. Some of these include monthly income, family possessions, number of children, mobility facility, health facility and type of accommodation. Agricultural Productivity Assessment Scale (APAS) is a 7-item instrument personally developed by the researcher to measure the Agric-productivity of beneficiaries and non-beneficiaries of JDPC agricultural intervention services in Ijebu Division of Ogun State. The scale is designed to assess Agric productivity using indicators such as quality of farm/crop production of farmers, farm yield, quality of storage facility, level of use of farm machinery and labour. This scale adopted a response

format involving: Nil (1), Very Low (2), Low (3), High (4), Very High (5). The instruments for this study were subjected to review in content, structure and language by the researcher's supervisor and other experts in Educational Evaluation in the Department. Thereafter, the instruments were administered to a sample outside the one of the main studies in order to determine their reliability. The coefficient obtained was 0.62 for APAS

The researchers obtained informed consent of individual farmers who are non-beneficiaries of JDPC intervention and farmers that are beneficiaries through the JDPC. The researchers with the help of two trained research assistants administered the instruments to the respondents. Data were collected over the period of four weeks. The data collected were analyzed using frequency counts, simple percentages and t-test and Analysis of Variance (ANOVA).

Results

Research Question 1: How adequate is the economic capacity of farmer-beneficiaries of the agricultural services intervention of JDPC?

Table 2: Median and Standard Deviation indicating adequacy of economic capacity of farmer-beneficiaries of JDPC agricultural services intervention

S/N	Items	N	Median	S.D	Expected Median	Decision
1	Monthly Income	120	1.00	.763	2.5	Not adequate
2	Refrigerator	120	0.00	.486	0.5	Not adequate
3	TV	120	1.00	.456	0.5	Adequate
4	Radio-Music System	120	1.00	.496	0.5	Adequate
5	Air-conditioner at home	120	0.00	.290	0.5	Not adequate
6	Washing machine	120	0.00	.367	0.5	Not adequate
7	Telephone (land)	120	0.00	.479	0.5	Not adequate
8	Mobile Telephone	120	1.00	.484	0.5	Adequate
9	Credit Card	120	0.00	.460	0.5	Not adequate
10	Sanitary latrine	120	0.00	.425	0.5	Not adequate
11	Subscribes monthly for newspaper	120	0.00	.301	0.5	Not adequate
12	Accommodation	120	3.00	1.900	4.5	Not adequate
13	Mobility facility	120	1.00	.885	3.0	Not adequate
14	Water source	120	3.00	.875	2.5	Adequate
15	Health facility	120	2.00	.704	2.5	Not adequate

According to the results presented in the Table 2, it was in only 4 out of 15 indicators of economic capacity that the farmer-beneficiaries of agricultural services intervention of JDPC were adequate. The four indicators include: TV set (median=1.00), Radio-music system (median=1.00), mobile telephone (median=1.00) and water supply with median score of 3.00 representing the use of borehole to tap

water. On the average, the farmer-beneficiaries were below a monthly income of #40,000 which of course was not adequate (median=1.00).

In like manner, acquisition of refrigerator (median=0.00), washing machine (median=0.00), land telephone (median=0.00), credit card (median=0.00), water closet toilet (median=0.00), and monthly subscription for newspaper (median=0.00) were not adequate. The results as presented on the Table indicate that the farmer-beneficiaries were found mostly in rented apartment consisting of a room apartment, 2-3 rooms apartment and 4-5 rooms apartment. Similarly, they were not mobile (median=1.00) in terms of personally acquired mobility facility consisting of motorcycle, tricycle, car and bus jeep. The results further reveal that the farmer-beneficiaries could only procure health facility up to public hospital (median=2.00) level. A large proportion of them could not afford the cost of private and specialist hospitals.

Research Question 2: How adequate is the social emancipation of the farmer-beneficiaries of the agricultural services intervention of JDPC?

Table 3: Median and Standard Deviation indicating adequacy of social emancipation of farmer-beneficiaries of JDPC agricultural services

S/N	Items	N	Median	S.D	Expected Median	Decision
1	Number of Children in the family	120	2.00	1.014	Below 2.5	Adequate
2	Position held in societies	120	2.00	0.987	2.5	Not adequate
3	Marital Status	120	4.00	0.951	2.5	Adequate

Adequacy of social emancipation of farmer-beneficiaries of JDPC agricultural services intervention was recorded for marital status (median=4.00). On the average, the farmer-beneficiaries were married with their homes intact. On the same note, they were considerate with the number of children they had (median=2). In other words, they were not involved in raising excessive number of children beyond six. Looking at positions held in societies/organizations, they were mostly ordinary members (median=2.00). They hardly belong to committee or executive councils of social clubs or societies.

Research Question 3: Is there any significant difference in the socio-economic status of farmer-beneficiaries and non-farmer beneficiaries of JDPC intervention?

Table 4: ANOVA Test of significant difference between socio-economic status of farmer-beneficiaries and farmer non-beneficiaries of JDPC intervention.**Dependent Variable: Beneficiary status**

	Type III sum of squares	Df	Mean of Square	F	Significance
Corrected model	22.772 ^a	32	.712	6.072	.000
Intercept	12.610	1	12.610	107.597	.000
Monthly Income	1.085	3	.362	3.086	.029*
Number of Children	1.076	5	.215	1.836	.109
Accommodation	2.045	7	.292	2.493	.019*
Mobility facility	.472	4	.118	1.008	.405
Water source	2.699	3	.900	7.676	.000*
Health facility	2.239	3	.749	6.369	.000*
Sex	.071	1	.071	603	.439
Position in societies	2.666	3	.889	7.583	.000*
Marital status	.701	3	.234	1.994	.117
Error	17.228	147	.117		
Total	360.000	180			
Corrected Total	40.000	179			

R squared= .569; Adjusted R squared = .476

ANOVA tests of between-subjects effects on Table 4 show that five of the socio-economic factors had significant influence on beneficiary status of farmers and they include monthly income ($F_{3,179} = 3.086$; $p < .05$), accommodation ($F_{7,179} = 2.493$; $p < .05$), water source ($F_{3,179} = 7.676$; $p < .05$), health facility ($F_{3,179} = 6.369$; $p < .05$) and positions in societies ($F_{3,179} = 7.583$; $p < 0.05$).

The interpretation is that, monthly income, accommodation, water source, health facility and positions in societies reflect the status of the farmer in either being a beneficiary or non-beneficiary of agricultural services intervention of JDPC. Thus, the five variables are significantly related to JDPC intervention beneficiary status of farmers. The other variables in the model without significant influence on the beneficiary status of the farmers are number of children in the family, mobility facility, sex and marital status. Meanwhile, the intervention accounts for 56% of variance in socio-economic status of farmers within the District.

Discussion of Findings

Given the findings of this study, it is reported that the economic capacity of the beneficiaries of agricultural services of JDPC was not adequate using standard economic status indicators. Except for common household articles/facilities namely radio/music system, television set, mobile phone and portable water, other essential household articles and facilities that make life comfortable were lacking and grossly inadequate among the farmers. The list includes monthly income, refrigerator, air-

conditioned room, land telephone, credit card, personal houses, personal vehicles, quality and reliable health facility. This low economic status is suggestive of how extensive and intensive their farm operations were. It simply suggests that the farmers still practise peasantry though may be enhanced but definitely not mechanized farming. This result corroborates the earlier finding of Adesina (2012) who argued that choice of information on improved agriculture technology and how such information is disseminated is of great concern to both the farmers and the agricultural extension specialists. He further asserted that adoption of farm technologies (rather than practicing non-mechanized farming) will bring about increased production and ultimately better economic returns.

Within the limits of the three indicators of social emancipation, the beneficiaries were found to be adequate and this is evidenced in marital status and number of children in the family. They were married with their homes intact and the number of children kept within sizeable limit. However, they were not privileged of holding leadership positions in public societies where they hold membership status. That they were married and intact with reasonable size of children could be an evidence of effective community awareness information of the government in addition to family planning education on mass media. On the other hand, the low economic capacity may likely account for not being privileged of leadership positions in societies they belong.

Expectedly, a significant difference exists in agricultural productivity between the farmer-beneficiaries of agricultural services intervention of JDPC and farmer non-beneficiaries. This is an evidence of the intervention being impactful. Arguably, increased input would yield increased output. The simple reason is the offer of opportunities in terms of facilities and services the beneficiaries enjoyed over and above the non-beneficiaries from the intervention. The results attest to the credibility of earlier results of Berdegue and Escobar (2001) who maintained that effective provision and utilization of agricultural extension have direct and indirect effects on rural poverty reduction. They argued that the direct effect is higher profits from agricultural production. Also new technologies introduced to farmers can improve their income when they reduce the marginal cost of production.

Consistently, remarkable difference exists in socio-economic status between the beneficiaries and non-beneficiaries of the intervention. Evidently, the beneficiaries were of higher socio-economic status expressed in higher monthly income, better accommodation, quality water source, better health facility and privileged position in societies. Remarkably, the intervention has been more beneficial to farmers. The result agrees with the findings of Birkhaeuser, Robert and Feder (1991) who argued that agricultural extension has significant relationship with better life. Also, Alston, Marra, Pardey and Wyatt (2000) in an extensive review of economic return to agricultural research and development with over 1,128 estimates rates of return submitted that an average rate of return of 80 percent is possible for agricultural extension investment.

Conclusion and Recommendations

Based on the results of this study, JDPC agricultural services had been of great positive effects in terms of increased agricultural productivity and improved socio-economic status of the farmers irrespective of their gender. The services offered were also acknowledged effective by the farmers who were the beneficiaries. On this note, the intervention is worthwhile and also deserves being sustained, enhanced and expanded.

The following recommendations are suggested consequent upon the findings of the study:

1. Justice Development and Peace Commission (JDPC) should facilitate easy access to fertilizers for use of its farmers.
2. JDPC should improve on Participatory and Practical Approach during meetings with farmers.
3. Government should partner with Private Agric-Service Delivery Institutions like JDPC for provision of funds for improved productive farming in the rural areas.
4. Government and Private Agric-Service Delivery Institutions like JDPC should employ the use of technology in terms of machinery, breed and seed analysis and overall agricultural technology for better farming experience and productivity.

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