



BENEFICIARIES' PERCEPTION OF EFFECTIVENESS OF RURAL DEVELOPMENT PROGRAMMES: CROSS RIVER COMMERCIAL AGRICULTURE DEVELOPMENT PROJECT, CROSS RIVER STATE, NIGERIA

Obinna, L. O. and †Bassey, J. I.

Department of Agricultural Extension and Rural Development,
Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria.
Corresponding Authors' email: obinna.leo@mouau.edu.ng

†Authour passed on

Abstract

The study assessed beneficiaries' perceptions of effectiveness of rural development programmes with particular reference to Cross River Commercial Agriculture Development Project. One hundred and thirty-five (135) beneficiaries of CADP were selected for the study through a multi-stage sampling procedure. Data collected were analyzed using descriptive statistics and analysis of variance. Results revealed that many (36.29%) of the respondents were within the age range of 50 years and above, 72.60% indicated married and educated (84.44%) with farming (92.59%) as major source of income. Respondents reported that CADP implementation was effective with grand mean of 2.11. Some of the identified constraints to effective implementation of CADP were untimely delivery of inputs by service providers ($\bar{x} = 3.42$), difficult procurement process ($\bar{x} = 3.24$), farmers have little control over approved grant as disbursement was in kind ($\bar{x} = 3.19$). There was no significant difference among beneficiaries perceptions of the effectiveness of CADP implementation across the three agricultural zones in the study area ($F\text{-Cal} = 2.76, P < 0.05$). The study concluded that CADP implementation was effective. The study recommends timely delivery of production inputs to beneficiaries by service providers in similar projects.

Keywords: Perception, Rural, Development, Commercial and Effectiveness

Introduction

Rural development can be viewed as a process by which the rural communities harness, mobilize and utilize all resources available to them, human and material, for the purpose of transforming the socio-physical environment for improvement in the quality of life of its members through increased provision of their needs and equitable distribution of such needs (Adubi, 2017). Attempts at solving the rural problems in Nigeria had been the concern of many successive governments over the years (Olayiwola and Adeleye, 2005). Various agricultural policies, strategies and programmes were implemented in Nigeria with the view to sustainably eliminate rural poverty and under-development. Some of these programmes are by no means limited to: Farm Settlement Scheme (1960); Back-to-Land Programme (1970); Cooperative Movement (1973); River Basin Development Authority (1975); Operation Feed the Nation (1976); and Integrated Rural Development (1980) (Amalu, 1998). Within the last decade, other programmes includes: National Food Security (NFS), National Resources Development and Conservation Scheme (NRDCS), Fadama I, II, III and III Additional Financing, IFAD-Community-Based Natural

Resources Management (IFAD-CBNRM) and Commercial Agricultural Programmes Project (CADP). The agricultural programmes or projects differed in nomenclature and perhaps organizational structure and advisory procedures. They however, shared one common objective-provide Nigerian rural dwellers and farmers with extension service, agricultural support and rural development services (CADP, 2014). The Commercial Agricultural Development Project (World Bank Assisted) started operation in 2009 in five States of the federation (Cross River, Enugu, Kano, Kaduna and Lagos). The project was designed to boost the income of target beneficiaries (small and medium scale commercial farmers) through a value-chain approach, while laying strong emphasis on commodity Interest Groups (CIGs) and Commercial Agricultural Associations (Bassey and Nzeakor, 2019). The relevance of Cross River Commercial Agriculture Development Project in empowering participants and ensuring rural development has continued to draw mixed reactions. Farmers have been blamed for poor adoption because that they are conservative. However, to a great extent, the success or failure of any extension programme depend equally on the delivery mechanisms

of the programme (Agbarevo, 2013; Agbarevo and Nwogu, 2016). However, despite the numerous rural development programmes or projects in the state, there appears to be little or no impact within the rural communities where a large number of the beneficiaries reside. If commercial agricultural development project was effective in addressing the needs of the beneficiaries and by so doing reduce rural poverty is unknown. Therefore, this study assessed beneficiary's perception of effectiveness of rural development programmes with particular reference to Cross River Commercial Agriculture Development Project (CADP-World Bank Assisted). The null hypothesis tested is stated as: There is no significant difference among beneficiaries in their perceptions of effectiveness of commercial agriculture development project across the three agricultural zones in the study area.

Methodology

The study was carried out in Cross River State. The State is one of the 36 States of the Federation (Nigeria). Cross River State consist of 18 Local Government Areas (LGAs) divided into three agricultural zones (Calabar, Ikom and Ogoja). The State occupies a landmass of 20,050,00 square kilometers with a population of 2,888,966 persons as at 2006 population census (NPC, 2006;). It shares boundaries with Benue State to the North, in the East by Cameroon Republic, West by Ebonyi and Abia States and to the South by Akwa Ibom State and Atlantic Ocean. The people of the state are majorly engaged in farming, trading, fishing and hunting. The major crops grown include: yam, cassava, cocoyam, rice, maize, vegetables, bush mango, oil palm, and cocoa. The population of the study consists of all CADP beneficiaries in Cross River State across the three value Chains (rice, oil palm and cocoa). Their participation in CADP is expected to enable the beneficiaries' access relevant production inputs and basic farm equipment (Bassey and Nzeakor, 2019). A multistage sampling procedure was adopted for the selection of respondents for the study. In the first stage, purposive sampling technique was adopted to select the three Agricultural Zones in the State. This is to allow beneficiaries in all segments in the three Agricultural Zones be represented in the study. In the second stage, stratified sampling technique was also employed to separate all the beneficiaries into strata on the basis of value chains and segments. The value chains were rice, cocoa and oil palm, while the segments were production, processing and marketing. In the third stage, simple random sampling technique was adopted to select beneficiaries from each segment of the value chains across the three Agricultural Zones, giving 15 beneficiaries for rice, cocoa and oil palm value chains each, for each of the agricultural zones. A total of 135 beneficiaries were selected as the sample size. Data collected were analyzed using descriptive and inferential statistical tools. A three-point rating type rating scale of "very effective" scored 3 points, "effective" 2 points, while "not effective" scored 1 point. The sum of the values adds up to 6 when divided by 3 giving a mean of 2.0 as the mean cut-off point. This

was modified as: any mean responses <2.0 = Not effective, while ≥ 2.0 = Effective. Also, a four-point rating scale of: "very serious" scored 4 points, "serious" 3 points, "mild" scored 2 points, while "no effect" scored 1 point. The sum of the values adds up to 10 when divided by 4, giving a mean of 2.5 as the mean cut-off point. This was modified as: any mean responses < 2.5 was regarded as not a constraint, while ≥ 2.5 was regarded as a constraint. The null hypothesis of no significant difference among beneficiaries perception of effectiveness of commercial agricultural development project implementation across the three agricultural zones was analyzed using analysis of variance thus;

$$F = \frac{MSSB}{MSSW}$$

Where,

F=F-calculated value

MSSB =Mean sum of squares among agricultural zones

MSSW =Mean sum of squares within agricultural zones.

Decision Rule: If the F-cal > F-tab, reject the Ho, otherwise accept.

Results and Discussion

Socio-economic characteristics of beneficiaries

The result in Table 1 shows that many (36.29%) respondents were within the age range of 50 years and above, while, 34.82%, 17.78% and 11.11% were within the age range of 39-49, 28-38 and less than 28years respectively, with mean age was 31.82years. This implies that the respondents are young and active. This agrees with Ekwe *et al.* (2006) that most farmers in Nigeria are in their middle age and still vibrant in agricultural activities. Majority (72.60%) of the respondents were married, with 23.70% and 3.70% single and divorced respectively. This implies that married respondents dominated the study area and had stable households. This agrees with Echebiri and Onu (2019), that majority (62%) of smallholder arable crop farmers in Akwa Ibom State were married. It was also observed that majority (84.44%) of the respondents had formal education, while small proportion (15.56%) had no formal education. This implies that majority of the respondents in the study area were educated. Education helps for prudent resource management and easy access to information in order to maximize opportunities (Nwaru, 2007; Iheke, 2010). Most (92.59%) of the respondents indicated farming as the major source of their income, while 7.41% indicated non-farm activitie. This implies that farming remains the major source of income for majority of the inhabitants of rural communities in Nigeria. More than half (56.30%) of the respondents recorded 16 years and above as farming experience, while 30.37% had 10-15years, and 13.33% less than 10 years, with mean farming experience of 8.97 years. This implies that on the average, farmers in Cross River State have 8.97 years farming experience necessary to fulfill the requirement for participation in Cross Rive State Commercial Agriculture Development

Project. Majority (62.22%) reported being members of 1-2 local organizations available in the study area, 20% to 3-4, while 17.78% belong to 5 local organizations and above. The mean membership of local organizations was 2.08. This implies that on the average Cross River

State farmers in rice, cocoa and oil palm value chains belong to a least 2 local organization available in their communities. Also, the implication of this observation is the important role of local organizations in transformation of the rural areas.

Table 1: Selected socio-economic characteristics of beneficiaries

Variables	Frequency	Percentage
Age (years)		
<28	15	11.11
28-38	24	17.78
39-49	47	34.82
50 and above	49	36.29
Mean		31.82
Marital Status		
Married	98	72.60
Single	32	23.70
Divorced	5	3.70
Education Status		
Non-formal	21	15.56
Formal	114	84.44
Major source of income		
Farming	125	92.59
Non-farming	10	7.41
Farming experience		
<10	18	13.33
10-15	41	30.37
16 and above	76	56.30
Mean		8.97
Membership of Local organization		
1-2	84	62.22
3-4	27	20.00
5 and above	24	17.78
Mean		2.08

Source: Field data, 2020

Beneficiaries' perception of effectiveness of Cross River Commercial Agriculture Development implementation

Respondents' perception of the effectiveness of CADP was estimated using means captured by three-point type rating scale. Table 2 shows that a grand mean of 2.11, suggests that beneficiaries perceived CADP implementation as effective. Specifically, the respondents agreed that CADP implementation was effective in the following: expansion of farms enterprises ($\bar{X} = 2.48$), increased productivity ($\bar{X} = 2.33$), improvement in sales volume of products ($\bar{X} = 2.33$), created access to production inputs ($\bar{X} = 2.39$),

created access to improved technologies ($\bar{X} = 2.42$), and enhanced access to ownership of simple farm tools ($\bar{X} = 2.27$). Also, CADP created employment opportunities ($\bar{X} = 2.09$). The farmers perceived the implementation of CADP as not effective in the following areas: provision of infrastructural facilities such as unpaved roads ($\bar{X} = 1.84$), enhanced capacity as beneficiaries in preparing investment plans ($\bar{X} = 1.59$), and provision of market linkages ($\bar{X} = 1.33$). This finding agrees with Ominikari *et al.* (2017) who found Fadama III (similar World Bank Assisted project) participants in Bayelsa State reporting that extensive cassava production and livestock production were effective Fadama III projects.

Table 2: Mean rating on beneficiaries' perception of effectiveness of CADP

Statements	Very Effective (3)	Effective (2)	Not Effective (1)	Total	Mean
Increased productivity	70(210)	40(80)	25 (25)	315	2.33
Created access to production inputs	64(192)	59 (118)	12(12)	322	2.39
Ownership of simple farm tools	70(210)	31(62)	34(34)	306	2.27
Provided linkage to markets	10(30)	25(50)	100(100)	180	1.33
Created employment opportunities	50(150)	48(96)	37(37)	283	2.09
Expansion of farm enterprises	80 (240)	40(80)	15(15)	335	2.48
Access to improved technologies	91(273)	10(20)	34(34)	327	2.42
Provision of infrastructural facilities (unpaved rural roads)	52(156)	10(20)	73(73)	249	1.84
Improvement in sales volume of products	70(210)	40(80)	25(25)	315	2.33
Enhanced capacity in preparing investment plans	20(60)	40(80)	75(75)	215	1.59
Grand Mean					2.11

Source: Field data, 2020

Constraints militating against effective implementation of Cross River Commercial Agriculture Development Project

Table 3 shows that the grand mean based on the mean rating of constraints to effective implementation as perceived by the respondents was 2.85, suggesting that the items statement were constraints to effective implementation of CADP. However, in specific terms, the item statements respondents' perceived as constraints were; untimely delivery of inputs by service providers ($\bar{X} = 3.42$), difficult procurement process ($\bar{X} = 3.24$), farmers have little control over approved grant as disbursement was in kind ($\bar{X} = 3.19$), hijacking of the programme by influential or highly placed individuals ($\bar{X} = 3.04$), and inadequate technical backstopping by

value chain facilitators and relevant officers ($\bar{X} = 2.84$). Item statements that were not rated as constraints were; raising counterpart contribution by commodity interest groups ($\bar{X} = 2.34$), and getting investment plans approval from National Coordinating Office (NCO) and the World Bank ($\bar{X} = 1.87$). This findings are in consonance with Agwu and Chukwuma (2015), that constraints to effective implementation of agricultural programmes were high production and service cost, insufficient credit availability, tendency of highly placed individuals to hijack the programme, untimely disbursement of inputs and counterpart fund by the development agencies and government policies on the programme.

Table 3: Mean rating on constraints to effective implementation of CADP

Constraints	Very serious (4)	Serious (3)	Mild (2)	No effect (1)	Total	Mean (x)
Untimely delivery of inputs by service providers	74(296)	51(153)	2(4)	8(8)	461	3.42
Raising counterpart contribution by commodity interest groups	40(160)	26(78)	9(18)	60(60)	316	2.34
Hijacking of programme by influential or highly placed individuals	50(200)	48(144)	30(60)	7(7)	411	3.04
Inadequate technical backstopping by value chain facilitators and relevant officers	20(80)	90(270)	9(18)	16(16)	384	2.84
Getting investment plans approval from National coordinating office and the World Bank	5(20)	10(30)	82(164)	38(38)	252	1.87
Farmers have little control over approved grant as disbursement was in kind	72(288)	30(90)	20(40)	13(13)	431	3.19
Difficult procurement process	67(268)	41(123)	20(40)	7(7)	438	3.24
Grand Mean						2.85

Sources: Field data, 2020

Test of hypothesis

The null hypothesis which was stated as: there is no significant difference among beneficiaries in their perception of effectiveness of commercial agriculture development project across the three Agricultural Zones in the study area was tested using analysis of variance. Table 4 Show that the sum of squares among the three

Agricultural Zones was 1,885.50, 2 degrees of freedom with means sum of squares of 942.75. While, the sum of squares within the Agricultural Zones was 45,148.85, 132 degrees of freedom, with mean sum of squares of 342. The F-cal value was 2.76 and smaller than F-critical value of 3.0 (F-cal= 2.76, $p < 0.05$). Therefore the null hypothesis was accepted. This implies that there is no

significant difference among beneficiaries in their perceptions of effectiveness of CADP across the three Agricultural Zones in the study area. The finding collaborates Ivande (2012), that people from same cultural background (study area) or farming

communities of close proximity sharing the same socio-cultural traits and beliefs do not differ in their perception and behavior. This so because the respondents are in the same state and are beneficiaries of the programme.

Table 4: Analysis of variance of beneficiaries' perceptions of effectiveness of CADP across the three Agricultural Zones

Sources of Variation	Sum of squares	df	Mean Sum of Squares	F-cal
Among Agricultural Zones	1,885.50	2	942.75	2.76
Within Agricultural Zones	45,148.85	132	342	
Total	47,034.35	134		

Source: Field data, 2020. *df*= Degree of freedom, *F-cal* = 2.76, *P*<0.05

Conclusion

The study revealed that the respondents in the study area are young and still vibrant and farming is their major source of income. Beneficiaries perceived the implementation of CADP in the State as effective. The study therefore, recommends that: CADP be re-formed and extended to other States of the federation (Nigeria). In subsequent CADP or related projects, a well defined and robust extension service be provided to enhance the technical backstopping by facilitators and relevant project officers. There should also, be timely delivery of inputs to beneficiaries by service providers.

References

- Adubi, A.A. (2017). Third national Fadama project implementation manual, Vol.1 retrieved from www.fadamallproject.org. on January 12, 2020.
- Agbarevo, M.N.B. and Nwogu, N.V. (2016). Level of extension agents motivation and effectiveness in Abia State, Nigeria. *International Journal of Scientific and Technology Research*, 5(4): 212-215.
- Agbarevo, M.N.B. (2013). Farmers perception of effectiveness of agricultural extension delivery in Cross River State, Nigeria. *Journal of Agriculture and Veterinary Science*, 2(6): 01-07.
- Agwu, A.E. and Chukwuma, N.A. (2015). Funding of agricultural extension in a democratic and deregulated economy. The cost showing approach. *Journal of Agricultural Extension*, 8:90-98.
- Amalu, U.C. (1998). *Agricultural research and extension delivery systems in sub-Saharan Africa*. Calabar: University of Calabar Press. Pp. 124-150.
- Bassey, J.I. and Nzeakor, F.C. (2019). Assessment of women participation in Cross River Commercial Agriculture Development Project, Cross River State, Nigeria. *Journal of Agricultural Economics, Extension and Science*, 5(1):29-40.
- CADP (2009). Commercial Agriculture Development Project. *Project Implementation Manual*. Washington DC: The World Bank. Pp. 1-145.
- Cross River State Ministry of Lands and Surveys (2012). *Cross River Geographical information system*. Calabar, Nigeria: Government Printing Press Calabar, Nigeria. Pp. 23-51.
- Echebiri, R.N. and Onu, D.O. (2019). Risk management strategies among smallholder arable crop farmers in Ibiono Ibom Local Government Area, Akwa Ibom State, Nigeria. *Nigerian Journal of Agriculture*, 50(1):22-29.
- Ekwe, K.C., Udealor, A. and Ezulike, T. (2006). *Constraints analysis of research extension farmer inputs linkage system in South- Eastern, Nigeria*. Annual Report of NRCRI, Umudike. Pp.38.
- Iheke, S.O. (2010). Market access, income diversification and welfare status of rural farm households in Abia State, Nigeria. *The Nigerian Agricultural Journal*, 41(1): 13-17.
- Ivande, P.O. (2012). Changes in households roles in agriculture among TIV farming households in Nigeria. PhD Thesis submitted to the Department of Agricultural Extension. University of Nigeria, Nsukka.
- NPC (2006). National Population Commission. *List of Nigerian states by landmass and Population density*. Abuja, Nigeria: NPC, Pp. 1-85.
- Nwaru, J.C. (2007). Rural credits market and resource use in arable crop production in Imo State. Ph.D Thesis, Michael Okpara University of Agriculture Umudike, Abia State, Nigeria.
- Olayiwola, L.M. and Adeleye, O.A. (2005). Rural infrastructural development in Nigeria: Between 1960 - 1990, problems and challenges. *Journal of Social Science*, 11(2): 91-96.
- Ominikari, A.G., Okrkingbo, J.I. and Eshiet, A.A. (2017). Perceived effectiveness of Fadama III agricultural project among participants in Bayelsa State, Nigeria. *Journal of Community and Communication Research*, 2(1): 93-99.