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Assessment of the Effect of Conflicts on Yam Production Farms in Cross River State, Nigeria

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ABSTRACT

Background: This study was designed to assess the effect of conflicts on yam production in Cross River State. The specific objectives of the study were to; identify the socio-economic characteristics of the respondents, assess the effect of conflicts on yam production in the study area and ascertain the constraints faced by yam farmers in the study area.

Methods: The study adopted a multi-stage sampling technique. Three blocks were selected from each of the three Agricultural zones in the state. Three cells were randomly selected from each of the blocks sampled, which gave a total of twenty-seven (27) cells. A total of 450 respondents were selected for the study. Data were collected with the aid of a structured questionnaire. Data obtained were analysed using percentage, mean and standard deviation.

Result: The result of the analysis revealed that a good number of the respondents had formal education and were married (53.6%). It was equally observed that conflicts reduced yam availability ($\bar{X}$=2.50) decreased productivity ($\bar{X}$=2.78), displaced farmers ($\bar{X}$=2.68), caused hunger and starvation ($\bar{X}$=2.62) and reduced arable land ($\bar{X}$=3.08). The study also noted that the following constraints affected yam production in the study area include insecurity among yam farmers and communities ($\bar{X}$ = 278), high cost of labour ($\bar{X}$ = 2.55), lack of funds ($\bar{X}$ = 2.58) and fear of unexpected conflicts ($\bar{X}$ = 2.71) among many others. The study recommended that civil defence Corp should be posted to conflicts zones in the state to provide security to the farming communities during farming seasons. The study therefore concludes that government needs to provide compensations to yam farmers who abandoned their farms as a result of conflicts and these would encourage them to return home for their yam business enterprises.

Key words: Assessment, Conflicts, Effect, Farmers, Yam production.

INTRODUCTION

Cross River State like many other parts of the world has witnessed persistent occurrence and re-occurrence of several land crises that posed devastating consequences on the socio economic, political, cultural and religious development of the state (Effiong *et al*., 2021). The state has witnessed many communal conflicts that led to disputes between two or more communities in recent pass (Effiong, 2012a); (Effiong and Aboh, 2018) and (Effiong, 2012b). According to Effiong and Effiong (2015) conflicts are that which involve two or more communities engaging themselves in disagreement or act of violence over issues such as claims of land ownership, religious and political differences, leading to loss of lives and destruction of properties. A clear example is the conflict between Adadama Community in Cross River State and Ameagu Community in Ebonyi State in 2010 where over 10 villages were burnt and properties worth millions of Naira were lost (Effiong, 2012a). Also, the recent crisis between Ediba and Usumutong communities in Abi Wakande and Obudu Urban; Nko and Onyeadama communities had claimed many lives and properties.

Yam production is very popular in Cross River State. This is evidence in the numerous yam festivals that are abound in the state (Effiong, 2012b). The age-long celebrated festivals have assumed an important part of the people's culture, especially in the central and northern region of the state (Effiong and Asikong, 2012) and (Effiong and Aboh, 2018). Some economically significant species of yam are cultivated in the state. These include White yam (*Dioscorear otundata*), yellow yam (*Dioscorea cayenensis*), aerial yam (*Dioscorea bulbifera*), Chinese yam (*Dioscorea esculanta)* and water yam (*Dioscorea alata*) among some others.

Agricultural production in Nigeria involves both self employed and wage employed according to Effiong and Aboh (2019), it accordingly requires precise information about who does what, what happened to what, who participate in a particular crop or livestock and what affects what type of enterprise (Effiong *et al*., 2015).

In fact, land holding of 75% of the yam farming communities being small, the number of landless yam farmers have swelled up over time due to effect of conflicts in the country. The situation thus demands an understanding of yam enterprises engaged in and the harm conflicts has

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caused to farmers both men and women whose lives are fundamentally structured in different ways and depends solely on yam production activities.

Also, due to growing agricultural related uncertainties such as war situation, family conflicts, community conflicts, herdsmen/farmers conflicts and natural disaster (flooding, disease outbreak and fire outbreak). Agricutural production has greatly reduced in Cross River State and Akwa Ibom State (Effiong *et al*., 2023) and (Effiong *et al*., 2016) Yam farmers in Cross River State, Nigeria have abandoned their farming activities for better livelihood activities.

Keeping in view of the above situation, this study was designed to assess the effect of conflicts on yam production in Cross River State. The specific objectives of the study were to; identify the socio-economic characteristics of the respondents, assess the effect of conflicts on yam production in the study area and ascertain the constraints faced by yam farmers in the study area.

MATERIALS AND METHODS

Location details and data

The study was conducted in Cross River State, Nigeria. It is located in the south-south region of Nigeria. The major ethnic groups in the state are Efik, Ejagham and Bekwara. The state is divided into 18 Local Government Area and occupies about 20,156 square kilometres. The state lies between latitudes 40°28′ and 60°55′ north of the Equator and longitude 70°50′ and 90°28′ east of the Greenwich meridian. The state has common boundaries with Benue State in the North, Akwa Ibom State and the Atlantic Ocean in the south, the republic of Cameroun in the East, Ebonyi and Abia States in the West. The major soil types in the area are loamy soil, clay soil and sandy soils. The main occupations in the area are farming, fishing and civil service-based work (Effiong and Effiong, 2015) and (Effiong *et al*., 2015).

The study adopted a multistage sampling technique. Stage one involved a random selection of three (3) extension blocks from each of the three (3) Agricultural zones making nine (9) blocks. The blocks selected were Akpabuyo, Odukpani and Calabar South (Calabar Agricultural zone); Ikom, Etung and Boki (Ikom Agricultural Zone); Ogoja, Obudu and Obubra (Ogoja Agricultural Zone). Stage two involved a random selection of three (3) cells from each of the blocks making twenty seven (27) cells. Stage three (3) involved a random selection of three per cent (3%) of the farmers from each of the twenty seven (27) cells making a total of 450 respondents used for the study.

This study was however conducted in the year January, 2021 at the University of Calabar Research and Development Farms Centre.

RESULTS AND DISCUSSION

Socio-economic characteristics of the respondents

The result of the socio-economic characteristics of the respondents shown in Table 1 indicated that 58.9% of the respondents were males, 41.1% were females, a good number of them (53.6%) were married. The result also showed that a small proportion (19.6%) of the respondents had no formal education, 30.70% attended secondary school and 33.70% attended tertiary level of education. Similarly, only 5.80% of the rural households cultivated 5 hectares of land and above. Also the results in Table 1 indicate that a good number of the respondents had various level of educational attainment, while a small number of them had no formal education. This implied that the farmers were typically literate. This finding is in tandem with Effiong *et al.* (2015) who found out that a good number of farmers in Etim Ekpo Local Government Area, Akwa Ibom State Nigeria are literature. Also, the result showed that majority were married,

Table 1: Distribution of respondents based on the Socio-economic characteristics.

Variables	Frequency	Percentage (%)
Sex		
Male	265	58.90
Female	185	41.10
Total	450	100.00
Age		
15-25	134	29.8
26-35	156	34.7
36-45	83	18.40
46-55	52	4.60
56 and above	25	5.50
Total	450	100.00
Marital status		
Single	109	24.20
Married	241	53.60
Divorced	82	18.20
Widowed	18	4.00
Total	450	100.00
Educational level		
No formal education	88	19.60
Primary education level	72	16.00
secondary education level	134	30.70
Tertiary education level	152	33.70
Total	450	100.00
Occupation		
Farming	174	38.70
Trading	131	29.70
Artisan	120	26.70
Civil servant	25	5.50
Total	450	100.00
Farm size		
< 1 ha	177	39.30
1-2 ha	180	40.00
3-4 ha	67	14.90
5 ha	26	5.80
Total	450	100.00

Source: Field Survey, 2021.

married respondents could increase the number of family labour, thus making more hands available for production activities in the yam farm. This proponent is in support of the position of Effiong *et al*. (2015) that the ability of a man to marry more wives in rural communities depend on the size of land he owns. The result also revealed that a fairly good number 34.70% of the respondents were aged 26-35 years. This indicated that most of the respondents were still strong and energetic to participate in Agricultural activities. This is in line with Effiong and Effiong (2015) and Effiong (2013) who stated that majority of the labour force in rubber production in Akwa Ibom State were energetic and productive.

Effect of conflicts on Yam production

The result in Table 2 showed the distribution of the respondent according to the effect of conflicts on yam production in the study area. The result revealed that all the variables identified recorded mean scores above the cut-off mean of 2.50, which suggests that the respondents accepted all the effects. Specifically, the study observed that conflicts reduced yam availability ($\bar{X}$=2.50), decreased yam productivity ($\bar{X}$=2.78), destroyed stored yam produce ($\bar{X}$=2.83), displacement of farmers and households ($\bar{X}$= 2.90), hunger and starvation ($\bar{X}$=2.62), reduced revenue from yam production ($\bar{X}$= 2.68), increased prices of yams available ($\bar{X}$=2.70), discourage yam farming ($\bar{X}$= 3.08), reduction in arable land ($\bar{X}$=2.57). The implication of this result is that conflicts of any kind or form are associated with some colossal damages to houses, shops, economic trees, crops, yam farm lands and ecological disturbance. This result is in agreement with Effiong *et al*. (2015) and Aboh and Effiong (2019) that farmers should as much as possible avoid all forms of hazards in their farm environments in Etim Ekpo Local Government, Akwa Ibom State. The results also implied that conflicts could be responsible for the increased yam prices in Cross River State and the low quality and quantity of yam exports in Nigeria (Jacobs and Greaves, 2003; Effiong and Effiong 2015). Conflict has therefore claimed an alarming proportion in the study area.

Constraints to Yam production

The results in Table 3 showed the distribution of respondents according to constraints to yam production in the study area. The results revealed that some variables recorded mean scores above the decision rule of 2.50, which means that the respondents agreed to the variables. However, three (3) variables; increased land reserve ($\bar{X}$= 2.42), poor cooperation from traditional institutions ($\bar{X}$=2.45) and desire to preserve forest resources ($\bar{X}$= 2.49) all recorded mean scores below the celt-off mean, which indicated that the variables were rejected as constraints affecting yam production. In particular, the study observed that insecurity of farmers and farming communities ($\bar{X}$=2.78), lack of funds ($\bar{X}$=2.58), high cost of labour ($\bar{X}$=2.55) unfavourable weather/ environmental conditions ($\bar{X}$=2.53), weeds pest/diseases infestation ($\bar{X}$=2.69), fear of unexpected conflicts ($\bar{X}$=2.71) and insufficient agricultural machineries ($\bar{X}$=2.51) among other variables, were regarded as constraints hindering yam production in the study area. The implication of this results is that yam farmers from rural communities in some areas in Cross River State are hindered by a wide range of variables, some of which the farmers cannot control by themselves. For instance, the fact that a substantial proportion of lands were either completely abandoned or half cultivated by yam farmers show a clear absence of yam production in Table 3. This agrees with the findings of Effiong and Effiong (2015) who noted that most farmers in Akwa Ibom State abandon their productive ventures due to some avoidable lack of funds/labour force. Also, majority of the rural communities in the study area are involved in one form of communal crisis or the other, where such clashes exist, farmers usually abandon their yam farms while the conflicts last. This agrees with the findings of Effiong *et al*. (2015) that clashes among communities, individuals, groups and villages are serious setbacks and obstacles to yam production in Abia State Nigeria.

Table 2: Distribution of respondents based on the effect of conflicts on Yam production.

Type of conflicts	Mean (X)	SD
Conflicts reduced yam availability	2.50	0.44
Decreased yam productivity	2.78	0.95
Destroyed stored yam produce	2.83	0.63
Displaced farmers and households	2.90	0.71
Hunger and starvation	2.62	0.87
Reduced revenue from yam production	2.68	0.49
Increased prices of available yam	2.70	0.96
Discourage yam farming	3.08	0.47
Reduction of arable land	2.57	0.43

Source: Field Survey Data, 2021. Cut-off $\bar{X}$ =2.50.

Table 3: Distribution of respondents according to constraints to Yam production in the study area.

Variables	Mean ($\bar{X}$)	SD
Increased land reserve	2.42	0.36
Poor cooperation from traditional institution	2.45	0.71
Desire to preserve forest resources	2.49	0.64
Insecurity among farmers/farming communities	2.78	0.69
Lack of funds	2.58	0.66
High cost of labour	2.55	0.75
Unfavourable weather/environmental conditions	2.53	0.86
Weeds, pest/diseases infestation	2.69	0.57
Fear of unexpected conflicts	2.71	0.82
Insufficient agricultural machineries	2.51	0.77

Source: Field Survey Data, 2021. $\bar{X}$ = ≥ 2.50.

RECOMMENDATIONS

Recommendations were made based on the findings of the study as follows:

Impact assessment should be conducted to assess the level of damage caused by conflicts in various parts of the

state. This is with a view to providing compensations and humanitarian services to the affected communities. Members of the civil defense corps should be posted to affected communities to provide security to those communities in the State. Yam farmers who abandoned their farms should be encouraged to return home and continue their yam enterprises. Government of Cross River State should partner donor agencies to provide more funds to farmers to increase their yam hecterage/land.

CONCLUSION

Conflicts have become a common phenomenon across the length and breadth of Cross River State. These conflicts have grown in occurrence and assume more dangerous and sophisticated dimensions. It has great negative effect on yam production rate, reduction in arable land, demolition of yam barns/stores, destruction of forest lands, housing structures, hunger and starvation in the affected communities in the State. The high occurrence of conflicts among yam is as a result on yam production farms may be as a result of continued struggle for scarce land resources in the state. Conflicts could be responsible for the increased yam prices in Cross River State and the low quality and quantity of yam exports in Nigeria. There is need for government to provide compensations to yam farmers who abandoned their farms as a result of conflicts, these would encourage them to return home and continue with their yam production enterprises.

Conflict of interest: None.

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