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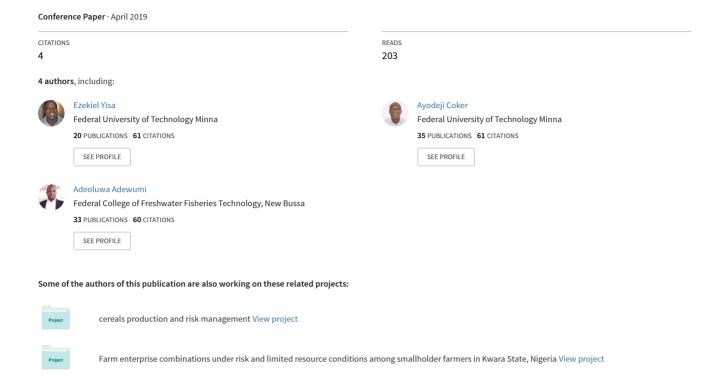
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EFFECTS OF CONFLICTS ON FOOD SECURITY AND POVERTY STATUS OF IRISH POTATO FARMERS IN PLATEAU STATE, NIGERIA

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Abstract

This study examined the effect of conflicts on food security and poverty status of Irish potato farmers in Plateau State, Nigeria. Multi-stage sampling technique was used to select a total of 225 respondents in the study area. Data for the research were collected with the aid of a well-structured questionnaire and were analyzed using descriptive statistics, United States food security scale, Foster-Greer-Thorbecke model, Probit regression and Ordered Logit regression model. Results showed that about 12% of respondents in the study area were food secured while 88% of the respondents were food insecure with various degrees of hunger. Majority (88.4%) of the respondents were poor and only 11.6% were non poor. Age, marital status, farm size, food expenditure, membership in cooperative and poverty status were found to be statistically significant factors at $p<0.01$ and $p<0.05$ levels of probability that affects the food security status of farmers during conflicts while level of education, farm size, labour and non-potato income were significant factors at $p<0.01$, $p<0.05$ and $p<0.10$ levels of probability respectively that affects the poverty status of respondents in the study area during conflicts. Also number of conflicts witnessed, household size and susceptibility to sickness were found to be statistically significant factors at $p<0.01$ and $p<0.10$ levels of probability that determine the susceptibility of respondents to conflicts. Respondents perceived and adopted adherence to curfew, living close to security post, cutting the size of meals and participation in community policing as effective coping strategies during conflicts in Plateau State. Agricultural credit should be made available to farmers through government intervention by statutory and commercial banks at little or no interest to increase crop production output, reduce poverty and improve food security status. Security post and barracks should be cited by government in rural communities to guarantee security of life and property.

Keywords: Conflict, Food Security, Poverty Status.

1. Introduction

Agriculture has been the largest industry which accommodates various human categories ranging from commercial farmers to rural peasant farmers, youths, women and men. However, the industry has for long been inefficient in providing food for humans and raw materials for industries, especially in most developing countries and in particular Nigeria (Etonihu et al. 2010). The eradication of poverty and insecurity has been declared by the United Nations World Summit for Social Development as the unfinished business of the 21st century. This unfinished business has been made more difficult to be completed, owing to the rising global conflicts.A major factor militating against the achievement of food security and economic wellbeing in Nigeria is conflicts.Conflict has become a global issue in

which Nigeria has witnessed its own share as a member of the global village. Most common phenomenon of conflict is its associated poverty causing effect on the affected population, of which women are the disadvantaged groups. The issue of gender with regards to poverty in Africa is expressed explicitly by Ezekwesili (2009), who asserted that poverty has a female face.

Most farmers in Plateau State cultivate Irish Potato because of the favourable weather which supports the cultivation of the crop. Norman(2014) established that cropping alternatives in any area is determined by physical and biological factors among other variables. According to the International Potato Center (1999), potato is the fourth most important food crop in the world, with annual production of about 300 million tons. Food and Agricultural Organization (FAO) (2014) affirmed that the world's potato production was estimated at about 3.6 million tons in 2012. Ayodele (2005) argued that more than one-third of the global potato output comes from developing countries. Irish potato cultivation has provided the best alternative as a choice crop for cultivation compared to other tubers because of its high yield, short maturity period and wide acceptability. Conflicts affect the economy of any society it befalls, resulting to a wider coverage of the number of people entangled in the vicious cycle of poverty. Many households in Plateau State are food insecure owing to the wide spread conflicts as many of the household heads have been killed in violence leaving the women to fend for their children by engaging in agriculture. It is therefore imperative to investigate the effects of conflicts on the food security and poverty status of the Irish potato farmers in Plateau State.

2. Materials and Methods

2.1 Area of Study

The study was carried out in Plateau State. Plateau is the twelfth largest State in Nigeria and is located approximately in the center of the country. It is geographically unique in Nigeria because of the rocky boundary that surrounds the Jos Plateau. According to the National Population Commission (2006), Jos has a population of around 3.5 million people. Plateau State is located in Nigeria's middle belt and with an area of 26,899 square kilometers. It is located between Latitudes 80°24' North and Longitude 80°32' and 100°38' East. The altitude ranges from around 1,200 meters (about 4000 feet) to a peak of 1,829 metres above sea level in the Shere Hills, near Jos. Years of tin mining have left the area strewn with deep gorges and lakes.

2.2 Sampling Techniques

Multi stage sampling technique was used for this study. The first stage involves purposive selection of four (4) Local Government Areas, two (2) LGAs where conflicts, violent clashes, crises and attacks have occurred these are Bokos and BarkinLadi and the remaining two (2) LGAs where violent clashes and conflict are virtually absent which are Jos South and Mangu. The next stage involved the random selection of four (4) villages each from the four (4) Local Government Areas. This gave a total of sixteen (16) villages. In the third stage, the list of total registered farmers obtained from the Plateau Agricultural Development Programme (PADP) was used as the sample frame. The last stage involved proportionate sampling (10%) of farmers from each of the Sixteen (16) villages to give a sample size of 225 farmers (respondents).

2.3 Analytical Techniques

Descriptive statistics which involved the use of percentages, means, range, weighted sum, frequency, as well as weighted mean, standard United States food security scale, Foster Greer and Theobecke model and inferential statistics such as Probit and Ordered Logistic regression models were used to analyze the data for this research. For determinants of effects of conflicts on food security and poverty status of the respondents' Probit regression model was used to achieve this. The regression model is used in estimating the probability of events based on dependent dichotomous variables. A dichotomous dependent variable assumes only two values (0 or 1). The implicit form of the probit model is given in equation (1) as:

$$P = (Y = 0) = C + (1 - C)F(X'\beta) \tag{1}$$

Where;

Y = Vector of parameter estimates

F = Cumulative distribution function (the normal, logistic, or extreme value)

X = Vector of explanatory variables

P = Probability of a response

C = Natural (threshold) response rate.

The explicit form of probit model is specified as followsin equation (2):

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + ... + \beta_n X_n \tag{2}$$

Where;

The dependent variable is defined as thus:

Y = Food security status of respondents (1 = food secure, otherwise = 0)

The independent variables are defined as:

X_1 = Age of farmer (Years)

X_2 = Gender (Male = 1, Female =0)

X_3 = Marital Status (1 = Married, otherwise = 0)

X_4 = Education (Years spent in school)

X_5 = Household size (Number of people)

X_6 = Farm size (Hectare)

X_7 = Farming experience (Years)

X_8 = Household expenditure per annum on food (₦)

X_9 = Affected by conflict (Yes=1; No=0)

X_{10} = Distance of homestead to the nearest security outpost (Km)

X_{11} = Extension visits (Number)

X_{12} = Labour (Man day)

X_{13} = Membership of cooperative society (Years)

X_{14} = Poverty status of respondents (1= Poor, 0= Non-poor)

β_0 = Constant

$\beta_1 - \beta_{14}$ = regression coefficients

For determinants of effects of conflict on the poverty status of respondents, the explicit probitmodel is expressed as follows in equation (3):

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + ... + \beta_{15} X_{15} \tag{3}$$

Where;

Y = Poverty status of Respondent (1 = poor, 0 = non poor)

X_1 = Age of farmer (Years)

X_2 = Gender (Male =1, Female = 0)

X_3 = Marital Status (1 = Married, otherwise = 0)

X_4 = Education (Years spent in school)

X_5 = Household size (Number of people)

X_6 = Membership of cooperative society (Years)

X_7 = Farm size (Hectare)

X_8 = Farming experience (Years)

X_9 = Household expenditure per annum on food (₦)

X_{10} = Affected by conflict (Yes=1; No=0)

X_{11} = Distance of homestead to the nearest security outpost (Km)

X_{12} = Extension visits (Number)

X_{13} = Labour (Man day)

X_{14} = Non- potato income (₦)

X_{15} = Capital input (₦)

β_0 = Constant

$\beta_1 - \beta_{15}$ = regression coefficients

For determinants of susceptibility of respondents to conflicts in the study area, Ordered Logit regression was used to achieve this. The implicit form of the model is expressed as thus:

model is specified as followsin equation (4):

$$\log\left[\frac{yj(X_i)}{1-yj(X_i)}\right] = \mu j - \left[\beta_1 x_{1i} + \beta_2 x_{2i} + ... + \beta_k x_{ki}\right]$$

(4)

$j = 1,..., J; i = 1,..., n$

Where;

Y_j is the cumulative probability of the dependent variable in a four-point Likertscale:

$Y_1 = 1$(Never susceptible)

$Y_2 = 2$ (Rarely susceptible)

$Y_3 = 3$ (Occasionally susceptible)

$Y_4 = 4$ (Always susceptible)

βi is the column vector and of (β_1, β_2,......,β_k) parameters

μj is the threshold

X_i is the column vector of explanatory variables which are expressed as thus:

$X_1 =$ Conflicts witnessed in the last one year (Number)

$X_2 =$ Value of properties destroyed in the last one year (₦)

$X_3 =$ Deceased family member during conflict (Number)

$X_4 =$ Meals eaten per day (Number)

$X_5 =$ Household size (numbers)

$X_6 =$ Farm size (hectares)

$X_7 =$ Food expenditure (naira)

$X_8 =$ Labour (man-day)

$X_9 =$ Susceptibility of household head to sickness (susceptible = 1, not = 0)

$X_{10} =$ Income per annum (naira)

$X_{11} =$ Extension visits (Number of visits)

$X_{12} =$ Membership of cooperative society (Years)

The weighted mean was used to assess the respondents' perceptions on coping strategies adopted during conflicts in the study area.A five point Likert scale(5 = Very effective, 4 = Effective, 3 = Undecided, 2 = Rarely effective and 1 = Not effective) was used to compute the weighted mean.

3. Results and Discussion

3.1 Food Security Status of Respondents in the Study Area

The result of food security status of respondents in the study area using the United State food security scale is presented in Table 1. It revealed that 54.7% of the respondents in the study area were food insecure with severe hunger while 26.7% of the respondents are food insecure with moderate hunger. Also, 6.6% of farmers in the study area were found to be food insecure without hunger. These findings corroborates with Robert *et al*. (2013) who found that majority (79%) of farmers in SekereAfram plains district of Ghana were food insecure.

Table 1. Food Security Status of Respondents

Food security status	Food security scale	Frequency	Percentage	Mean
Food secured	0.0 − 2.2	27	12%	
Food insecure without hunger	2.3 − 4.4	15	6.6%	
Food insecure with hunger (moderate)	4.5 − 6.4	60	26.7%	2.2
Food insecure with hunger (severe)	6.5 − 10	123	54.7%	
Total		**225**	**100.0**	

Source: Field survey, 2017

3.2 Poverty Status of the Respondents

The result presented in Table 2showed that majority (88.4%) of respondents in the study area were living below the poverty line implying that significant number of farmers in the study area were poor and only 11.6% of the respondents were non poor. This position is also supported by Asogwa*et al.* (2012) who affirm that poverty is disproportionately concentrated among households whose primary livelihood is agricultural activities.

Table 2. Respondents' Poverty Status

Poverty status	Frequency	Percentage
Poor	199	88.4
Non poor	26	11.6
Total	**225**	**100**

Source: Field survey, 2017

3.3 Effects of Conflicts on Food Security Status of Respondents

The result of probit regression analysis showing the effect of conflict on the food security status of Irish potato farmers is presented in Table 3. It revealed that the regression coefficients of age (X_1), marital status (X_3) farm size (X_6) and membership of cooperative (X_{13}) were positive and significant at p<0.05probability level. This means that these factors have positive relationship with the food security status of respondents in the study area. Significant level (p<0.05) for age show that for every five years increase in the age of respondents in the study area, their food security status will increase by the coefficient of 0.02. This implies that the older the farmers get the more experience they acquire to improve their food security status. Also, for every 5% increase in the marital status of respondents, their food security status improves by 0.51 and for every 5% increase on the acreage farm size of respondents in the study area; their food security status will increase by 0.17. Similarly for every five years increase in cooperative membership, the food security status of respondents in the study area will improve by 0.83. The regression coefficient of food expenditure (X_8) and Poverty status (X_{14}) were negative and significant at 1% level of probability meaning that these factors have negative relationship with the food security level of respondents. The regression coefficient of food expenditure shows that for every 1% increase in food expenditure, the food security status of respondent drops by 0.001. Also for every 1% increases in poverty status of respondents their food security status drops by 0.8.This could be attributed to the fact that the incessant conflicts in the study area have made most of the respondents to be economically unproductive and hence as they keep getting poor their food security status drops significantly. This finding agrees with Babatunde*et al.* (2008) who found age, farm size and food expenditure as significant factors that affect households' food security status.

3.4 Marginal Effect and Partial/Quasi Elasticity

The result presented in Table 4 shows that the partial elasticities of the age, marital status, farm size, food expenditure, cooperative membership and poverty status are inelastic. This means that a percentage change in these explanatory variables leads to a less than proportionate change in the probability of respondents' food security status.

Table 3. ProbitEstimates on Effects of Conflicts on Food Security Status in the Study Area

Food Security Variables	Coefficients	Standard Error	Z-Value
Constant	-0.154	0.750	0.837
Age (X_1)	0.023	0.011	2.14**
Gender (X_2)	0.164	0.221	0.75
Marital status (X_3)	0.512	0.243	2.11**
Level of education (X_4)	0.025	0.025	1.02
Household size (X_5)	-0.033	0.043	-0.77
Farm size(X_6)	0.167	0.083	2.02**
Farming experience (X_7)	-0.008	0.014	-0.60
Food expenditure (X_8)	-0.001	3.16e-06	-5.95***
Affected by conflict (X_9)	-0.280	0.230	-1.22
Distance to security post (X_{10})	0.052	0.038	1.36
Extension Visits(X_{11})	-0.015	0.040	-0.39
Labour (X_{12})	-0.001	0.007	-0.99
Membership in cooperative (X_{13})	0.827	0.363	2.28**
Poverty status (X_{14})	-0.751	0.220	-3.41***

Log likelihood = -82.563;   Prob> chi-square = 0.0000***; Pseudo R^2 = 0.453

*** = significant at 1% level of probability, ** = significant at 5% level of probability

Source: Field survey, 2017

Table 4. Marginal Effect and Partial Elasticities of Factors Affecting Food Security Status of Respondents

Variables	Marginal Effect	Partial Elasticity
Age	0.005	0.002
Marital Status	0.106	0.049
Farm Size	0.035	0.017
Food Expenditure	-3.90e-06	4.04e-07
Cooperative Membership	0.171	0.076
Poverty Status	-0.156	0.045

Source: Field survey, 2017

3.5 Effects of Conflicts on the Poverty Status of Respondents

The result presented in Table 5 shows the probit estimates of the effect of conflicts on respondents' poverty status. It shows that among the fifteen variables included in this model, the regression coefficients of level of education (X_4) had positive relationship on the dependent variable while farm size (X_7), labour (X_{13}) and non-potato income (X_{14}) had negative relationship on the poverty status of respondents in the study area due to conflicts. For the coefficient of educational level significant at (p<0.05), this indicates that for every 5% increase in educational level of respondents in the study area, their poverty status increases by 0.067. This implies that as the farmers in the study area acquires more education, the probability of abandoning farming due to the incessant conflict in the study area is 1 and as a result of absence of immediate alternative, the poverty status of the respondents' increases. On the other hand an increase in the acreage of the farm size will drop the poverty level of the respondents by -0.639. This is justifiable as the farmers are able to cultivate more lands amidst the conflict, the poverty level decrease as more crops are harvested and some sold for income. Similarly the more the labour available for farm work in the study area, the further their poverty level drops by -0.002. The coefficient for non-potato income as shown in the table result was at 1% probability level. It shows that an increase in income for the farmers from sources other than Irish potato sales will decrease their poverty level significantly. These finding agrees with Paul *et al.* (2009) who found educational level as a factor that has relationship on the poverty level of farmers in northern Nigeria.

Table 5. Probit Estimates on Effects of Conflicts on Poverty Status in the Study Area

Poverty variables	Coefficients	Standard Error	Z –Value
Constant	3.670	1.452	2.53**
Age(X_1)	-0.014	0.030	-0.46^{ns}
Gender (X_2)	0.237	0.292	0.81^{ns}
Marital Status (X_3)	-0.171	0.318	-0.54^{ns}
Level of Education (X_4)	0.067	0.032	2.08**
Household Size (X_5)	-0.014	0.057	-0.25^{ns}
Membership in Cooperative (X_6)	-0.030	0.022	-1.34^{ns}
Farm Size (X_7)	-0.639	0.263	-2.43**
Farming Experience (X_8)	0.035	0.022	1.61^{ns}
Food Expenditure (X_9)	-9.82e-07	1.04e-06	-0.953^{ns}
Affected by Conflict (X_{10})	0.077	0.336	0.23^{ns}
Distance to Security Post (X_{11})	0.042	0.057	0.75^{ns}
Extension Visits (X_{12})	0.048	0.047	1.02^{ns}
Labour (X_{13})	-0.002	0.001	-1.69*
Non-Potato Income (X_{14})	-0.00002	4.21e-06	-5.43***
Capital Input (X_{15})	0.0000178	0.0000223	0.80^{ns}

Log pseudo likelihood = -43.009;   Prob> chi-square = 0.0000***; Pseudo R^2 = 0.466
*** = significant at 1%, ** = significant at 5% and * = significant at 10% probability level
Source: Field Survey, 2017

3.6 Marginal Effect and Partial/Quasi Elasticity

The result in Table 6 shows that the quasi-elasticities of educational level, farm size, labour and non-potato income are less than 1 which implies that they are inelastic. This means that a change in these explanatory variables leads to less than proportionate change in the poverty status of respondents in the studyarea.

Table 6. Estimates of Marginal Effect and Partial Elasticities of Effects of Conflicts on the Poverty Status of Respondents

Variables	Marginal Effect	Partial Elasticity
Educational Level	0.007	0.003
Farm Size	-0.065	0.027
Labour	-0.0001795	0.0001084
Non-Potato Income	-2.33e-07	3.78e-07

Source: Field survey, 2017

3.7 Determinants of Susceptibility of Respondents to Conflict in the Study Area

The result of ordered logit (Ologit) regression model for determinants of susceptibility of respondents to conflict in the study area is presented in Table 7. It shows that out of the twelve explanatory variables included in this model, three were found to be statistically significant at 1% and 10% levels of probability. The coefficient of multiple determinations (R^2) obtained for this model is 0.079 implying that 8% variation in always susceptible to conflicts (dependent variable) is explained by the independent variables included in this model. Log likelihood chi-square of 33.41 is obtained and statistically significant at 1% also implying that the whole model is significant. For number of conflicts witnessed with coefficient of -0.116, a unit increase in number of conflicts (going from 0 to 1), the odds of high always susceptible versus the combined middle and low categories are 0.89 greater, given that all of the other variable in the model are held constant. Likewise, the odds of the combined middle and high categories versus low susceptibility is 0.89 times greater, given the all other variable in the model are held constant. This implies that as the number of conflicts witnessed by the respondents' increases, the probability of always becoming susceptible to conflicts decreases by -0.116. For the household size with coefficient of -0.213, an increase in the household size that is going from 0 to 1, the odds of high always susceptible to conflict versus the combined middle and low

categories are 0.81 greater, given that all other variables in the model are held constant. This shows that as the household size increases, their susceptibility to conflict decreases due to more household members are available to protect each other. Likewise the odds of the combined middle and high categories versus low always susceptibility to conflict is 0.81 times greater, given that all other variables in the model are held constant. This finding is in agreement with Suharyanto*et al.* (2014) who found increase in household size at 1% significant level to be a factor that makes farmers less susceptible during conflict. For one unit increase in susceptibility to sickness, the odds of high category of always susceptible to conflict versus the low and middle categories of always susceptible to conflict is 0.15 times greater, given all other variables in the model are held constant. The same increase, 0.15 times, is found between the low always susceptible to conflict and the combined middle and high categories. This implies that as household members becomes sick; they become less susceptible during conflicts as they are not actively involved in the clashes or disputes due to illness.

Table 7. Estimates of Determinants of Respondents' Susceptibility to Conflict (n=225)

Susceptibility Variables	Coefficient	Odd Ratios	Standard Error	Z- Value
Number of Conflicts Witnessed(X_1)	-0.116	0.891	0.064	-1.81*
Value of Property Destroyed(X_2)	-0.002	0.999	0.002	-1.22
Deceased Family Member(X_3)	0.001	1.001	0.108	0.01
No. of Meal Per Day(X_4)	0.097	1.102	0.205	0.47
Household Size(X_5)	-0.213	0.808	0.072	-2.97***
Farm Size(X_6)	-0.115	0.891	0.109	-1.06
Food Expenditure(X_7)	-9.44e-06	0.999	7.73e-06	-1.22
Labour(X_8)	0.00002	1..000	0.001	0.02
Susceptibility to Sickness(X_9)	-1.885	0.152	0.417	-4.52***
Income per Annum(X_{10})	-3.01e-07	0.999	4.33e-07	-0.69
Extension Visits(X_{11})	-0.041	0.959	0.045	-0.92
Cooperative Membership(X_{12})	-0.006	0.994	0.017	-0.33

Log likehood = -245.80349;   LR Chi Square = 33.41***;   Pseudo R^2 =0.079
*** = Significant at 1% level of probability, * = Significant at 10% level of probability
Source: Field survey, 2017

3.8 Respondents' Perceptions on Coping Strategies during Conflicts in the Study Area

Result of the analysis reveals the perceptions of respondents to various coping strategies in the study area during conflicts as presented in Table 8. Seven coping strategies which includes: living close to security post, cultivating in less distant farm, participating in community policing, cutting down number of meals, food storage, adherence to curfew and emigration were studied. Result of the analysis showed that adherence to curfew has a weighted mean of 3.87 which showed that it is an effective strategy during conflict in the study area. This finding agrees with Adelakun*et al.*, (2015) who found government intervention through enforcing law and order as the most effective means of conflict resolution, guaranteeing survival. The result further revealed that living close to security post accounted for 3.47 in weighted mean, showing that respondents perceived dwelling close to a security post as an effective means of coping with conflicts. It was also discovered that cutting down number of meals accounted for 3.49 in weighted mean which showed that it is an effective coping strategy based on the perception of the respondents. This finding shows why food insecurity is one of the resultant effects of conflict in most part of Nigeria and as a result of this, most households perceive rationing and cutting down sizes of meals as a means of survival during conflicts. Also, the result revealed that participation in community policing with 3.42 weighted mean is opined by respondents as an effective coping strategy during conflict. This implies that cooperating with law enforcement officers in jointly securing lives and properties in conflict areas is an effective survival approach. From the research, it was also discovered that cultivating a less distant farm (2.71) weighted mean was perceived not an effective coping strategy during conflicts by farmers in the study area. This result shows that farming in less distant fields for fear of being attacked while in the farms does not guarantee safety. Similarly, respondents' perception on food storage (2.29) in weighted mean implied

that it is not an effective coping strategy during conflicts. The result from the analysis also revealed that respondents' perception on emigration with 2.32 in weighted mean show that moving out from the communities during conflict is not an effective coping strategy. This shows that exodus of people during conflict is a survival instinct of last resort and common in most rural settlements where government presence is not obvious. This result agrees with Tonah (2006) who found emigration of farmers to be common during farmer- herder conflicts as a means of survival.

Table 8. Perceptions of Respondents on Coping Strategies during Conflicts in the Study Area

Coping Strategies	Weighted Sum	Weighted Mean	Remark
Adherence to Curfew	870	3.87	Effective
Living Close to Security Post	780	3.47	Effective
Cutting Down Number of Meals	785	3.49	Effective
Participation in Community Policing	770	3.42	Effective
Cultivating a Less Distant Farm	610	2.71	Not Effective
Food Storage	515	2.29	Not Effective
Emigration	521	2.32	Not Effective

Source: Field survey, 2017

4. Conclusion

Based on the result of this study, it is concluded that conflicts has no significant effects on the food security and poverty status of Irish potato farmers in the study area. This is because of the diversification of majority of the respondents to non-potato enterprise which buffered the effects of conflicts on the living standard of the respondents. This is shown when the variable non-potato enterprise was excluded from the model; the conflict variable was statistically significant as against when it was included in the model. Age, marital status, farm size, food expenditure, cooperative membership and poverty status significantly affect the food security status of the respondents likewise level of education farm size, labour and non-potato income were significant factors that affect poverty status of respondents during conflicts in the study area. Adhering to curfew, living close to security post and cutting down number of meals were perceived to be effective coping strategies during conflicts by respondents in the study area. Based on the findings of this research, the following recommendations are made: It was revealed from the findings of this study that non-potato income was a signification factor having negative relationship on the poverty status of respondents; it is therefore recommended that farmers should diversify into other non-potato enterprise to alleviate their poverty status and improve living standard. Government through agricultural institutions should make more inputs readily available at subsidized rate. Stakeholder, philanthropist and NGO's should develop more specific poverty alleviation programmes tailored in areas of skill acquisition and along potato value chain in the study area to curb the high poverty rate in the study area.

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