

Full Length Research Paper

Factors influencing women's involvement in good agricultural practices package of national special programme on food security in Niger State, Nigeria.

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The study investigates factors influencing women participation in National Special Programme on Food Security Niger state. Purposive sampling technique was used to select 103 participants through administration of pre-tested questionnaire supplemented with oral interview. Both descriptive and inferential statistics were used to analyze the data collected. Findings revealed that most (71%) of the participants are middle-aged and still active in agricultural production. Majority (87.4%) of the participants involved in the programme are married, thus, contributing to the family welfare in cash and kind. The results indicated that the majority (71.9%) of the participants had non-formal education, with an average household size of 8.7%. In addition, analyzed results indicated that (55.9%) participated in crop enterprise, (30.2%) participated in livestock production, (13.7%) participated in marketing. The study also revealed that age, education and household size influenced women participation in the programme. However the effects of education indicated that literacy level as a result of basic literacy skill acquisition introduced by the programme facilitators has improved; large household size as a result of enormous family responsibility affect the level of participation in the programme and middle aged are most of the participants. The study concluded that women participation in NSPFS programme actually reduced poverty level and significantly contributed to food security. The programme should be expanded to cover more areas, thereby increasing the number of sites and participants so as to extend its benefits to many rural poor.

Keywords: Food security, poverty alleviation, women participation, NSPFS, Niger State

INTRODUCTION

Women constitute half of the world's population with about 565 million of them residing in rural areas in developing countries where they perform increasingly indispensable roles in agricultural and national development. Studies have shown that rural women farmers' perform about 70% or more of all agricultural production activities, 100% of food processing and utilization activities and over 50% of storage and marketing operations (Kawani and Pernia, 2002). According to Saito (1992) women tend to contribute more towards agricultural production which constitutes an important aspect of national development. Women

put in more hours in agricultural and non-agricultural activities than men. This notwithstanding, empirical findings reveal that although women perform nearly two-third of the world's work, they receive only one-tenth of the world's income and own less than one-hundredth of the world's property (World Bank, 2002). Also, because of the erroneous assumption that men and not women make the key farm management decisions, women receive less than 5 percent of extension service worldwide, a bulk of which is focused on domestic roles like childcare and nutrition. It has also been revealed that less than 3 percent of extensions officials are

women and that in the whole United Nations system, only 4 percent of programmes benefit women (World Bank, 2002). In essence, women's priorities are rarely reflected in agricultural or national development research or policies. The World Bank (2002) reported that marginalization of women in general and rural women in particular were tantamount to stifling their potentials and denying the nation or rural communities the rewards inherent in such potentials.

Nigeria is gripped by both income and food poverty, and poor access to the means of supporting rural development being among the causative factors (FGN/WHO 2004). Nworgu (2006), states that in Nigeria, food security which goes with food self-sufficiency and sustainability is still elusive. This is because the agricultural sector has not been able to deal effectively with the problems of food security for the Nigerian people when viewed from the standing point of nutritional status of Nigerians, household food security and food prices (Vision, 2010). In an effort to reverse these trends, the Federal Government of Nigeria (FGN) has renewed its commitment to promoting growth in the agricultural sector and prepared the National Economic Empowerment and Development Strategy (NEEDS). In a move to achieve these objectives, the FGN with assistance from FAO implemented the Special Programme for Food Security (SPFS) as a pilot Programme in Kano State, with the objective of identifying, adopting, testing and promoting intervention packages that promote growth in the agriculture sector. It was in this context that the Federal and State governments in conjunction with FAO became interested in extending the programme to all states in Nigeria. Its aim is to assist farmers to improve on their livelihood status (Dauda and Ajayi, 2009). Because of the high rate of feminization of poverty which is evident among women, this paper will take women as the focal point of study. The study was designed to determine those factors influencing women participation in the programme. The specific objectives are to:

- identify the socio-economic characteristics of the women participant; and
- determine the factors influencing women participation in the programme.

METHODOLOGY

Niger state is located in north central Nigeria and it's the largest state in the country in terms of landmass. The state is bordered in the north by Zamfara state, east by `Kebbi, and federal capital territory border the state at both north-east and south-east. It shares a common boundary with the republic of Benin at Babanna in Borgu local government area (NSADP, 2008). Niger state lies in the guinea savannah vegetation of the country with

favourable climate condition for crops and livestock production. The state has total population of 3,950,249 and about 85% of the state populations are farmers'. Only about 15% are involve in other activities such as white-collar jobs, business e.t.c. (NPC, 2006). Purposive sampling technique was used to select a total of 103 respondents from women strata in the three sites of the programme in the state, namely; Nasarawa (zone I), Gidan Mangoro (zone II), and Lioji (zone III). Secondly, each site was stratified into two and the female strata which is the focal point of study was selected for the study. Three female groups with its membership ranging from 15 to 20 were identified in each site. A scale of 60% was used to select the number of respondents for the study. Lastly, 34, 35 and 34 were randomly selected from Nasarawa, Gidan Mangoro, Lioji sites respectively, thus, given a total sample size of one hundred and three (103) respondents for the study. Interview schedule coupled with pre-tested questionnaire was used to elicit informations from the respondents. Descriptive statistics and logit regression model were used to analyse the data collected.

Model specification

The logit regression model is given as:

$$\text{Log} (P/ 1-P) = b_0 + b_1X_1 + \dots + b_nX_n + U_i$$

Where

Y = level of participation (high= 1, low=0)

P_i = Highly involved (1)

$1 - P_i$ = Lowly involved (0)

b_0 = intercept/constant

b_{i-n} = Co-efficient of the parameters

X_1 = Age (in years)

X_2 = Marital status (double =1, otherwise = 0)

X_3 = Educational level (formal = 1, otherwise = 0)

X_4 = Household size (in numbers)

X_5 = occupation (farming = 1, otherwise = 0)

X_3 = income (in naira)

RESULT AND DISCUSSION

Socio-economic characteristics of the respondents

Age distribution

Firstly, Age distribution in Table1 depicts that majority of the participant fall between the age bracket $\leq 30-50$, with mean age of 37.4 years. This implies that the participants are within the active age bracket recommended by FAO; majority of them are energetic, young and agile to actively participate in the programme and improve their productivity, thus, reducing poverty level in the household. This finding agrees with Adekoya

Table 1: Socio-economic characteristics of the Respondents

Socio-Economic	Frequency	Percentage
Age Distribution		
≤ 30	23	22.3
31-35	19	18.4
36-40	32	31.1
41-45	14	13.6
46-50	12	11.7
≥ 50	3	2.9
Total	103	100
Marital Status		
Married	90	87.4
Single	2	1.9
Widow	11	10.7
Total	103	100
Educational Status		
Non-formal	74	71.9
Formal	29	28.1
Total	103	100
Household Size		
1-5	18	17.5
6-10	64	62.1
11-15	18	17.5
16-20	3	2.9
Total	103	100
Major Occupation		
Farming	68	66.0
Business women	31	30.1
Others	4	3.9
Total	103	100

Source: Field survey, 2012.

et al., (2000) as cited by Ayoade and Adeola (2012) who reported that majority of women participant are in the active ages with children to train and nurture which will impose enormous economic burden on them.

Marital status

Secondly, marital status in Table 1 shows that the majority of the participants (87.4%) were married, while (12.6%) are either single or widow. This implies that married women were more involved in the programme and are within their productive age. This agrees with the findings of Ekong (2003) as cited by Ayoade et al., (2011) who reported that majority of rural women involved in agricultural productivity were married and are within their productive age. This means child bearing and responsibility of the home may influence their level of participation in the programme. Furthermore, he asserted that the wishes and interest of their husband's determine the extent of their participation.

Educational status

Thirdly, Educational status in Table1 also reveals that the majority of the participant (71.9%), had non- formal

education while 28.1% had formal education. This implies that formal educational level of the participants were low. This is not a surprising outcome because the three NSPFS site are located within the educational disadvantage local government areas of the state. This result is in line with the observation of the programme facilitator who remarked that poor formal educational level did not affect women's participation in the programme because they were led into basic literacy skill acquisition. This result agrees with the findings of Ayoade (2010); Ayoade (2011).

Household size

Fourthly, Household size in Table 1 reveals that majority of the participants (79.6%) had a household size which range between 1-10 people while (20.4%) had a household size of ≥11 people, with mean household size of 8.7%. It is expected the fewer the household size the better the standard of living and health status. This is a fair average based on FAO recommendation; a good standard of living. This result is in consonant with the findings of Ayoade (2010) and Ayoade *et.al*, (2011).

Table 2: Factors influencing Women Participation.

Parameter	Estimate	Std. Error	Z	Sig.
Age	-.010	.009	-4.134	.007***
Marital status	.013	.050	0.251	.801 ^{NS}
Level of Education	.010	.030	1.942	.023**
Household size	-.047	.021	-2.273	.023**
Major occupation	-.031	.073	-0.431	.667 ^{NS}
Income	.000	.000	1.235	.217 ^{NS}
Intercept	-2.297	.344	-6.682	.000
Chi-square(χ^2)	156.633***			
Pseudo R ²	0.50			

Source: Field survey, 2012

Note: *** ** * implies 1%, 5% and 10% level of significance **NS**= not significant.

Major occupation

Lastly, major occupation in Table 1 reveals that 66% of the respondents are farmers while the remaining are either business women or engaged in other activities. This implies that the major occupation is arable farming; as such NSPFS need to enlighten them on the importance of enterprises diversification: aquaculture, fishery, and livestock rearing, thus keeping them economically active throughout the year.

Factors influencing women participation

Table 2 presents the estimates of logit regression on the factors influencing women participation in the programme. The explanatory power of the factors as reflected by Psuedo R² was relatively fair (50%). The significant of the chi-square (χ^2) shows that the logit model is fit and appropriate for the analysis. Three out of the six variables included in the model were significant. In terms of consistency with *a priori* expectations, the model seems to have behaved well. The co-efficient of the age is negative and significant at ($P < 0.01$). This means that the higher the age the lower the level of participation. It implies that the aged people do not much participate in the NSPFS programme. This is not a surprise because the aged have little or non-materialistic desire. The co-efficient of the level of education is positive and significant at 5%, the higher the level of education, the higher the level of participation. Ajani (2008), reported that educated women may be more aware of their rights and responsibilities in the household and may be more assertive about them than uneducated ones. The household size is negative and significant ($p < 0.05$). This implies that the higher the household size the lower the level of participation. This is contrary to the past studies which suggest that household size has positive influence on the level of participation in the

programme. Other variables included are not significant and need no further discussion.

CONCLUSION AND RECOMMENDATIONS

Poverty reduction and food security in niger state have proved to be of immense challenge not only to the state but the nation as a whole. The study focused on women because of the significant role they play in the overall welfare of their families. The following conclusions were made on the basis of findings. Most of the participants were within their productive age; hence they will be expected to participate actively in their project activities. Majority of the participants are married with an average household size of 1-10 members. Participants contribute to family welfare in cash and kind. A significant relationship exists between age, level of education, household size and the level of participation. The following recommendations were made based on the major findings of the study.

- The programme should be expanded to cover ,more areas, thus increasing the number of sites and participants
- Enterprise diversification such as aquaculture, livestock production and marketing to boost their income generation should be highly encouraged, thereby keeping them economically active throughout the year.

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