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ASSESSMENT OF FARMERS' PARTICIPATION LEVEL IN NATIONAL SPECIAL PROGRMME FOR FOOD SECURITY: A CASE STUDY OF WARAWA LOCAL GVERNMENT AREA OF KANO STATE.

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ABSTRACT

The study focused on the assessment of farmers' participation in National Special Programme for Food Security (NSPFS) in Warawa Local Government Area of Kano State. Data were collected from 100 randomly selected farmers' through the use of interview schedule, while the information collected was analyzed using descriptive statistics, regression (logit) and ranking. The result indicated that, the age of the farmers range from 15 to 72 with a mean of 37 years. They also have a mean household size of 13 members with an average farm size of 3.42ha as well as a mean farming experience of 22 years. Similarly, majority of the respondents (46%) have medium level of participation in NSPFS. Also farmers' age, years of awareness and farming experience were statistically significant (P<0.05; 0.0164, 0.0533 and P<0.01; 0.0054) to participation. Nevertheless, local leadership problems, inadequate quantity and quality inputs, diversion of inputs meant for the Programme and inadequate Extension agents constitute the major constraints to the respondents' active participation in the Programme. It is hereby recommended that training and development of local leadership, provision of adequate inputs as well as Extension personnel will go a long way in improving farmers' participation in the Programme.

KEYWORDS: Farmers, participation level, NSPFS, Warawa in Kano State-Nigeria.

INTRODUCTION

The importance of agriculture in accelerating the social, economic and political growth in developing Countries such as Nigeria has been well recognized (Igben, 1988). Agriculture is an integral part of our lives as large percentage of working hours are taken up by efforts to provide food for ourselves. Despite the fact that agriculture employed about 80% of Nigeria population, yet the production yield from the sector is very poor or low couple with rapid growth in population which far exceeds growth in food production (Daneji, et al. 2006). This is posing a threat to National Food Security, and food security exists when all people, at all times, have access to sufficient, safe and nutritious food to meet their dietary requirement for an active and healthy life. Therefore in an attempt to cope with increasing food demand by the country's teeming population, the government of Nigeria decides to look inwards for ways of improving agricultural production in the country, which was in line with world food summit held in Rome, Italy in November, 1996. through strengthening the innovative approach to food security in low-income food-deficit Countries, which lead to concerted effort being made of bringing together the basic elements and key players necessary to increase staple food production in a sustainable manner (FAO,2006). However, this could only be achieved by ensuring an enabling political, social and economic environment as well as encouraging effective grassroots participation of rural people to be involve in the planning of Programmes as the originators, planners, controllers and executors of their own Programme designed to create the best conditions for the eradication of poverty and for durable peace, based on full and equal participation of men and women, which is most conducive to achieving sustainable food security for all (FAO, 1996).

Hence the need to involve the farmers to determine agricultural extension Programme in order to make the services more responsive to local conditions, more accountable, more effective and more sustainable can not be overemphasized owing to the fact that successful management of resources by and large rest on the support, understanding and cooperation of rural people, local, state, federal governments as well as the private sector.

The broad objective of this study is to assess farmers' participation level in NSPFS Programme in Warawa local government area, Kano State. Specifically the study aimed at the following;

- a. determine the socio-economic characteristics of farmers' in NSPFS
- b. examine the farmers level of participation in NSPFS recommended practices
- c. determine the relationship between farmers' socio-economic variables and their level of participation in NSPFS
- d. investigate the constraints to farmers' active participation in NSPFS

Table 1: Summary of Socio-economic Characteristics of the Farmers

Characteristics Minir	num	Maximum	Mean	Standard Error	Percentage
Age	15	72	36.97	1.236683	-
Household size	4	27	13.3	0.433799	-
Farming experience	4	64	22.19	1.258241	-
Farm size	0.5	8	3.42	0.204954	-
Educated (formal)	-	-	-	-	40
Gender (male)	-	-	-	-	97
M/status (married)	-	-	-	-	89
Occupation (major)	-	-	-	-	95

Source: Field survey, 2006

Table 2: Respondents level of participation in NSPFS recommended practices

Number of Practices	Frequency	Percentage
Low participation	42	42.00
Medium participation	46	46.00
High participation	12	12.00
Total	100	100.00

Mean= 3.96

Source: Field survey, 2006.

- *1 3 practices low participation
- *4 6 practices medium participation
- *7 9 practices high participation

METHODOLOGY

The study area

Warawa Local Government Area, (LGA) lies within the Sudan Savannah ecological zone of Nigeria. The local government is located in the north-central part of Kano State, bounded to the north by Gezawa and Gabasawa L.G.A.s, in the south by Dawakin Kudu L.G.A., in the west by Kumbotso L.G.A. and by Wudil L.G.A. in the east. The local government area covers a total land size of 3,671 square km and lies between latitude 11o 52' and 12 o 00'N and longitude 8o 43' and 8o 56'E. The climatic condition and vegetation cover of the area consist of two distinct seasons: the wet and dry seasons.

The main land use pattern in Warawa L.G.A. involved the production of rain fed crops; irrigated crops; economic tree crops and rearing of animals. Among the rain fed crops produced include maize, sorghum, millet, cowpea and groundnut. Also irrigated crops include rice, wheat, water melon and vegetable crops (tomatoes, onion, pepper and cabbage). Mango, guava, cashew and pawpaw are the commonly grown economic trees.

Data collection

Simple random sampling technique was used in selecting the respondents for this study. Farmers participating in NSPFS activities and programmes in the local government area constituted the target population of this study. A total of 100 respondents were chosen and data were collected through the use of questionnaire, which was administered to respondents.

Data analysis

The data collected was analyzed using descriptive statistics such as percentages, minimum, maximum, mean, ranking and inferential statistics such as logit regression. These were employed to analyze socio-economic information of farmers' and participation level in NSPFS in the study area. The tools are considered adequate in the study of demographics variables as adopted by Daneji (2006), Rahman and Alamu (2003) and Fakoya (2004).

Table 3: Estimated logit regression analysis of socio-economic characteristics and participation variables of NSPFS programme

Variable	Coefficient	Standard	Z-value	Probability
		error		level
Constant	-2.553374	1.647799	-1.549566	0.1212^{ns}
Age (X_1)	-17.11095	7.131779	-2.399254	0.0164*
Household $size(X_2)$	0.577976	3.262074	0.177180	0.8594^{ns}
Educational status(X_3)	1.242882	1.371774	0.906040	0.3649^{ns}
Farming experience(X_4)	20.76477	7.465776	2.781328	0.0054**
Farm $size(X_5)$	-1.101585	3.115001	-0.353639	0.7236 ns
Awareness level (X_6)	2.330976	1.206167	1.932549	0.0533*

Source: Field survey, 2006

** = Significant at P < 0.01

*= Significant at P< 0.05

ns= Not significant

RESULTS AND DISCUSSION

Socio-economic characteristics of the respondents

In Table 1 the socio-economic characteristic of farmers were presented. The result showed that the vast majority of the respondents (54%) were between 20 and 39 years bracket and the mean age of respondents was 37 years. This implies that majority of the respondents were still in their prime or active age who are likely to participate more in NSPFS Programme. Majority (97%) of the respondents were male while 89% of them were married. As for mean household size, farm size and farming experience of the respondents were presented their as 13.3, 3.42 and 22.19 respectively. While 99% of them had either western or non western education which implies that their educational background was adequate to comprehend the different components of the Programme.

Respondents' level of participation in NSPFS recommended practices

Table 2 showed that majority (46%) of the respondents were having medium participation by participating in only 4-6 practices out of nine practices recommended by NSPFS Programme with a mean (average) practices per respondent of four practices. It could therefore be deduced from the study that there was a medium level of participation in the study area. It is only when farmers participate in more practices that will lead to a better standard of living.

Relationship between respondent's socio-economic variables and their participation in NSPFS Programme activities

Table 3 shows the results of logit regression analysis of socio-economic variables influencing the respondents' participation in the Programme. It revealed a good fit with -2log likelihood of -63.38362 and 100% of respondents' correctly classified after 6 iterations. It showed that three variables (age, farming experience and awareness level) were statistically significant (P<0.05 and P<0.01) in determining the respondents' participation in the Programme. It can be seen that age was significant (P<0.05) with negative coefficient of -17.11095. This means an inverse relationship between age of respondents and their participation. The inverse relationship could be attributed to the fact that older farmers often tend to be more conservative (traditional) and afraid of taking risk, which adoption of new practices or technologies entails. It was said that younger farmers are more

dynamic and more willing to take risk connected with the adoption of new agricultural practices (Hamidu *et. al.* 2006). Also farming experience has influence (P<0.01) over the respondents ability to participate in the Programme. This implies that, the more years of experience of the farmer, the more he/she tries to explore new practice. Also, Igben (1988) pointed out that, agricultural extension services are ineffective principally because the agents hardly transfer sizeable number of new technologies. This goes to show that a long farming experience is an advantage rather than a disadvantage for increased farm productivity. Similarly, awareness level was also significant (P<0.05) with a coefficient of 2.330976, meaning that respondents knowledge of the Programme (years of awareness) was statistically significant in determining participation in the Programme. The implication of this finding could be that awareness of the existence of a Programme does not necessarily lead to participation and hence increased capability; one should interpret this observation with care, even though it is only when an individual is aware about a Programme that he/she may decide to get involved in it. The finding of this study conforms to previous findings (Auta, et. al. 1992; Daneji, *et. al.* 2006) who reported significant relationship between age, farming experience and awareness level.

Table 4: Distribution of respondents according to constraints to their

active participation in NSPFS Programme

Constraints	Frequency*	Ranking
Local leadership problems	78 (78%)	1 st
Inadequate quantity and quality inputs	75 (75%)	2^{nd}
Diversion of inputs meant for the programme	72 (72%)	3^{rd}
Inadequate extension agents	70 (70%)	4 th
Delay encountered in obtaining inputs	42 (42%)	5 th
Delay involved in securing agricultural		
Loan from Banks	24 (24%)	6 th

Field survey, 2006

Note: Figures in parenthesis are percentages

Major constraints affecting respondents' active participation in NSPFS Programme

These served as bottleneck being encountered towards the active participation in NSPFS Programme in the study area. Table 4 revealed that the major constraints faced in the area were local leadership problem, inadequate quantity and quality inputs, diversion of inputs meant for the Programme, inadequacy of extension agents, delay encountered in obtaining inputs and securing agricultural loan from Banks accounting for 78%, 75%, 72%, 70%, 42% and 24% respectively. The implication of this findings is that, as farmers find it difficult to trust their local leaders due to their perception of them as been selfish, bias and involved in diverting inputs meant for the generality of the farmers, its may hinder their active participation and adoption rate, hence they ranked as first and third most important constraints.

Source:

CONCLUSION AND RECOMMENDATIONS

From the findings of this study one can conclude that even though the respondents are willing to participate actively in NSPFS Programme activities, the respondents' participation level was moderate which a reflection of their interest in the Programme is. It is therefore recommended that training and development of local leadership, provision of adequate quantity and quality inputs at the right time as well as deploying more extension agents to the Programme will go a long way in improving farmers' participation.

REFERENCES

Auta, S. J., Ariyo, Y. A. and Akpoko, J. E. (1992): Socio-Spatial Variation in Selected Villages in Futua and Jema'a Local Government Areas. *Nigerian Journal of Agricultural Extension*. 7 (2): 86 – 89.

Daneji, M. I. (2006): Multivariate Analysis of Women Participation in Agricultural Activities in Bauchi State. Unpublished Ph. D. Thesis, Abubakar Tafawa Balewa University Bauchi, Nigeria. 41 – 98pp.

^{*}Percentage not hundred because of multiple responses

Daneji, M. I., Tafida, I. and Ali, B. U. (2006): Socio-Economic Determinants of Technology Adoption by Farmers of Maigana Zone of the Kaduna state Agricultural Development Programme. In: I.R. Muhammad, B.F. Muhammad, F. Bibi-Farouk, Y. Shehu (eds)Application of Appropriate Technology in Overcoming Environmental Barriers in Animal Agriculture in Nigeria. Proceedings of the 31st Annual Conference of Nigerian Society for AnimalProduction Held at Bayero University Kano, Nigeria from 12th – 15th March, 2006. Pp 188 – 190.

Fakoya, E. O. (2004): Selection and Use of Statistical Tools in Agricultural and Extension Rural Sociology Research. Department of Agricultural Extension and Rural Development Lecture Series II, University of Agriculture Abeokuta, Nigeria. Pp 3 – 18.

FAO (1996): Rome Declaration on World Food Summit Held on 13th – 17th November, 1996, Rome Italy. Food and Agriculture Organization of the United Nations.2pp.

FAO (2006): Helping to Build a World Without Hunger. Food and Agriculture Organization of the United Nations, Technical Cooperation Department, Rome.1p

Hamidu, B. M., Murtala, N., Illiyasu, A. Y. and Adamu, I. P. (2006): Assessment of the Adoption of Afforestation Innovations in Dambatta Local Government Area of Kano state. *Nigerian Journal of Agricultural Extension* 9: 51 – 55.

Igben, M. S. (1988): The Nigerian Farmer and Agricultural Institutions: An Assessment of Nigerian Institute of Social and Economic Research (NISER) Ibadan, Nigeria. Pp 12-47

Rahman, . A. and Alamu, J. F. (2003): Estimating the level of Women Interest in Agriculture: An Application of Logit Regression Model. Department of Agricultural Economics and Rural Sociology, Ahmadu Bello University, Zaria. Pp 45-49.

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