Access To Extension And Poverty Alleviating Strategies of Farm Families In Adamawa State, Nigeria

Akinbile, L.A. and A.A.T. Ndaghu
Dept. of Agric. Extension & Rural Development,
University of Ibadan, Ibadan

ABSTRACT

The strategies employed by farm families in alleviating poverty in the face of their level of access to extension information are the focus of this study. Data were collected from 120 household heads of farm families from Adamawa state. Results showed that 60 percent of the household heads have low access to extension information, with the most common sources being the VEAs (73%) and informal organizations (66%). The deregulation of the economy has affected expenditure on extension and thus reduced the number of extension agents.

The results revealed that the poverty alleviating strategies employed by the respondents include cultivating several crops, trading, brewing of local drinks, leasing out of farmland and craft making. Results further showed no significant relationship between respondents' membership of informal organizations and the poverty alleviating strategies they employed while a significant relationship exist between respondents' access to extension and the poverty alleviating strategies they employed ($X^2 = 3.68$; $p = 0.04$). This indicated a linkage between respondents' access to extension and the poverty alleviating strategies they employed. There is therefore the need to improve the farm families' access to extension in effort at assisting them alleviate poverty.

1.0 INTRODUCTION

There is a global concern about poverty, which is not by accident as there is a general consensus that poverty has become a pervasive and massive global outrage. According to Okunmadewa (2002), almost a billion people in the world over live in absolute poverty and suffer from chronic hunger. Seventy percent of these individuals are farmers who make a living from small plots of poor soil, mainly in tropical environments that are increasingly prone to droughts, floods, bushfires and hurricanes (Persley and Doyle, 1999). They therefore need to involve themselves in other supplementary income generating activities. In the same vein, FOS (1999) reported that before the discovery of -oil, Nigeria's economy was primarily agricultural and, despite its decreased role as a component of the GDP, the sector continues to employ about 72 percent of the labour force. It is not surprising then that 68 percent of the extreme poor are dependent on agriculture for their livelihoods (FOS, 1999). Most of them are mainly self-employed or family workers and live within regions with poor infrastructure, poor access to services, unfavourable agro-climatic conditions, or all three.

The number of rural poor is roughly twice that of the urban poor. The depth of poverty (that is, the average shortfall from the poverty line) was more than double in rural areas. FOS (1999) reported that the average per capita expenditure of a poor rural household was one-fifth of that of the non-poor. Of the extreme poor, 85 percent live in rural areas and more than two-thirds lived on farms. In Nigeria, the northern states which are substantially rural and have had less exposure to education express more poverty than other parts of the country. Half of those in the lowest expenditure quintile live in the northeast and northwest. A third of Nigeria's poor are concentrated in three northern states – Sokoto, Kaduna and Kano, while Gongola (Adamawa), Cross Rivers and Sokoto showed no reduction in poverty between 1985 and 1992 (FOS, 1999). The same report concluded that poor rural households have an average of seven members with only two employed, while non-poor rural households have an average of four members.

Farmers' access to extension services has effect on their production and earnings from agriculture. The withdrawal of World Bank funding of Agricultural Development Programmes (ADPs) that are responsible for extension services, in the face of the deregulation of the economy has led to reduction in the funding of the ADPs. Most ADPs are now tending towards being profit oriented, or at least generating enough funds to keep them going. Farmers are thus expected to pay for extension services. The effect is that the access that

rural poor farmers have to extension services is seriously affected. This affects the level of involvement of the farmers in non-agricultural enterprises in efforts at alleviating poverty. Farm families thus spend all their time on the farm, working laboriously working year in year out, and engaging in several non-farm activities during the dry season. Yet, they are still marooned in the threshold of poverty. This is evidenced in their lack of good storage facilities, poor marketing and pricing policy for agricultural produce, highly unpredictive weather; high incidence of pests and diseases, non motorable roads, thereby leaving agricultural produce (though of high commercial value) trapped in the rural areas; non-access to credit facilities by farmers, as well as hijack of benefits meant for farmers by non-farming farmers who serve as middlemen. All these keep the farm families trapped in the vicious circle of poverty, which could have been alleviated if they have functional access to extension services. They therefore carry out several activities and employ several strategies to better their lot. It has often been emphasized that farm families (families that have agriculture as their major source of livelihood and her members are engaged in farming) engage in poverty alleviating activities like use of informal credit sources, as well as constituting themselves into labour groups to alleviate poverty. This is because poverty is an undesirable situation and it is only normal that efforts are made to overcome it (Aliyu, 1998).

It is therefore pertinent to assess the respondents' access to extension services and how this affects the poverty alleviating strategies employed by them in the face of the deregulation of the economy in Nigeria's democratic experience.

2.0 METHODOLOGY

Adamawa State has a total land area of 42,159 square kilometers. It lies between latitudes 7^0 28^1 and 10^0 55^1N and longitude 11.05 and 13.75^0 E. It has a population census figure of 2,124,049 (NPC, 1991). There are two notable vegetation zones within the state; the Sub-Sudan zone and the Northern Guinea Savannah zone. The state is essentially a picturesque mountaineous land transversed by River valleys of Benue, Gongola and Yedsarem.

Agriculture is the major source of livelihood for the teeming majority of the people in the state. The main crops grown include sorghum, maize, cowpea, groundnut, bambara nuts, rice, millet, beniseed and cassava. Most of these crops are intercropped in mixtures like cowpea/maize, rice/maize, sorghum/cowpea and groundnut/cowpea. Livestock rearing like cattle, goat, sheep, poultry and pigs are also important income generating activities of the people.

Data were gathered with the use of structured questionnaire. The concentration of the major ethnic groups in the state was the basis of sample selection. Three clusters were therefore identified, that is the Higgis, the Marghis and the Hausa/Fulanis. One local government area each in which the ethnic groups are concentrated was sampled, while one community each was sampled from the 3 local government areas, which were Garta, Watu and Michika communities, from where 40 respondents each were selected systematically by taking the household head in every 3^{rd} household from each of the communities. This gave a sample size of 120 respondents.

Variables for the study were measured thus:

Poverty alleviating strategy of farm families was measured on a 4-point scale of never involved (1), rarely involved (2), often involved (3) and always involved (4). The 11 poverty alleviating strategies considered are: cultivating several crops, animal husbandry, leasing out of farmland, remittance from relations, gifts of cash or food from better-off members of the community, trading, brewing of local drinks, selling of firewood, selling of farm wastes, leasing out of ox-drawn plough and artisans.

Factors influencing poverty were measured on a 3-point scale of not severe factor (1), severe factor (2) and most severe factor (3) for 10 identified factors.

Access to extension was measured on the basis of extension contact and usefulness of services rendered from extension. Extension contact was operationalised on the: daily, bi-weekly, weekly, bi-monthly, monthly, rarely and no-contact; while usefulness of services was operationalised on the basis of very useful (4), useful (3), not useful (2) and services not received (1) for 5 identified extension services (problem identification, on-farm trial, provision of information, teaching of technical skills and determination of solutions).

3.0 RESULTS AND DISCUSSION

Respondents Characteristics

Results of the study show that about 42 percent of the respondents have family size of 6 to 10, while only 23.3 percent have family size of 1 to 5. It further indicates that 26.7 percent have family size of 11 to 15, while about 8 percent have family size of 16 to 30. This corroborates the fact that majority of the farm families have large family sizes. This is a characteristic in farming communities, especially in a subsistence agriculture where the large family size is used as family labour on the farms (Akinbile, 2002).

More than 50 percent of the respondents had no formal education, while 36.7 percent had Koranic education. This has the tendency of affecting their level of adoption of improved farm practices as previous studies have shown a relationship between farmers' level of education and their level of adoption of agricultural innovations (Adekoya and Ajayi, 2000).

Respondents access to extension services

Results on Table 1 show that 72.5 percent of the respondents sourced their extension information from the village extension agents (VEAs), while 65.8 percent sourced their information from informal organizations such as cooperative societies. The extent to which people still rely on the VEAs for information on their farm practices is therefore still very high. The deregulation of the economy, coupled with the withdrawal of World Bank's funding of ADPs has however reduced the number of VEAs that state ADPs can employ, and thus the number of effective contacts each of the agents can make.

Table 1 further reveals that the respondents level of access to extension information was low as about 60 percent either rarely had contact with VEAs or had no contact. Only about 2 percent of the respondents had monthly access to extension information. This level of contact is low and has the tendency of affecting the farmers' level of productivity. This will in turn affect their income and thus the people's level of poverty. This will explain why the farmers will seek poverty alleviation strategies out of their major calling, which is farming.

The table further reveals that about 60 percent of the respondents did not receive extension information on on-farm trial. This will not afford them the opportunity of being able to perfect the application of the packages they adopt and thus reduces their level of productivity. Also, 50 percent of the respondents did not receive extension information on determination of solutions. There is therefore no opportunity of timely proffering of solutions to farmers problems on the part of extension agents. Majority of the respondents found the provision of information aspect of extension services as being most useful. The VEAs thus still carry out their major activities despite the seeming problems.

Table 1: Respondents access to extension services (N = 120)

a. Sources of information*		
Source	Frequency	Percentage
VEAs	87	72.5
Friends/Peers	26	21.7
Relatives	25	20.8
Informal organizations	79	65.8
*Multiple response		
b. Extension contact		
Rate of access	Frequency	Percentage
Daily	8	6.6
Bi-weekly	3	2.5
Weekly	16	13.3
Bi-monthly	20	16.7
Monthly	2	1.7
Rarely	45	37.5
No-contact	26	21.7

c. Usefulness of information						
Extension services	Useful		Received but not useful		Services not received	
	F	%	F	%	F	%
Problem identification	35	29.2	57	47.5	28	23.3
On-farm trial	13	10.8	36	30.0	71	59.2
Provision of information	76	63.3	6	5.0	38	31.7
Imparting of technical skills	22	18.3	60	50.0	38	31.7
Determination of solutions	55	45.8	5	4.2	60	50.0

Respondents household income sources

Table 2 shows that majority of the respondents earned their income from farm produce consumed of sold, as well as gifts. Income in kind from fetching of firewood, hunting etc. were also used by respondents. Only 49 percent of the respondents sourced direct income from non-agricultural sources. There is thus the need to make the respondents have better access to extension information as the bulk of their income is still from agricultural sources.

Table 2: Distribution of respondents according to their household income sources

Sources	Frequency	Percentage
Farm produce consumed at home	116	96.7
Farm produce sold	112	93.3
Income from non-agric sources	59	49.2
Cash gifts	69	57.5
Material gifts	86	71.7
Income in kind	103	85.8

Respondents poverty alleviating strategies

Results on Table 3 show that for each of the poverty alleviating strategies employed, the minimum score is 1, while the maximum score is 4. From the mean values, the strategies that are ed by the farm families can be determined on the basis of the average of the cut-off point of 2. Those strategies, with mean values less than or equal to 2, are rarely used by respondents, while those with mean values of 2 or more are employed by respondents. It can therefore be observed from the result on the table that poverty alleviating strategies employed by the respondents, and the order in which they are employed are: cultivating several crops, trading, working as artisans, brewing of local drinks, sourcing gifts from better-off members of the community and sale of farm waste. The respondents therefore need to be empowered in these income-generating activities, especially their cultivation of several crops, through strengthening their access to extension services. They can also be empowered in their trading, artisan and brewing activities. This will assist them effectively alleviate the poverty that is becoming their lot.

Table 3: respondents poverty alleviating strategies

Strategies	Never involved (1)	Rarely involved (2)	Often involved (3)	Always involved (4)	Mean
a. Cultivating several crops	2	6	14	128	3.8
b. Animal husbandry	12	24	35	79	1.5
c. Leasing out of farmland	77	30	31	12	1.5
d. Brewing of local drinks	64	32	33	21	2.1
e. Gift from better-off members of the society	59	33	39	19	2.1

f. Artisan	52	29	48	21	2.2
g. Trading	56	24	54	16	2.2
h. Sales of farm waste	67	24	33	26	2.1
i. Sale of firewood	79	33	29	8	1.5
j. Leasing out of ox-driven plough	76	39	19	16	1.5
k. Remittance from relations	115	21	5	8	1.2

Relationship between variables

A test of relationship between respondents' membership of informal organizations and the poverty alleviating strategies they employed revealed that no significant relationship exist (Table 4). However, there exist a significant relationship between respondents' access to extension and the poverty alleviating strategies they employed
(X^2 = 3.68; p = 0.04). The contingency coefficient of 0.6 indicates a strong relationship. This indicates a linkage between respondents' access to extension and the poverty alleviating strategies they employed, as the lesser the level of access respondents have to extension information, the more the number of poverty alleviating strategies they were involved in. This therefore suggests a link between respondents' level of access to extension and their poverty level. It may be due to the fact that those that have access to extension are less poor and they employ less poverty alleviating strategies because they can afford to pay for extension information even when those from the Government are not forthcoming. There is therefore the need to improve the level of access of the poor peasant farmers to extension information as they produce the bulk of the food in the nation (Aliyu, 1998, Okunmadewa, 2002)

Table 4: Relationship between selected variables and respondents poverty alleviating strategies

Variable	X^2 value	Contingency coefficient	df	p-value
Membership of informal organisation	2.07	0.01	2	0.35
Access to extension	3.68	0.60	4	0.04*
Family size	15.30	0.02	4	0.23

Conclusion

The study showed that the VEAs are the major source of information for the respondents in the study area, and they have low access to extension information. Their major source of income is proceeds from their farming activities, while their major poverty alleviating strategy is their cultivation of several crops, trading, brewing of local drinks, as well as relying on gifts from better-off members of their communities. The level of access respondents have to extension affects the number and type of poverty alleviating strategies they employ. Extension information should therefore be made to be at the reach of farmers, especially the poor peasant farmers in the face of the deregulation of the economy that has affected extension delivery in the nation.

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