

## CHANGES IN THE INCOME GENERATING ACTIVITIES OF CROP FARMERS IN ODO-OTIN LOCAL GOVERNMENT AREA, OSUN STATE: IMPLICATIONS FOR POVERTY ALLEVIATION PROGRAMMES

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### Abstract

*The study examined changes in the income generating activities as well as causes of the changes of farmers in Odo-Otin Local Government Area of Osun State. These were done with aim of identifying implications for poverty alleviation programmes in the Nigeria.*

*The study reveals pronounced changes in poultry raising (20%), trading (18.1%), cultivation of potato (8.1%), maize (5%) and cassava (2.5%); goat rearing (5.6%), food processing (3.1%), embroidery (4.4%), selling of vegetables (4.4%) and production of cocoa (-23.8%) and kola (-21.9%). The reasons adduced for the changes are inadequate credit facilities (96.3%), scarcity of labour (95.0%), market prices of agricultural commodities (93.8%), scarcity of agro-inputs (75.0%) and deforestation (85.6%); with adequacy of credit (Beta = 0.36) and deforestation (Beta = 0.28) making the greatest contributions to the changes.*

*Poverty alleviation programmes should therefore empower crop farmers in areas of positive changes while the problems of credit availability and deforestation be adequately addressed to help alleviate poverty that has become the burden of majority of the farmers.*

### 1.0 Introduction

Majority of the people involved in agricultural production in Nigeria are small-scale farmers who cultivate small plots spread over a vast area of land. They utilize various production inputs like land, capital, labour and also manage their farms to generate income. Income generating activities refer here to series of activities geared towards bringing in profit for farmers, which include production, processing and distribution of agricultural products, as well as involvement in non agricultural enterprises (other income generating activities).

Efforts at improving agricultural production in the country, as in other developing countries, to meet the demand of the ever increasing population has been through the use of intensive farming practices to meet the needs of the teeming population. This led to efforts at increasing food production per unit area of land with the use of intensive scientific knowledge, which has not been without its attendant negative influences on the soils and the entire environment (Eboh, 1995). The system is characterised by the use of agro-chemicals, coupled with increasing effort at urbanization, which clears the forests for several developmental purposes. All these had, however undermined the ecology of the tropical region, affecting the soil-climate-vegetation balance, which leads to problems like desert encroachment, erosion, deforestation and subsequently changes in farmers cropping patterns and systems. The long-term effect of all these is that farmers cannot produce to their optimum on their lands, thereby reducing their productivity (Botkin and Keller, 1995). The implication is that majority of the farmers that operate at the subsistence level move further down the poverty ladder as income from their farming activities could not meet their needs as much as it used to do.

Farmers, in efforts at circumventing the problems of environmental degradation on their farming activities adopt more or varying income generating activities (agricultural and non-agricultural) to help improve their income. Among the reasons that make farmers change their income generating activities, according to Whitmore and Sayer (1992) are: ecological or environmental (i.e. deforestation and climatic change), biological (effects of pests and diseases) or sociological (source/ownership of land). Others are economic (credit and effects of demand/supply on agricultural production), labour availability, scarcity of farm inputs, edaphic/soil factors, institutional/government policies, inadequate storage and processing facilities, as well as marketing facilities. All these, as well as the dearth of infrastructure, functional farmers' groups and improved locally sourced inputs further take farmers to lower abyss of poverty in the country (Akinbile, 1999).

The changes that have taken place in farmers income generating activities include shift from cash crop to food crop production, change in types of crops produced, reduction in farm size for the adoption of other non-agricultural income generating activities, reduction in time devoted to specific farming activities or reduction in time devoted to farming to accommodate non-farming activities (Adelowokan, 1998). These were done by farmers to boost their income and take them out of the poverty level. Farmers are, therefore, involved in poverty alleviation strategies through changes in their income generating activities. This can be a good focal point for the design and execution of poverty alleviation programmes in the country. The study therefore seeks to analyse the changes in the income generating activities of crop farmers in Odo-Otin Local Government Area of Osun State and draw implications for poverty alleviation programmes in the country.

## **2.0 Methodology**

Data for the study was gathered with the use of questionnaire administered on purposively sampled crop farmers that have farmed in the area for at least 10 years. This was to give enough room for the possible changes that must have taken place in the crop farmers' income generating activities over the years. The 19 towns and 31 villages in the local government area were grouped into 4, consisting of an average of 9 towns/villages. The 4 clusters include:

1. Ekosin, Inisha, Oyan, Igbaye, Ore, Agbaye, Okua, and Ekusa towns/villages.
2. Okuku, Faji, Iyeku, Opete, Imuleke, Opondan and Aganju towns/villages.
3. Ijabe, Elesinfunfun, Konta, Alapala, Igbotede, and Ayore towns/villages.
4. Gaa Sindiku, Ashi, Kabba, Reke and Ayo towns/villages.

One village each was sampled from 4 groups or clusters of villages, giving Ijaba, Okuku, Ashi and Ekosin. Snowball technique was used to sample 40 farmers from each of the villages. This gave a total of 160 crop farmers as respondents.

Crop farmers responded to 28 income generating activities indicators (such as farming, trading, artisan etc) on the basis of their involvement before (about 10 years ago) and now, on a three- point scale of never involved (1), occasionally involved (2) and always involved (3) in the activities. Those that were involved either occasionally or always are agreed to be involved. This was measured as follows:

Income generating activities	Involvement before		Involvement now	
	f	%	f	%
1. Cocal				
2. Rearing of goat				
3. Trading				
4. Artisan				
5. Trapping and collection of snails etc				

The difference in the two periods of involvement marked the changes in farmers income generating activities over the years. This is expected to be a pointer to farmers efforts at alleviating poverty in the area.

Adequacy of credit was measured with a 3-point scale of not adequate (1), adequate (2) and in abundance (3) to items on credit to purchase seeds, purchase agro-chemicals, employ labour and credit for farm expansion.

Labour availability was measured with a 3-point scale of labour not sufficient (1), undecided (2) and sufficient (3) to items on labour for: land clearing, planting, weeding, harvesting and processing.

Deforestation was measured with a 4-point scale of products obtained from forest as: obtain from forest (4), no longer obtain (3), buy them (2) and do without them (1) for fruits, vegetables, snails, game, firewood, stakes and building sticks.

Socio-economic status was measured by adapting the scale developed by Akinbile (1997) with items on possession of storey building, other houses, children in higher institution, children that are graduates, functioning vehicles, relatives living under respondents roof, farm size, chieftaincy title, leader of any society or organization, member of executive, possession of refrigerator, fan, cooking stove, pit latrine, toilet with water cistern, television, radio, number of wives and possession of well.

### 3.0 Results and Discussion

The results of the study show that majority of the respondents (68%) are in the age range of 50 to 69 years, with the majority (51%) having no formal education. Seventy nine percent of the respondents are male, corroborating the fact that majority of the female in the study area are not full time crop farmers, but are more involved in processing, or cultivating family farms and not their personal farms. Respondents' level of access to land was low (29%), usually through inheritance, while their access to labour was moderate (48%) through hired labour. Their socio-economic status was generally low (66%). Credit facilities were also low, as the major source of credit was through personal savings (92.5%). Changes in respondents income generation is as shown on Table 1:

**Table 1**  
**Changes In Respondents Income Generating Activities**

Income Activities	Generation	Involvement B e f o r e		Involvement Now		% Changes
		Frequency	Percentage	Frequency	Percentage	
Maize		149	93.1	157	98.1	5
Yam		141	88.1	141	88.1	0
Cassava		137	85.6	141	88.1	2.5
Potato		133	83.1	146	91.3	8.1
Kola		98	61.3	63	39.4	-21.9
Cocoa		90	56.3	52	32.5	-23.8
Food processing		101	63.1	106	66.3	3.1
Selling of vegetables		77	48.1	84	52.5	4.4
Food vendoring		14	8.8	9	5.6	-3.1
Hired labour		9	5.6	0	0	-5.6
Rearing of sheep		16	10	13	8.1	-1.9
Rearing of goats		75	46.9	84	52.5	5.6
Poultry raising		48	30	80	50	20
Rearing of pig		3	1.9	2	1.3	0.6
Rearing of rabbit		3	1.9	3	1.9	0
Trapping and collection of snails		58	36.3	28	17.5	-18.8
Fishing		9	5.6	5	3.1	-2.5
Hunting		50	31.3	25	15.6	-15.6
Gathering of fruits		94	58.8	100	62.5	3.8
Selling of firewood		75	46.9	28	17.5	-29.4
Trading		51	31.9	80	50	18.1
Craft and basket weaving		28	17.5	23	14.4	-3.1
Palmwine tapping		6	3.8	13	8.1	4.4
Hair plating		6	3.8	5	3.1	-0.6
Smithery		0	0	1	0.6	0.6
Embroidery		3	1.9	10	6.3	4.4
Lumbering		12	7.5	0	0	-7.5
Artisan		10	6.3	9	5.6	-0.6

Table 1 shows that the activities that the farmers have given higher levels of adoption as poverty alleviation strategies through changes in income generating activities (from percentage increases) include poultry raising, trading, increased cultivation of potato, maize and cassava, goat rearing, food processing, embroidery and selling of vegetables. The crop farmers have found these activities potent in helping to cope with their poverty levels caused by changes in their environments. Poverty alleviation programmes should therefore intensify efforts to empower crop farmers in those areas of income generating activities. Their involvement in those activities should be enhanced through intensive capacity building to help make crop farmers better off in their living conditions.

Income generating activities that the farmers now give less emphasis include: selling of firewood (-29.4%) cocoa plantation (-23.8%) and kola plantations (-21.9%), which may be due to availability of land and changes in the environment. Others include collection of snails, hunting and lumbering which resulted in loss of forests, occasioned by environmental degradation and land clearing for developmental purposes. Hired labour, fishing and craft also have their level of adoption reduced. This result shows that crop farmers' income generating activities have changed over the years and so poverty alleviation programmes can learn from the changes for effectiveness.

**Table 2**  
**Reasons For The Changes In Crop Farmers Income Generating Activities**

Reasons	Frequency*	Percentage
Scarcity of agro inputs	120	75.0
Soil degradation	39	24.4
Deforestation	137	85.6
Market price of agricultural commodities	150	93.8
Land tenure system	62	38.8
Inadequacy storage and processing facilities	26	16.3
Inadequacy of credit facilities	154	96.3
Scarcity of labour	152	95.0

\*Multiple response

Table 2 shows that the major reasons adduced by respondents for changes in their income generating activities are: inadequacy of credit facilities, scarcity of labour, market price of agricultural commodities, scarcity of agro-inputs and deforestation. The reasons, therefore, have to do with credit and the environment. This corroborates the findings of Ajibade (1994) that farmers change their income generating activities due to social and economic benefits. Poverty alleviation programmes should, therefore, seriously address the issue of lack of credit for crop farmers and the degradation taking place in the environment. These will help in bringing majority of the farmers out of the abyss of poverty. This confirms the position of Johnson (1990) that efforts to help the farmers alleviate poverty should involve them and focus directly on their needs.

**Table 3:**  
**Contributions Of Farmer Related Factors To Changes In Their Income**  
**Generating Activities.**

Farmer related factors	Beta values	S.E. Beta	T	Sig. T
Deforestation	-0.28	0.15	-3.39	0.01
SES	-0.09	0.33	-1.09	0.28
Age	0.04	0.72	0.48	0.63
No. of wives	-0.15	1.15	-8-1.84	0.07
Family size	0.09	0.21	1.09	0.28
Labour	0.23	1.26	2.75	0.01
Credit	-0.36	2.85	-4.27	0.00
Storage	0.04	0.79	0.42	0.67
Constant				

F = 4.35

Sig F = 0.0001

R<sup>2</sup> = 0.53

Multiple R = 0.84

Standard Error = 8.57

Table 3 indicates that the eight variables entered into the regression contributed significantly to the changes in crop farmer's income generating activities. All the factors are able to predict 53% of the variations in the changes in crop farmers income generating activities.

Adequacy of credit exercised the greatest influence (with a Beta value -0.36) in determining the changes in crop farmers' income generating activities. Others contributed in the following order: deforestation (Beta = -0.28), labour availability (Beta = 0.23), number of wives (Beta = -0.15), socio-economic status (Beta = -0.09) and family size (Beta = 0.09). Age (Beta = 0.04) and availability of storage facilities (Beta = 0.04) have the least influence. This corroborates the position of the farmers that credit availability is the greatest reason that influence changes in their income generating activities (Table 2). The importance of deforestation as a factor is also emphasized. Efforts at alleviating poverty of farmers should, therefore, focus basically on these two areas (i.e. credit supply and deforestation) to ensure true emancipation of farmers from poverty in the study area in particular and Nigeria in general.

#### 4.0 Conclusion and Recommendations

It can be concluded from the findings of this study that there have been changes in crop farmers' income generating activities over the years in the study area. The changes have been more pronounced in: poultry raising, trading, increased cultivation of potato, maize, and cassava, goat rearing, food processing, embroidery, selling of vegetables and decreased production of cocoa and kola. The reasons that have been adduced for the changes are inadequacy of credit facilities, scarcity of labour, market price of agricultural commodities, scarcity of agro-inputs and deforestation.



The major contributors to changes in the income generating activities are adequacy of credit and deforestation. It is, therefore, recommend that poverty alleviation programmes should focus on empowering crop farmers in the areas where there has been an enhanced or positive change in their income generating activities (i.e. poultry raising, trading, potato, maize and cassava production, goat rearing, food processing, embroidery and selling of vegetables).

Also, effective credit facilities should be made available to crop farmers. Marketing facilities like good roads, transportation, storage and efficient processing facilities should be provided as these will help the crop farmers market their agricultural commodities at better prices. The issue of scarcity of agro-inputs should be addressed through provision of improved locally sourced inputs for the farmers use. Agro-forestry as well as afforestation programmes should be organised to help solve the problem of deforestation.

Poverty alleviation programmes should, therefore, address the issues of credit and deforestation, in addition to empowering crop farmers in the required areas so that their prolonged stay in the poverty bracket can be a thing of the past.

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