

Extent of rural women's involvement in the Agro-processing enterprise of The National Special Programme for Food Security in Imo State, Nigeria

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Abstract: The study focused on the extent of rural women's involvement in the agro-processing enterprise of the National Special Programme for Food Security in Imo State, Nigeria. Data was collected with the aid of structured interview from 45 randomly selected women who were involved in agro-processing enterprise. Data analysis was by descriptive statistics and multiple regression. Findings revealed that respondents were fully involved in garri processing (mean score =1.12) and partially involved in palm oil processing (mean score = 0.67), cassava retting (mean score =0.18), tomatoes/fruit juice processing (mean score =0.13) and rice milling (mean score =0.65). Education and income significantly influenced rural women's involvement in agro processing enterprise of the National Special Programme for Food Security. Based on the findings of the study it was recommended that emphasis should be given to other enterprises especially processing of oil palm, since it is also a significant source of livelihood in the study area. Agricultural Extension should give adequate awareness to the agro-processing enterprise to ensure food security for sustainable rural development. In so doing the dynamics of social change can be worthwhile. [Report and Opinion 2010;2(7):69-73]. (ISSN: 1553-9873).

Key words: rural women, agro-processing enterprise, food security

1. Introduction

According to Pretty and Vodouhe (1997) extension has come to mean extending knowledge from a centre of learning to those presumed to be in need of that knowledge, but this method does not lead to enhanced capacity among extensionists and farmers. The participatory methods and approaches represent opportunity to build linkages between various actors and increase leaning from each other, this thus encourages better involvement of participating farmers and interaction between farmers and researchers through the extension staff. This is thus the plan of the organizers of NSPFS which was spurred by the 1996 World Food Summit. Nigeria identified as one of the 82 Low Income-Food Deficient Countries (LIFDC) requested for assistance under the FAO's Special Program for Food Security (SPFS). In March 1998 an advance allocation was made to support the pilot phase of the SPFS in Kano state. The NSPFS has five components which include Food Security Project, Agriculture and Inland Fisheries Project, Animal Disease and Trans-Boundary Pest Control, Marketing of Agricultural Commodities and Food Stock Management Project and Soil Fertilities Initiative. The NSPFS was directed at ensuring national food security, employment generation, and eradication of rural poverty, through the adoption of improved technology to boost production, strengthening of research and extension services, and effective utilization of land and development of

aquaculture, small ruminants and post harvest management. The program has been successfully implemented in 109 sites nation wide from 2003 to 2007 (Ado et al 2009).

In this programme, women participate in two ways through heterogeneous grouping of men and women of not more than 30 members and of homogenous grouping of women of between 10 to 30 members each. The role of women is assuming more and more responsibilities for what used to be male-dominated tasks which has evolved over time. Studies have show that rural women are usually disadvantaged in their access to all factors of agricultural production and processing. The relative status of men and women, the interaction between gender and race, class and ethnicity and questions of control, ownership, power and voice all have a critical impact on the success and sustainability of every development intervention (The Commonwealth, 2003; Egbugara, 1993). Women are almost entirely responsible for operations such as storage, handling, processing and marketing in rural economies. This is why their workload is enormous. According to Okoro and Amaechi (2008) the involvement of women in both productive and reproductive tasks mean that they invariably work longer hours per day than men do. Mbah (2008) supports this by restating the vital role of women in post-harvest activities which was confirmed by FAO (1990).

An important area of agriculture that needs to be immediately addressed is agro-processing, a key area in agricultural production that is often neglected. This is obviously the reason why Onucheyo (1998) reiterated the need for a strong farmer/agro-processor relationship to ensure the availability of adequate quantity and quality of raw materials at the required time and location. Obanu (1990) noted that if agricultural development projects are to contribute, as they should, to food security, they cannot just produce and be satisfied with mere production, they must be interested in their produce, what happens to it, its end and impact. This is where agro-processing comes in to stabilize the produce and facilitate its handling, availability and utility. Ofoh (2009) says that another important area that required urgent attention is the area of agro-processing, this is to reduce spoilage, waste and other losses in quantity and quality of farm produce between the time of harvesting and time of marketing/consumption. Most agricultural products are perishable in nature thus the need for processing, so as to increase its shelf life. Processing is highest in the on season especially when there is a glut in agricultural produce which leads to losses in production. According to Ofoh (2009) for crops that are seasonal there is always a temporary glut immediately after harvesting and farmers are forced to sell their produce at very low price. Ugboh and Adesope (2004) reported the need to emphasize proliferation of agro-industries that will create real interest and challenges to the people for proper community development.

Inability of a farmer to process and store his/her produce efficiently so that a good quantity produce can be sold at a good price when it is scarce (off season) is one of the major factors responsible for economic non viability of traditional farming. Agro-processing is good source of foreign exchange earning. Eric and Ikheloha (2007) opined that palm oil is a major product processed from oil palm in Nigeria. It is being converted to cooking oil, raw material for manufacturing industries for soap, creams, margarines, confectionaries. It can also be converted to petrol to drive automobile as is the case in Malaysia.

Many programmes in which women have been involved have come and gone such as Better Life Program (BLP) for rural women. Women in Agriculture (WIA), Family Economic Advancement Programme (FEAP), but most of them concentrated on women's involvement in crop production and animal production enterprises, home economics, etc., without really looking critically at women's involvement in agro processing and post harvest losses. Atala (1981) reported that the haphazard nature of the schemes in an attempt to score political point and their

inappropriateness for the Nigeria situation is part of the reason for some failed programs. The NSPFS is all encompassing because it involves women's activities in crop production, animal production and agro processing enterprises since most losses in agricultural production centers on post harvest activities mainly processing. It becomes germane to find out the level of involvement of these rural women in agro-processing enterprise under the National Special Programme for Food Security

2. Materials and Methods

This study on rural women's involvement in agro-processing enterprise in NSPFS was conducted in Imo State of Nigeria. Farming is the main occupation of the people. Administratively, Imo State is divided into three agricultural zones, namely Okigwe, Owerri and Orlu zones. Imo State has 27 local government areas (L.G.A), and is bounded in the East by Abia state, in the North by Anambra state, and South by Rivers state. On the West it is bounded by Delta state. Imo state lies within latitude 4°45' and 6°15' North and Longitude 6°30' and 8°09' east. Crop production is the major agricultural activity in the state and the major food and cash crops produced in the state are cassava, yam, cocoyam, palm produce, plantain e.t.c. These crops are grown both at subsistence and commercial level.

Three communities were randomly selected from each of the three sites where NSPFS programme is located. This gave a total of 9 communities. From the communities, a list of members in women associations was obtained from the various site managers. From each community 5 women were randomly selected to give a total of 45 women from all the sites. A structured questionnaire was used to collect data for the study and data analysis was by the use of frequency, percentages, arithmetic mean, and regression.

3. Results and Discussion

From the result of the research majority of the respondents were middle aged, with a mean age of 48 years. Also, 92.7 percent of the respondents were married. The average farming experience was 26years meaning that respondents had considerable years of farming experience. Coming to farm size, 66% had farm size of between 1.87 and 3.37hectares. The conclusion is that majority of the respondents had farm size of between 1.87 and 3.37 hectares with an average size of 2.2 hectares. Findings showed that majority of the farmers had household size of between 1 and 10, with an average size of 6persons.

Results showed that respondents were educated as most of them had formal education. It is clear that the more educated farmers would more likely accept the programme which is meant to impact on their lives positively. Uwaka et al (1980)

and Nweke (1981) viewed formal education in their earlier studies as a means of facilitating farmer's use of written information, and ways of increasing their knowledge and comprehension of new farm practices. Asiabaka, (2002) reported that the resultant effect of lack of formal and informal education is acute resistance to change especially in the spread of information which include participation in the innovative programmes that are meant to change the lives of farmers positively. It was found that 66% of the respondents earned monthly farm income of between ₦5000.00 and ₦10,000.00. Majority of respondents were low income earners since 66% of them earned income of between ₦5,000.00 and ₦10,000.00 with an average earning of ₦12,737.00.

The percentage of women involved in agro processing was 30.00 percent. Findings

showed that 99.3% of the respondents obtained capital from NSPFS loans, 19.3% obtained capital from their monthly income, 0.7% obtained loan from other organization, and 19.3% obtained loans from individuals. About 93% of the respondents belonged to social organizations while 7.30% of the respondents do not belong to any other social organization. Most of the respondents (94.00%) were only visited once in a week by extension agents, while 6.0% of the respondents were visited twice in a week showing that respondents were under visited. Hamidu, et al (2006) noted that extension visit serves as a vital tool in the ability of an Extension agent to perform his job effectively and for the farmers to adopt improved agricultural practices.

Table 1: Distribution of respondents by their level of involvement in agro processing enterprise

Agro Processing Enterprise (n = 45)			
1	Garri processing	1.12	Involved
2	Palm fruit processing	0.67	Partially involved
3	Cassava retting	0.18	Partially involved
4	Tomato processing/fruit juice processing	0.13	Partially involved
5	Rice milling	0.65	Partially involved

Source: Field Survey data, 2006.

NB: Midpoint = 1.00; any mean score less than or equal to 1.00 is partial involvement, while any mean score greater than 1.00 is full involvement.

Table 1 shows that respondents were only fully involved in garri processing (mean = 1.12). They however were partially involved in palm fruit processing (mean = 0.67), cassava retting (mean

0.18), tomato processing/fruit juice processing (mean = 0.13) and rice milling (mean 0.65). The grand mean of 0.55 confirms the partial level of involvement.

Table 2: Result of the relationship between respondents' involvement Agro processing Enterprise and Socio-economic Characteristics of respondents.

Variables	Linear	Exponential	Semi Log	Double Log
Constant	2.150 (0.695)	0.448 (1.640)	-11.107 (-0.840)	-0.676 (-0.593)
Age	1.55E-02 (0.239)	1.001E-03 (0.174)	1.727 (0.235)	0.130 (0.203)
Marital	0.578 (0.532)	5.364E-02 (0.559)	1.369 (0.391)	0.133 (0.436)
Farming Exp	1.547E-03 (0.039)	4.205E-04 (0.120)	0.589 (0.273)	5.955E-02 (0.317)
Farm size	3.524E-02 (0.139)	3.408E-03 (0.152)	0.752 (0.806)	6.40E-02 (0.789)
Household	8.391E-02 (1.107)	6.031E-03 (0.901)	0.240 (0.319)	1.376E-02 (0.210)
Education	-8.605E-02 (-1.811)***	-7.287E-03 (-1.7360)***	-0.600 (-1.394)	-5.719E-02 (-1.525)
Yrs in	-0.413 (-0.995)	-3.625E-02 (-0.990)	-2.337 (0.930)	-0.221 (-1.008)
Income	1.637E-04 (2.123)**	1.351E-05 (1.983)***	3.198 (2.040)*	0.278 (2.034)*
Membership	0.227 (0.535)	2.956E-02 (0.788)	0.883 (0.634)	0.109 (0.895)

R ²	0.250	0.232	0.251	0.252
F	1.296	1.177	1.300	1.313
N	45	45	45	45

* Significant at 5% level; ** Significant at 1% *** Significant at 10% level

Source: Field Survey data (2006)

Table 2 shows the regression estimate of involvement of NSPFS women in agro processing enterprises. The result shows that education was negatively and significantly related to involvement ($t = 1.811$) in agro processing enterprises at 10% significant level. This means that women with higher level of education were less involved in agro processing than women with lower level of education, this may be so because most of the more educated women who are farmers may also be working somewhere else and may not have time for full time agro processing, unlike the less educated women who may take garri processing as their main business and source of livelihood. Income was positively and significantly related to involvement ($t = 2.123$) in agro processing enterprise at 5% significant level. This finding suggests that women with higher income were more involved in agro processing than women with lower income. This is obvious since they can afford the processes involved.

However, age, marital status, farming experience, farm size, household size, years in NSPFS, and membership in other organizations were not significantly related to involvement in agro processing enterprise. This shows that these variables are of less relevance to involvement. The result showed that farmers' educational level and income significantly influenced their involvement in agro processing. Thus the hypothesis is hereby rejected since there was significant relationship between the farmers socio-economic characteristics and involvement in agro processing enterprise.

3. Conclusion and Recommendations

The study revealed that women were more involved in cassava processing than in other enterprises. Education and income significantly influenced rural women's involvement in Agro-processing enterprise of the National Special Programme for Food Security. Women with higher level of education were less involved in agro processing than women with lower level of education, women with higher income were more involved in agro processing than women with lower income. Based on the findings of the study it is recommended that more emphasis should be laid on processing of the agricultural produce especially oil palm since it is a source of income. Women with higher level of education should be encouraged to go into agro processing, if possible some incentives should be attached to agro processing to encourage more women with lower

income level. All these will ensure food security to combat the poverty bedeviling the rural populace.

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