INTRODUCTION

Rural development simply means the restructuring of the national economy to bring about improvement in the level of living of people in the rural area. It means collected incentives of the rural dwellers to participate in development process in their communities. According to Jibowo (2000), it involves the integration of the rural people, which constitutes the vast majority of the population of most developing countries into the national economy.

Women form the majority in the rural areas, and are involved at all stages of agricultural enterprises in Nigeria. Olawoye (1985), find that 50% of women in Oyo State were involved in planting, 97% in weeding, 85% in harvesting, 91% in transporting, 92% in processing, and 79% in marketing. Njar (1990), observed that Nigerian women are responsible for about 80% of all food items produced and sold in different parts of the country. Ritche (1977) in his work among African women on the involvement of women in the economic activity of Africa observed that African women are responsible for 70 percent of food production and 50 percent of the domestic food storage in the country.

The mass rural-urban migration in Nigeria whereby women, because of their family cares and domestic engagements, could not migrate to urban areas as men do, are left behind in rural areas to take care of farms and family members after the exit of their husbands and adult male children, enhances female-headed farms and households. In agreement with this, Egunjobi (1991) observed that the semi-permanent migration of men had in many cases promoted women to the headship of household in some of the rural areas. Hence, Nigerian women now have more inputs into decisions regarding their families, especially family farming enterprises (Patel and Anthonio, 1973).

Akande and Igben (1984) reported that access to credit is the ultimate of agricultural development. Membership of cooperative societies provides better and reliable access to credit facilities. People come together in cooperative societies to pool their resources together so as to meet individual needs that could not be resolved by individual limited financial capacity. Ijere (1992) affirmed that people cooperate because they cannot achieve their aims alone. Capital is a very important factor of production. Its availability could determine the extent of production capacity, thus, could influence the disposition of the farmers to new ideas or innovations (adoption behavior). A large-scale farmer would be expected to adopt better than the small scale's, not only because he possesses better or higher financial capacity but also because he would desire to keep his level of
production if not able to increase it. Availability of credit facilities is very crucial to adoption of improved and new ideas in agriculture.

This study seeks answer to the following questions:

What is the level of adoption of the improved cassava varieties among the women farmers?

What is the level of membership of cooperative societies among the women farmers?

What is the correlation between the demographic and socio-economic characteristics of women farmers, such as; number of children assisting in farm work, sources of credit, and membership of cooperative societies?

Is there relationship between membership of cooperative societies by women farmers and their adoption behavior?

METHODOLOGY

Three purposively selected Local Government Areas covered by the study are Iseyin, Itesiwa, and Kajola, in Oke-Ogun area of Oyo State. Nine, six, and three farming communities were proportionately selected respectively from the sampled Local Government Areas. Eighty, forty-five, and thirty respondents were eventually interviewed randomly from the chosen farming communities in each Local Government Area respectively through the use of structured interview schedule.

Adoption of improved cassava varieties was the dependent variable while membership of Cooperative societies was the independent variable.

Multiple regression analysis was employed to infer the relationship between the dependent and independent variables of the study, while correlation matrix was used to determine the direction of relationship among the selected demographic and socio economic characteristics of the respondents and membership of cooperative societies.

RESULTS AND DISCUSSION

Adoption and Membership of Cooperative Societies: It was found that one hundred and forty women farmers (90.3%) have adopted the improved cassava varieties. About 0.7% adopted in 1990, 5.7% in 1992, 13.6% in 1993, 27.1% in 1995, with the highest adoption rate recorded in 1996 (43.2%). It was also found that about 49% of the respondents were members of cooperative societies as at the time the study was conducted (Table 1).

<table>
<thead>
<tr>
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<th>Yes (%)</th>
<th>No (%)</th>
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<tbody>
<tr>
<td>Adoption</td>
<td>90.3</td>
<td>9.7</td>
</tr>
<tr>
<td>Membership of cooperative society</td>
<td>49.0</td>
<td>51.0</td>
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This result is a glaring evidence of the significant role played by women in agricultural productivity. It implies that women farmers are also committed to the goal of improving agricultural production through adoption of new and improved agricultural ideas and practices, which is germane to the achieve of food security and sustainable rural development.

Membership of Cooperative Societies, Demographic and Socio economic Characteristics and Adoption: The result reveals that there is significant relationship (b= 0.251) between membership of cooperative societies and adoption of improved cassava varieties by women farmers in the study area, at 0.05 level of significance and 153 degree of freedom. The result further indicates that number of children assisting in farm work (r = 0.373), sources of credit (r = 0.675) are positively related to membership of cooperative societies, through the use of inter-correlation analytical tool (Table 2).

Table 1: Distribution of respondents by adoption of improved cassava varieties and membership of cooperative societies

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Table 2: Result of regression and intercorrelation analysis between the variables

<table>
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<tr>
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<th>Regression coeff. (b)</th>
<th>Inter correlation coeff. (r)</th>
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<tbody>
<tr>
<td>Membership of cooperative societies</td>
<td>0.251*</td>
<td>-</td>
</tr>
<tr>
<td>Number of children assisting in farm work</td>
<td>-</td>
<td>0.373</td>
</tr>
<tr>
<td>Sources of credit</td>
<td>-</td>
<td>0.675</td>
</tr>
</tbody>
</table>

R² = 0.13
Critical value = 1.96
* Significant at 0.05 level of significance

The prevailing mass adoption of improved cassava varieties and average membership of cooperative societies among women farmers could have been the bases for the significant relationship existing between membership of cooperative societies and adoption behavior of the women farmers. It implies that membership of cooperative societies enhances the probability of adopting new agricultural ideas or innovations by the women farmers. The underpinning reason behind this will not be far from the fact that cooperative societies render financial assistance to its
members, which is germane to adoption of new ideas and agricultural practices by farmers.

The implications of the positive relationship between number of children assisting in farm works, sources of credit available to women farmers; and their membership of cooperative societies are:

The higher the number of children assisting a woman farmers on the farm, the larger the farm size, and then the higher the probability of joining cooperative societies for financial assistance. Children are cheap sources of labor in farm work. Hence, the number of children assisting in farm work could determine the farm size, which could directly influence the decision to join the cooperative societies.

The more available the sources of credit to a woman farmer the higher the probability of joining the cooperative societies, since the higher will be the probability of possessing larger farmland. Sources of credit are very significant to the success of farming enterprises. Since cooperative societies grant reliable sources of credit to their members alone, this may compel women farmers to join the societies. Contrariwise, Ojolo (1995) found that number of children \( r = 0.110 \) is not significant to level of organizational participation. In the same study, she supported that income (which connotes sources of credit in this study) was significant \( r = 0.264 \) to level of organization participation that is in agreement with the findings of this study. Also, in line with the findings of this study, Alao (1971) also found level of social participation as a predictive factor of adoption behaviour of Nigerian Farmers while Ayo-Bello (1988) found that women formed about 49% of the membership of credit and thrift societies.

**IMPLICATION OF THE RESULTS FOR RURAL DEVELOPMENT**

Adoption of agricultural innovation and improved varieties is crucial to development of agriculture, which is a vital sector in the rural economy. Since women farmers form the majority of the rural dwellers and participate actively in agricultural entrepreneur in Nigeria, it therefore implies that their adoption behavior should be given thorough investigation in order to enhance their agricultural productivity and livelihoods. Based on the major findings of this study, it is glaring that membership of cooperative societies could be one of the strategies to improve their adoption of agricultural innovations. On this premise, the paper submits that regular enlightenment campaign and education should be organized for women farmers, on the advantages of joining cooperative societies.

**ACKNOWLEDGEMENT**

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**REFERENCES**


