Assessment of Women’s Participation in Fadama II Project in Michika Local Government of Adamawa State, Nigeria

Mustapha SB, Bzugu PM, Jare N

The study assessed participation of women in Fadama II Project in Michika Local Government area of Adamawa State, Nigeria. Simple random sampling technique was used to select 116 respondents who were administered interview schedules. Descriptive statistics (frequency distribution and percentages) and inferential statistics (multiple regression analysis) were used to analyse the data. The findings indicated that some (40.52%) of the respondents have their ages between 41-50, and that majority (60.07%) were widowed. The regression analysis revealed that educational level and access to credit were significant and positive at 1% and 5% levels respectively. The major problem, the study identified to affect the women participants in the project was delay in the supply of farm input materials, representing 71.55% of the respondents in the study area. The study recommended that women should be encouraged to be enrolled in adult education classes to enable improve participating in Fadama activities. The study also recommended the need for enlightenment of participants on the availability and sources of credit facilities to respondents in the study area.

Keywords: Women, Participation, Fadaama II Project, Michika, Nigeria.

INTRODUCTION

Fadama is defined as flood plains or swamps, which are those areas, elevated above the level of the Main River, or ocean channels (Adebayo, 2005). Fadama I focused mainly on production but largely neglected downstream activities such as processing, preservation and rural infrastructure. It did not take into consideration livestock and fisheries production (PIM, 2003). In order to fill this gap in the downstream sector could be the reason why Fadama II was established. The project assisted developing countries like Nigeria where greater proportion of the population live in rural areas as agricultural technology could provide a potential means of increasing production and subsequently raising income of farmers as well as their standards of living (Ani, 2002). Given recognition to the role women play in agricultural and rural development as fundamental to national development, it is generally acknowledged that women make major contributions to farming activities (Ani, 2002). It has been established that the involvement of rural women in agricultural production has been of significance to the country’s economic development (Bzugu and Kwaghe, 1997).

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Empirical evidence has revealed that women perform such works as hoeing, sowing, weeding, harvesting and other activities related to agricultural production. Despite the contributions by women in agricultural production and processing, women were not recognized to be important in agricultural sector; this might be due to some socio-economic and institutional factors. Therefore, there is need to investigate the extent of women’s participation in Fadama activities. The main objective of the study was to assess the participation of women in Fadama II project in Michika Local Government Area of Adamawa State, Nigeria. The specific objectives were to:

i. identify the socio-economic characteristics of women participants in Fadama II project,
ii. examine the relationship between socio-economic characteristics and the participation of women in Fadama II project, and
iii. Identify the problems associated with women participation in Fadama II project in the study area.

METHODOLOGY

The study was conducted among women participants of Fadama II project in Michika Local Government Area of Adamawa State. There were 22 registered women associations and 520 registered members. A simple random sampling technique was used to select 116 women out of the list of 520 women. OF the 22 registered women associations from the four (4) Fadama district namely Michika, Garta, Madzi and Bazaa. Interview schedules were administered to respondents during collection of the data. The study was conducted in 2013.

The analytical techniques that were used to analyze the data include both the descriptive statistics such as frequency distribution and percentages were used to organize and summarize the data collected. The inferential statistics (Multiple regression analysis) was used to test the relationship between the socio-economic characteristics and the participation of women in Fadama II project. The regression model used was explicitly expressed as:

\[ Y = F(X_1, X_2, X_3 + X_4 + X_5 + X_6 + U) \]

\[ \text{Where; } 
\begin{align*}
Y & = \text{women participation in Fadama II project} \\
X_1 & = \text{years of experience in activities of associations (years)} \\
X_2 & = \text{age of individual associations member (years)} \\
X_3 & = \text{number of contacts with facilitators (per month)} \\
X_4 & = \text{number of contacts with extension agents (per month)} \\
X_5 & = \text{access to credit; Dummy 1 if yes, 0 if otherwise.} \\
X_6 & = \text{educational level of women (proxy by number of years spent in school).} \\
U & = \text{error term.} 
\end{align*} \]

To determine the factors which affect women participation, the dependent variable was regressed against the selected independent variables. The linear, semi-log, double log and exponential forms were tried. The linear model was chosen considering the R², least standard error and significance of the variables.

RESULTS AND DISCUSSION

Socio-economic characteristics of the respondents

Table 1 showed that most (40.52%) of the respondents were between the ages 31-40, 9.48% were between the ages of 21-30, 20% had over 50 years of age. This implied that most of the women that participated in the project were in their youthful ages. This result was in line with the findings that most of the respondents who were active in Fadama farming were in their youthful age (Bzugu and Kwahe, 1997). This also agrees with the report that young farmers have higher aspiration to accept new technologies compared to older farmers who seem to be satisfied with their traditional method (Abdullahi et al., 2007).

Table 1 further revealed that majority (62.07%) of the respondents was widowed, 37.07% were married and 0.86 of the respondents were divorced. The higher percentage of widowed respondents might be due to the fact that the aim of Fadama II Project is poverty reduction in the rural areas and widowed women were found to belong to this category of participants. The farmers further indicated that respondents with family size between11-15 constituted 31, 90%, those with 6-10 were 25%, 1-5 were 18.10% and families with more than 20 household sizes were 6.03%. The findings showed that most of the respondents who participated in the programme had large families.

Educational attainment as a socio-economic variable has a great influence on women participation in the programme. The study revealed that about 33.62% of the respondents had secondary education, 19.83% did not have any formal education, 32.76% had primary education and 13.79% had completed tertiary education. This means that majority of the respondents in the study area were literate who completed at least primary education and about 0.86 of the respondents were divorced.
education. The exposure rate of approximately 80% of the respondents to education may indicate the potential awareness of the programme to them. This also agrees with the assertion that highly educated farmers can get information from a wide range of sources such as electronics, print media and the internet because they can easily comprehend instructions (Iheanacho, 2000). The finding also supports the assertion that educational level is an important factor for participants to comprehend the different components of a farming experience (Abdullahi et al., 2007).

The result revealed that most (30.17%) of the respondents had more than 20 years of farming experience, 22.41% had 11-15 years, 21.55% had 6-10 years, 17.24% had less than 5 years and 8.62% had 16.20 years. This implies that majority of the respondents had reasonable years of farming experience. It could be deduced that they would be familiar with farming activities, which is expected to have a positive impact on the level of their agricultural production. This was in line with the findings that farming experience influences farmers understanding of climatic and weather conditions and at the same time socio-economic policies and factors affecting farming (Iheanacho, 2000).

On the occupation of the respondents, it is revealed that majority of the respondents (61.21%) were farmers, 30.17% were civil servants, 6.03% were traders and 2.59% were housewives. This signifies that the target groups of the programme are the small scale farmers with poor productive resources. As such it could be seen that the majority of the respondents were farmers who were ready to improve their standard of

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**Table 1. Distribution of respondents by socio-economic characteristics (n=116)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency (No.)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age of farmers (years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-30</td>
<td>11</td>
<td>9.48</td>
</tr>
<tr>
<td>31-40</td>
<td>47</td>
<td>50.52</td>
</tr>
<tr>
<td>41-50</td>
<td>35</td>
<td>30.00</td>
</tr>
<tr>
<td>More than 50</td>
<td>23</td>
<td>20.00</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>43</td>
<td>37.07</td>
</tr>
<tr>
<td>Widowed</td>
<td>72</td>
<td>62.07</td>
</tr>
<tr>
<td>Divorced</td>
<td>1</td>
<td>0.86</td>
</tr>
<tr>
<td><strong>Household size (No)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10</td>
<td>29</td>
<td>25.00</td>
</tr>
<tr>
<td>11-15</td>
<td>37</td>
<td>31.90</td>
</tr>
<tr>
<td>16-20</td>
<td>22</td>
<td>18.97</td>
</tr>
<tr>
<td>More than 20</td>
<td>7</td>
<td>6.03</td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attending no school</td>
<td>23</td>
<td>19.83</td>
</tr>
<tr>
<td>Primary school</td>
<td>38</td>
<td>32.76</td>
</tr>
<tr>
<td>Secondary school</td>
<td>39</td>
<td>33.62</td>
</tr>
<tr>
<td>Tertiary institution</td>
<td>16</td>
<td>13.79</td>
</tr>
<tr>
<td><strong>Farming experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5</td>
<td>20</td>
<td>17.24</td>
</tr>
<tr>
<td>6-10</td>
<td>25</td>
<td>21.55</td>
</tr>
<tr>
<td>11-15</td>
<td>26</td>
<td>22.41</td>
</tr>
<tr>
<td>16-20</td>
<td>10</td>
<td>8.62</td>
</tr>
<tr>
<td>More than 20</td>
<td>35</td>
<td>30.17</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil servant</td>
<td>35</td>
<td>30.17</td>
</tr>
<tr>
<td>Farming</td>
<td>71</td>
<td>61.21</td>
</tr>
<tr>
<td>Housewife</td>
<td>3</td>
<td>2.59</td>
</tr>
<tr>
<td>Trading</td>
<td>7</td>
<td>6.03</td>
</tr>
</tbody>
</table>

Source: field survey, 2011
Table 2. Regression results on relationship between socio-economic characteristics of respondents and their participation in Fadama II Project

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Standard error</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.5425</td>
<td>0.8420</td>
<td>0.520</td>
</tr>
<tr>
<td>Age (X1)</td>
<td>0.3084</td>
<td>0.0129</td>
<td>0.0249**</td>
</tr>
<tr>
<td>Level of educate (X2)</td>
<td>0.2522</td>
<td>0.0177</td>
<td>0.0001**</td>
</tr>
<tr>
<td>Contact with facilitators (X3)</td>
<td>0.1473</td>
<td>0.01877</td>
<td>0.4343</td>
</tr>
<tr>
<td>Extension contact (X4)</td>
<td>0.3633</td>
<td>0.3633</td>
<td>0.0505</td>
</tr>
<tr>
<td>Years of involvement in association activities (X5)</td>
<td>0.119</td>
<td>0.1079</td>
<td>0.269</td>
</tr>
<tr>
<td>Access to credit (X6)</td>
<td>0.4050</td>
<td>0.1959</td>
<td>0.0407**</td>
</tr>
</tbody>
</table>

R² = 0.6871
Adjusted R² = 0.8289
F = 39.8912

Source: Field survey, 2011.

*** = Significant at 1% level of women participation in Fadama II project

** = Significant at 5% level of women participation in Fadama II project

Table 3. Distribution of respondents by problems associated with participation in Fadama II Project (n=116)

<table>
<thead>
<tr>
<th>Problems</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay in supply of materials</td>
<td>83</td>
<td>71.55</td>
</tr>
<tr>
<td>Poor commitment of facilitators</td>
<td>73</td>
<td>62.93</td>
</tr>
<tr>
<td>Number of items requested</td>
<td>31</td>
<td>16.74</td>
</tr>
<tr>
<td>Poor publicity</td>
<td>34</td>
<td>29.31</td>
</tr>
</tbody>
</table>

Source: Field survey, 2011

living through participation in the programme that would raise their income.

Socio-Economic Factors Affecting Women’s Participation in Fadama II Project

Four functional forms of the regression analysis were tried (linear, semi-log, double log and exponential forms) that examined the factors influencing respondent’s participation in Fadama II project. Out of which the best model (linear model) was selected as the lead equation with R² = 0.69 which means that 69% variations in participation by women farmers in Fadama II Project in the study area was accounted for by X1 (age of the respondents), X2 (level of education), X3 (number of contact with facilitators), X4 (number of contact with extension agents), X5 (years of involvement in association) and X6 (Access to credit) as variables considered in the model.

The age of the respondents had a positive coefficient and significant at 5% level of significance (Table 2). This signifies that the more the age of the respondents the more the participation in Fadama II project activities. This may be due to the fact that as the farmer’s age increases the more is the sense of reasoning. Table 2 indicated that the coefficient of educational level was positive and significant at 1% level of significance. This signifies that the more educated the respondents were, the more they participate in activities of Fadama II project. The study supports the findings that high rates of literacy means greater capacity to uptake information and participate in development activities (PIM, 2003; Abdullahi et al., 2007).

Access to credit also has a positive coefficient and significance at 5% level of significance. The positive coefficient suggests that participation in the programme increases as the women participants have access credit facilities. Credit improves their financial capacity which could enable them deposit the 30% of the total cost of the programme they want to undertake and also trigger them to participate more and so as to refund credits. The study revealed that only 27.59% of the respondents had access credit, this indicates that the women participations in the study area had limited access to credit facilities which could affect theft level of participation in the programme.

Problems Associated With Women Participation in Fadama II Project

Table 3 showed the problems associated in the participation of women in Fadama II project in the study area. The problems mostly cited by the respondents were
delay in the supply of materials (71.55%). This could be
due to bureaucracy in the procurement of materials from
the head office of National Fadama Project. Some 62
.93% of the respondents complained about the
commitment of the facilitators. This might be due to the
inadequate number of facilitators in the study area,
because there were only four facilitators in the study
area. The number is not enough to cover the study area
on time. Some of the needs of the respondents were time
bound especially those related to raising animals. If such
visits were not made in time, it may result in poor
productivity.

Furthermore, 26.74% of the respondents
complained that the number of items requested was not
adequately supplied. This might be because the numbers
of participants that were requesting such material were
many, so such materials could be shared to respondents.
The least problem cited by the respondents were poor
publicity (20.31%). The respondents indicated that most
of the women in the study area heard about the
programme from their neighbors. The role of women in
agricultural production cannot be over emphasized and if
properly recognized, will go a long way in empowering
rural women. The result of this study indicated that
literate women participate most in the programme.

CONCLUSION

The study revealed that women have participated actively
in Fadama II project in the study area despite the
problems faced by respondents such as delay of supply
of inputs supply and poor commitment of facilitators in
project implementation. The study also indicated that
some socio-economic variables: age of women
participants, level of education, and access to credit had
significant influence on women participation in Fadama II
Project in the study area.

RECOMMENDATIONS

Based on the findings of the study, the following
recommendations were made:

1. Fadama II project should articulate a strategy that
could lead to and ensure adequate farm input supply to
participants in good time as much as possible.
2. Commitment of facilitators to service, through
staff motivation should be improved for the successful
implementation of project II for improvement of
livelihoods of people in the study area.
3. Enlightenment campaign should be vigorously
pursued through agricultural extension services on
Fadama II project among women in the study area. This
could increase their level of participation in the project.

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