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SOCIO-ECONOMIC DETERMINANTS OF YOUTH EMPOWERMENT BY FADAMA III PROJECT IN DELTA STATE, NIGERIA: IMPLICATIONS FOR AGRICULTURAL TRANSFORMATION

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ABSTRACT: *This study was conducted in Delta State. It assessed the contributions of Fadama III empowerment activities toward youth development. The specific objectives were to: describe the socio-economic characteristics of the participants, ascertain the participation level of youths in the project, examine the determinants of youth empowerment by Fadama III, and identify the issues militating against youth empowerment in Fadama III. The multistage sampling procedure was used to gather data from 105 youths. Descriptive statistics and multiple regression were used to analyze collected data. The socio-economic characteristics result showed that youths from 28 – 32 years were highest (41.9%) in the project. Most of the youths (78.1%) involved in Fadama III were males, high proportion (55.2%) of the youths were married, 61.9% possessed secondary education and 88.6% cultivated less than an hectare. The level of youths participation was moderate ($\bar{x}$ = 2.53). The major constraints militating against the youth participation in Fadama III were poor capital base ($\bar{x}$ = 3.34), inefficient training session ($\bar{x}$ = 3.30), poor project finance ($\bar{x}$ = 3.29) and poor communication ideas in farming technology ($\bar{x}$ = 3.26). The regression result (R^2 = 0.840) showed that the determinants of youth empowerment by Fadama III were sex which was significant at 1% level while marital status and educational level were inversely proportional to youth empowerment at 1% and 5% level of probability respectively. The study concluded that marriage and high educational status reduce the tendency of active involvement in Fadama III agricultural activities. It was recommended that training should be given to the married and educated youths.*

KEYWORDS: Fadama III, Socio-Economic, Determinants, Youth Empowerment,

INTRODUCTION

Nigeria is a country having good climatic conditions that support agricultural production. Agriculture is a vital segment in the economic improvement and poverty alleviation drive of several countries(Adebayo and Okuneye, 2005). The unique role played by agriculture in industrial growth and development in the world cannot be over emphasized (Adeyemi and Adekunmi, 2005). The Fadama programme was initiated in Nigeria as an agricultural policy designed to boost food production for her increasing population. Fadama is derived from Hausa name for irrigable land. Such lands are principally suitable for irrigation farming and fishing, and conventionally supply feed and water for farm animals. The primary focus of Fadama III project is to boost the incomes of users and reduce poverty. The project is a Community Development Driven approach, and focuses on investments and empowerment of various groups and associations in other to enhanced agricultural efficiency and land use management. The Delta State Fadama III covered a period of 2008 – 2014.

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According Muhammad-Lawal, Omotesho, and Falola (2009), Youth in agriculture programme has been portrayed as a highly essential structure of land and agricultural transformation assisting to promote the interest of youth development in the economy. They further saw the need for holistic actions on the task youths can participate in agriculture since agricultural development is the basic tool for economic development. Despite the importance agriculture plays in farming activities, physical strength, which decline with age needs a back up by youth engagement for sustainable agriculture. Insufficient youth participation has been identified as one of the major constraints to agricultural production in Nigeria. Though youths have desirable qualities that can promote agriculture, most of them have strong apathy towards it (Adedoyin, 2005). With fewer youths in agriculture at the long run, the agrarian sector will suffer a setback as a result of the youths looking for white collar jobs to the neglect of farming. (Okeowo, Agunbiacle and Odeyemi, 1999).

According to United Nations definition youths are people aged between 15 and 24 years and young people aged 10-19 years. The African definition of youth is based on economic independence and mental status. In many parts of Africa and some developing countries, the youths are described as people who are not yet married. In line with the conditions and realities on ground especially historical and contemporary socio-economic and political conditions, and for the purpose of execution of the current National Youth Policy, the youth shall comprise of all young males and females aged 18 – 35 years, who are citizens of the Federal Republic of Nigeria. (FRN, 2009) Most religious organisations classify youths as people between the age range of 15 – 40 years irrespective of marital status and means of livelihood. To them, youth is in the mind. Sometimes, we find persons above forty (40) years who join youth organisations in churches and mosques. This definition is based on the belief by most Africans that 'adult life begins at forty (40)'. 'A fool at forty is a fool forever'. A person who is forty (40) years old is expected to have started charting a course of perpetuating himself and contributing to the advancement of the society (Ovwigho and Ifie, 2009). Thus in this study, youth age brackket will be considered between 18 and 40 years.

The youth's agony is visible in frustrations arising from avoidable diseases and deaths, lack of access to portable water and engagement in subsistence economic activities (Nwokocha, 2007). Youths, based on their strength, can be effective in farming activities. Okeowo *et al* (1999) confirmed this by stating that youths are major clientele group needed for agricultural transformation in Nigeria.

Empowerment is a social accomplishment involving processes that supports practical contribution of people, organizations and communities in uplifting standard of living (Mensah and Yankson, 2013). Youth programmes are ostensibly designed to tackle the perennial youth restiveness, idleness and deviant behaviours that come to characterize youth activities in some countries. Again, experiences over the past few decades suggest a shortcoming of top-down approaches to development. Since the 1980s, the new watchwords have been "participatory" or "community-led" development (Mansuri and Rao, 2004; Uphoff 1996) and, more recently, "empowerment." The World Bank's Empowerment and Poverty Reduction: A Sourcebook defines empowerment as "the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives" (Narayan, 2002).

Programmes must be developed to manage the potential energy of youths. Youth energies could be a source of pride and wealth to any nation if properly managed and channeled into worthwhile ventures. Empowerment programmes for youths should involve project

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development which creates opportunities for income generation and social stability. Another possible and vibrant opportunity to bring agricultural transformation by youths is entrepreneurship development.

In ameliorating the problems of youths engagement in agriculture, successive government have introduced various agricultural development programmess with the aim of increasing food output and farmers profits through provision of agricultural amenities and efficient extension activity (Jibowo, 2005).The programmes were designed to create rapid employment for the youths through active participation in modern agricultural practices by raising the production efficiency of the youths.

The specific objectives of this study were to: describe the socio-economic characteristics of the youth participants in Fadama III in the study area, ascertain the level of youths participation in Fadama III project, examine the determinants of youth empowerment by Fadama III, and identify the problems militating against youth empowerment in Fadama III.

METHODOLOGY

Area of Study

This study was carried out in Delta State which is one of the participating States in Fadama III projects in Nigeria. The total land area of Delta State is about 17,011 square kilometers with a population of 4,098.391 (Federal Republic of Nigeria Official Gazette, 2007). It is located on latitudes 4^0N and 6^0N and longitudes 5^0E and 7^0E.

Sampling Techniques

The multistage sampling procedure was used to ensure a good spread of respondents for the study. In stage one, Three Local Government Areas (LGAs) were purposively selected for the study because youths in those areas benefitted mostly from Fadama III project. The LGAs were Warri South, Ughelli North and Ughelli South were. In the second stage, eight Fadama Users'Groups (FUGs) were randomly selected from fifteen FUGs that were active in Fadama III. Each FUG has an average of twenty members. Thus, a minimum of one hundred and sixty members made up the eight FUGs. Lastly, seven youth participants were randomly drawn from each sampled FUG giving a total of one hundred and five youths (65.6%) drawn from the population for the study.

Analytical Techniques

Simple descriptive statistics involving frequency counts, percentage and ranking order scores were used to satisfy objectives one. Objective two was achieved using participation Index. The participation Index was constructed using a 4-point likert scale. The respondents were asked to indicate their level of participation (very high, high, very low and low) in Fadama activities. The 4- point scale was weighed in order of importance from, very high = 4, high = 3, very low = 2 and low = 1. The mean score for participation was calculated by adding the four responses to obtain 10, which was further divided by 4 to obtain 2.5. The 2.5 was regarded as the mean to determine the level of participation of youths in FADAMA activities in the study area. The scale below was used to determine the level of participation.

Level of Participation: Participation Index Score

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Low participation by youth = less than 2.50

High Participation by youth = equal or above 2.50

In the same vein, a 4-point likert scale of very serious, serious, fairly serious and not serious was used to measure the constraints. A mean cut off point of 2.50 was also used to determine the seriousness of the factors militating against youth empowerment scheme under Fadama III in Delta State. Low constraints have a score of ≤ 2.50, while serious high constraints have a mean score of ≥ 2.50.

The objective three was analyzed by Multiple Regression. The model is specified as:

$$Y= a + b1x1 + b2x2 + b3x3 + b4x4 + b5x5 + u$$

Y = Youth Empowerment (*using participation as measurement by proxy*, Narayan, 2002)

a = Constant

X_1 = Age (years)

X_2 = Gender (dummy: male = 0; female = 1)

X_3 = Marital status (dummy: single = 0; married = 1)

X_4 = Farm size (Ha)

X_5 = FUG Activities

b_1-b_5 = Regression Coefficients

U = Error Term

RESULTS AND DISCUSSION

Socio-Economic Characteristics of Participants

The result in Table 1 shows that (41.9.%) proportion of the sampled youths between 28 – 32 years were highest in participation. The lowest youth participants (2.9%) were between the age brackets of 38 – 42 years. Respondents were male (78.1%) and female (21.9%) respectively. The sex of an individual can influence the type and quality of work carried out by the individual. The results obtained showed that there are more males involved in the Fadama III activities than females. Male youths domination in Fadama III farming is in line with findings from earlier studies Afolabi, (2010) which was attributed to the fact that female youths cannot cope with the tedious activities of Fadama III. The result showed that most of the participants (55.2%) in Fadama were married which support the result of Muhammad-Lawal, Omotesho, and Falola (2009) that most of the participants in the Youth – in – Agriculture programme in Ondo State are married.

The results of the study also showed that 61.9%, 23.8%, 7.6% and 6.7% of the youths involved in Fadama III had secondary, primary, tertiary education while only 6.7% had no education. This implies that majority of the youths are educated. This is in consonance with the findings

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of Balogun, Adeoye, Yusuf, Akinlade and Carim-Sanni (2012) that majority of the Fadama participants were educated. This is a added advantage for the youths to be able to make use of innovations in Fadama III project activities. This entails that the participants are not likely to have much difficulty in understanding and adopting modern agricultural technologies. The result showed that 88.6% of the participants in the study area cultivated less than 1 hectare of land with an average farm size of 0.6Ha, while only 11.4% of them cultivated farm size of 1-3 hectare.

Table 1: Socio-Economic Characteristics of Respondents

Characteristics	Frequency	Percentage
Age		
18-22	12	11.4
23-27	25	23.8
28-32	44	41.9
33-37	21	20.0
38-42	3	2.9
Total	105	100.0
Sex		
Male	82	78.1
Female	23	21.9
Total	105	100.0
Marital Status		
Single	47	44.8
Married	58	55.2
Total	105	100.0
Level of Education		
No formal education	8	7.6
Primary education	25	23.8
Secondary education	65	61.9
Tertiary education	7	6.7
Total	105	100.0
Farm Size (Ha)		
< 1	93	88.6
1-3	12	11.4
>3	0	0
Total	105	100.0

Level of youth participation

The results in Table 2 shows the grand mean participation scores of (2.53) which implied that the respondents were generally involved in Fadama III activities. The findings inferred that the respondents level of participation were directly focused on youths contribution to good leadership ($\bar{x}$ = 3.18), youths involved in livestock management ($\bar{x}$ = 2.90), youths involved in agro-forestry (2.86), youths involved in crop production ($\bar{x}$ = 2.85). Other activities involved by the youths included fish farming ($\bar{x}$ = 2.75), and project planning ($\bar{x}$ = 2.67). However, the

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respondents participation in Fadama III activities were high since six out of the eleven statements were favourable.

Table 2: Respondents' Level of Participation in Fadama III project

Level of participation	Very high	High	Very low	Low	Total	Mean	Remark
Project planning	8	72	7	18	280	2.67	High
Project design	6	37	15	47	212	2.02	Low
Project implementation	9	56	12	28	256	2.44	Low
Project monitoring and evaluation	8	26	26	50	212	2.02	Low
Feed back processes	8	23	44	30	219	2.09	Low
Crop production	39	26	25	15	299	2.85	High
Livestock management	20	67	6	12	305	2.90	High
Fish farming	16	64	8	17	289	2.75	High
Apiculture	13	14	42	36	214	2.04	Low
Agro-forestry	31	48	9	17	303	2.86	High
Good leadership	47	42	4	12	334	3.18	High

Note: *The level of youth participation in Fadama III project was high in six items.*

Regression Result

The result of regression showed R^2 to be 0.840 which shows that the combined effect of the independent variables explained 84% of items relating to youth empowerment (Table 4). The remaining 16% were caused by other factors such as management practices not included in the model. The double-log model was chosen as the lead equation based on econometric and statistical reasons such as the number of regression coefficients that are significant, the value of R^2 and the significant level of the F- ratio. The result should that only three of the variables have significant influence on youth empowerment. It should be noted that a positive sign on a parameter indicates that higher values of the variable tend to increase the likelihood of empowerment through active participation of youths in Fadama III activities. Likewise, a negative sign of a coefficient implies that higher values of the variable would decrease the probability of youth empowerment through less participation of youths in Fadama III activities The result shows that gender was positive and significant at 1% probability level. This implies as more of this variable is employed, there will be an increase in total output of youth empowerment by Fadama III in the study area. On the other hand, marital status and educational level were negatively significant at 1% and 5% probability level respectively. This implies that the singles tended to get involved in Fadama III more than the married respondents to necessitate empowerment.

Table 3: Regression Result of Socioeconomic Characteristics of Fadama III Participants on Empowerment of Youth in Rural Communities

Variable	Coefficients	Standard error	Significance level
Age (X_1)	0.039	0.035	1.101
Gender (X_2)	1.240	0.147	0.000^{x}
Marital status (X_3)	-0.023	0.403	-0.058
Educational level (X_4)	-0.003	0.123	-0.025^{xx}

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FUGA (X_5)	-0.154	0.137	-1.123
Constant term	-0.061	1.528	-0.040[xx]

*R-square =0.840, F-value = 16.83, * Significant at 1%; ** Significant at 5%;*

Constraints Faced by Youths in Fadama Participation

Major constraint identified by the respondents in participation in Fadama III project were poor capital base ($\bar{x}$ = 3.34) as well as poor project financing($\bar{x}$ = 3.29). According to them use of credit was for hiring labour and meeting expenses. This implied that capital investments were small and modern inputs such as fertilizers, chemicals and improved seeds were generally in short supply and scarcely made available to participants in the Fadama III project. This might affect the level of participation of the youths in Fadama III programme. This finding is in line with Odoemenem *et al* (1991) that problems emanating from unavailability of credit included low productivity, inability to adopt modern techniques, poor marketing and distribution arrangements, poor information, inadequate infrastructures, lack of credit facilities and poor rate of capital formation. Youths in the study area further identified inadequate farm inputs($\bar{x}$ = 3.16) constituting serious constraint to their participation in Fadama. This support the finding of Obeta and Nwagbo (1991) who reported that poor distribution of technological inputs could seriously hamper adoption of innovations.

Table 4: Level of Constraints

Constraints	Very serious (4)	Serious (3)	Fairly serious (2)	Not serious (1)	Total	Mean	Remark
Low education status	37	54	8	6	332	3.16	Serious
Poor capital base	51	42	9	3	351	3.34	Serious
Inadequate provision of farm inputs	35	56	10	4	332	3.16	Serious
Diversion of inputs	49	30	15	11	327	3.11	Serious
Absence of insurance	59	17	13	16	329	3.13	Serious
Poor communication ideas in farming technology	38	59	6	2	343	3.26	Serious
Inefficient training session	44	51	7	3	346	3.30	Serious
Poor project finance	49	42	9	5	345	3.29	Serious

Note: *Serious constraints (mean ≥ 2.5).*

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CONCLUSION

The participation level of the youth in design, project implementation, feed back processes, apiculture, monitoring and evaluation in the study area were found to be low. Low education status, poor capital base, inadequate provision of inputs, diversion of inputs, absence of insurance poor communication ideas in farming technology, inefficient training session and poor project finance were the problems militating against youth participation in Fadama III. The expected food availability and adequacy through these virile youths can only be achieved in the Delta State if the youths are harness properly by Fadama III as a means of integrating them to embrace farming a means of livelihood. This could be realized by supply of loan facilities at subsidies rate and provision of infrastructure to alleviate the suffering of youths to boost agriculture. The implication of result was that marriage and high educational level reduce the tendency to actively participate in Fadama III. Activities. It is therefore recommended that effective training should be given to the more educated participants .There are needs for improved communication strategies, introduction of insurance policies, avoidance of farm inputs diversion among others.

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