



IMPACTS OF IFAD ON INCOME AND LIVELIHOOD OF RICE MARKETERS IN BASSA LOCAL GOVERNMENT AREA OF KOGI STATE, NIGERIA.

¹MOHAMMED, U., ²AHMAD B.S., ¹UMAR, A.1WAZIRI, A.

¹Department of Agricultural Economics and Extension Services, Ibrahim Badamasi Babangida University, Lapai. ²National Cereals Research Institute Baddegi, Niger State.

ABSTRACT

The study was on Impacts of IFAD on Income and Livelihoods of Rice Marketers in Bassa Local Government area of Kogi State, Nigeria. Multi-stage sampling technique was used to select 127 of rice marketers. Data were collected using structured questionnaire and interview scheduled; and analyzed using descriptive statistics (percentage and frequency), multiple regression and Likert scale. The result of socio economic characteristics revealed that majority of respondents were female, married with long year of experience in rice marketing. The result in the study area showed that the coefficient of training on marketing method (179429) was positively significant at 1% level of implying that access to training is expected to have positive effect the income of rice marketers. The constraints faced by rice marketers showed that poor credit was ranked 1st with mean value of (\bar{X} =3.01), this was followed by insufficient fund (\bar{X} =5.07) ranked 2nd and lack of good market was ranked 3rd with mean value of (\bar{X} =6.37). The study recommended that: marketer should be trained on how to sources for alternative income through diversification in the study area.

Keywords: Impacts, Income, Livelihoods, Rice, Marketers.

Introduction

Rice (*Oryza sativa*) is the most important food crop for half of human race (United State Agency for International Development (USAID) 2021). It is the world's most consumed cereal after wheat which shapes the lives of millions of people; more than half of the world's population depends on rice for 80% of the daily calories ingested (Braun, 2016). The world rice processors is 691.6 million metric tons of paddy per year with global rice production increasingly considerable, since the sixties (FAOSTAT, 2020). More than 90 percent of the world rice marketers takes place in developed countries, mostly in Asia with China and India being the two largest marketers, while Latin America and Africa produce 3.8 and 2.8 percent respectively (FAOSTAT, 2020).

There are three different types of rice: japonica, javanica, and indica. Japonica rice varieties are high yielding and tend to be resistant to disease. Javanica types of rice fall between japonica and indica varieties in terms of yield, use, and hardiness. Although quite hardy, indica yield less than japonica types and are most often grown in the tropics, because cultivation is so widespread, development of four distinct types of ecosystems has occurred. They are commonly referred to as irrigated, rainfed lowland, upland, and flood-prone agroecological zones. Irrigated ecosystems are the primary type found in East Asia. Irrigated ecosystems provide 75% of global rice marketers. Irrigated rice is grown in bunded (embanked), paddy fields. Rainfed lowland ecosystems only sustain one crop per growing season and fields are flooded as much as 19.7 in (50 cm) during part of the season (USAID, 2021). In value chain system, farmers are linked to consumers' needs working closely with suppliers and marketers to produce specific goods to meet consumers demand. Similarly, through the flows of information and products, consumers are linked with needs of the farmers. Under this approach, and through continuous innovations, the return to farmers can be increased and livelihoods enhanced. It is against this background that the Value Chain Development Programme was initiated by Federal Government of Nigeria and International Fund for Agricultural Development to address the constraints along rice value chain through an inclusive strategy of strengthening the capability of actors along the chain including marketers as well as public and private institutions, service providers and access to market (James 2021).

The objectives of this study are to:

- i. describe the socio - economics characteristics of IFAD rice marketers in the study area
- ii. determine the impact of the IFAD programme on income and livelihoods of rice marketers in the study area
- iii. describe the constraints faced by rice marketers in the study area

MATERIALS AND METHODS

Study Area

The study was undertaken in Bassa LGA of Kogi State is located in Guinea Savanna Ecological Zone of Nigeria, the state has approximately between Latitude 6.3⁰N to 8.1⁰N and Longitude 8⁰ E to 10⁰ E. The LGA has a total land area of about 2,866.25 square kilometers (km²) (KSG Diary, 2021). The LGA has the projected population value of 336.26 in 2020 using growth rate of 3.5%. Major occupation is farming (KSG Diary, 2021). The climate is characterized by a distinct dry and wet season with annual rainfall ranging from 1,000mm in the North to 1,800mm in the South Kogi State Government (KSG Diary, 2021). The maximum temperature do not exceed 37⁰, C. The duration of the season ranges from 160 days between the month of April to September in the Northern part of the LGA and about 150 days in the Southern part of the LGA between the month

of April to October. The climate and soil hydrology permit the cultivation of most Nigerian staple crop and still leave grazing, forestry and fresh water for fishing.

Sampling Procedure and Sample Size

Multi-stage sampling technique was used for the study. The first stage involved random selection of local government in the State. At the second stage, involved random selection of eight (8) communities from the Local Government Areas (LGA). At the third stage, 10% of the rice marketers were randomly selected from the sampling frame of each community. In all, a total of 127 respondents were selected from the LGA as the sample size for the study.

Table 1: Sample distribution of the respondents in the study area

Communities	Sample frame	Sample size (10%)
Baki	208	20.8
Landu	97	9.7
Butu	145	14.5
Gobiji	140	14.0
Agodo	150	15.0
Kebe	157	15.7
Adinbeku	55	5.5
Mosu	48	4.8
Total	1000	100

Sources: Field survey, 2021

Method of Data collection and Analytical Techniques

Primary data was used for the study, the data were collected by researchers and trained enumerators using structured questionnaire complimented with interview schedule. The data obtained from objective I was analyzed using descriptive statistics such as (frequency distribution, percentage mean) objective II was achieved using multiple regression model, while, objective III Constraints was measured using 3 point Likert scale of very severe = 3, severe = 2, Not severe

Socioeconomic characteristics of rice marketers

Sex: The result in Table 2 indicated that more than half (67.5%) of rice marketers were female in their respective communities. Larger proportion of female in rice marketer might be attributed to male roles in cultivating thereby leaving women in marketing and other post-harvest activities. This finding agreed with Zakulwi (2021), who reported that rice marketing in Niger State.

Age: Result in Table 2 also indicated that the mean age of rice marketers in the study area was about 41 years. The finding suggests that the rice marketer belong to the middle age classes, who are physically fit to withstand the stress and rigorous process involved

in marketing of rice. This might also be due to the facts that most of the marketers in any business venture are always in their youthful age, productive and versatile. This finding is in with Zakulwi (2021), who indicated that rice marketers in Katcha LGA of Niger State, Nigeria were in their productive age.

Marital status: Finding in the Table 2 also indicated that majority (92.5%) and (90.8%) of rice marketers in the study area were married, which indicate some kinds of family responsibilities that will propel them to seek for additional mean of livelihood from IFAD programme in order to augment their incomes. The finding is in line with Abah *et al.*, (2021), who reported that majority of the rice marketers were married in Kebbi State, Nigeria.

Education status: Table 2 indicated that more than half of rice marketers (55.0%) in the study area had non-formal education, implying that more than half of rice markets did not attend any forms of formal education and this is expected to negatively influence their income. This however, contradicts the findings by (Aisha 2021), who reported high literacy level among paddy rice marketers in Kano State, Nigeria.

Household size: Table 2 showed that the mean household size of rice marketers in the study area was 8 persons, implying a moderate household size. However, moderate household size could be advantageous to marketers in the area of marketing of agricultural produce. This finding agreed with Barnabas *et al.* (2019), who reported that majority of rural farming populace in Benue State, Nigeria had moderate household size.

Years in agricultural activities: In Table 2 the mean years in agricultural activities in the study area was 44. This result agrees with the findings of Nwosu *et al.* (2020), who stated that the number of years spent in marketing of agricultural produce may give an indication of the practical knowledge the marketers has acquired on how to cope with inherent marketing problem.

Access to extension: Table 2 indicated that majority (93.8%) of rice marketers in the study area had access to extension. These findings indicated that majority of rice marketers accessed to extension service. However, extension access is expected to improve skills and knowledge of rice marketers that will also go a long way in improving their income. This finding agreed with Zalkuwi (2021), who indicated that larger percentage of rice marketers in Adamawa State, Nigeria accessed extension services.

Income: Table 2 revealed that the mean annual income of rice marketers in the study area was 856099.6. This finding indicated that rice marketers in the study area were high income earner and this is expected to enhance their output. This agreed with Zalkuwi (2021), who reported that high increase in income among rice marketers improved their livelihood.

Table 2: Socio-economic characteristics of rice marketers

Variables	Bassa LGA (n=127) Freq (%)
Sex	
Male	26 (32.5)

Female	54(67.5)
Age	
<30	11 (13.8)
31-40	51 (63.8)
41-50	18 (22.5)
51-60	0 (0)
>60	0 (0)
Mean	37
Marital status	
Married	74 (92.5)
Single	6 (7.5)
Widow	0 (0)
Widower	0 (0)
Divorced	0 (0)
Education status	
Primary	16 (20.0)
Secondary	15 (18.8)
Adult	1 (1.2)
Post-secondary	4 (5.0)
Non-formal	44 (55.0)
Years spent in Agricultural activities	
1-6	16 (20.0)
7-12	15 (18.8)
>12	5 (6.3)
None	44 (55.0)
Mean	4.4
House hold size	
1-5	22 (27.5)
6-10	43 (53.8)
11-15	12 (15.0)
16-20	2 (2.5)
>20	1 (1.3)
Mean	8
Access to extension	
Yes	75 (93.8)
No	5 (6.3)
Income	
<100000	1 (1.3)
101000-200000	0 (0)

201000-300000	6 (7.5)
301000-400000	2 (2.5)
>400000	71 (88.8)
Mean	856099.6

Sources: Field survey, 2021

Impact of the IFAD programme on the income of rice marketers

The result of the regression model showing the impact of the IFAD programme on the income of rice marketers in the study area is presented in Table 3. The result in the study area showed that the coefficient of training on marketing method (179429) was positively significant at 1% level of probability, implying that access to training is expected to have positive effect the income of rice marketers. Also, the coefficient of market information (113463.3) was positively significant at 5% level of probability, implying that increase in marketers access to market information is expected to positively effect on income of rice marketers. In the same vein, the coefficient of cost of construction of market tore (-82661.29) was negatively significant at 10% level of probability, implying that reduction in the cost of construction of market tore is expected positively influence the income of rice marketers.

Table 3: Impact of IFAD programme on the income of rice marketers in the study area

Variables	Linear		Semi-log		Double log		Exponential	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Training on marketing method	179429	4.11***	3133	4.30***	.849068	3.93***	.4898562	3.85***
Mou	15021.07	0.53	45179.85	0.69	.2159541	1.10	.0880552	1.06
Market information	113463.3	2.46**	187939.4	1.96**	.5638506	1.98**	.359491	2.68***
Cost of construction of apartment warehouse	1353.666	0.47	6778.075	0.06	-.1057099	-0.31	-.0001147	-0.01
Cost of construction of markets tore	-82661.29	1.76*	171863.1	1.57	-.495564	1.52	-.2306724	1.68*
Cost of transportation	-9752.372	-0.55	-19961.81	-0.17	-.2917901	-0.84	-.0695721	-1.35
Constant	-497774.8	-2.07**	-174210.6	-0.34	11.73584	7.70***	10.29616	14.64***
F-value	0.0000		0.0000		0.0000		0.0000	
R-square	0.4325		0.3930		0.3729		0.4339	
Adjusted R-square	0.4325		0.3431		0.3213		0.3874	

Sources: Field survey, 2021

Constraints faced by rice marketers in the study area

The results showed that poor credit was ranked 1st with mean value of (\bar{X} =3.01), this was followed by insufficient fund (\bar{X} =5.07) ranked 2nd. Other findings showed that lank of good market (\bar{X} =6.37), lack of nearest to the market (\bar{X} =6.74), poor marketing

channel (\bar{X} =7.14), consumer preference (\bar{X} =8.14), inadequate supply from sources (\bar{X} =8.19), marketing agencies problems (\bar{X} =8.23), high cost of transportation (\bar{X} =8.52), fluctuation of price (\bar{X} =8.67), high cost of labour (\bar{X} =9.56), lack of market information (\bar{X} =10.12), middlemen problems (\bar{X} =10.20), lack of storage facilities (\bar{X} =10.79), co cooperative societies (\bar{X} =11.66) and inadequate infrastructure (\bar{X} =13.56) ranked 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th and 16th respectively.

Table 4: Constraints faced by rice marketers in the study area

Variables	Bassa LGA (n=127)	
	Mean (\bar{x})	Ranking
Insufficient funds	5.07	2 nd
Middlemen problems	10.20	13 th
Poor credit facilities	3.01	1 st
Inadequate supply from source	8.19	7 th
Lack of nearest to the market	6.74	4 th
No cooperative societies	11.66	15 th
High of labour	9.56	11 th
Lack of storage facilities	10.79	14 th
Inadequate rural infrastructure	13.58	16 th
Fluctuation of price	8.67	10 th
Consumers preference	8.14	6 th
Lack of good market	6.37	3 rd
Poor marketing channel	7.14	5 th
Lack of market information	10.12	12 th
High cost of transportation	8.52	9 th
Marketing agencies problems	8.23	8 th
Kendall's W ^a	0.454	
Chi-Square	544.918	
Degree	15	
Asymptotic significant	0.000***	

Sources: Field survey, 2021

Conclusion and Recommendations

Based on the findings of these research it can be concluded that majority of rice marketers were female. Also, majority of rice marketers were in their active age and married. The literacy level of rice marketers in the study area was low. Moreover, majority of the rice marketers had moderate household size with high experience in rice marketing. Further findings revealed that majority of the rice marketers had access to extension services and of moderate income earners. The findings furthered showed that

rice marketers had high level of participation in the following; poor credit facilities was ranked 1st with mean value of (\bar{X} =3.01), Insufficient funds ranked 2nd with mean value of (\bar{X} =5.07) and lack of good market was ranked 3rd with mean value of (\bar{X} =6.37). The study recommended that: marketer should be trained on how to sources for alternative income through diversification in the study area. The most constraint faced by rice marketers was poor credit facilities. However, credit facilities should be provided for rice marketers by financial institutions and other self-help agencies in order to enhance their performance. The finding showed a low literacy level among all rice marketers in the study area. However, beneficiaries should be educated by extension agents on the roles play by formal education in the study area.

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