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Factors motivating incentives of farmers in rice Production training programmes(A case study of Olam/USAID/ADP/First Bank Programme)

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Abstract

The study examined motivating incentives of farmers in rice production training of OLAM/USAID/ADP/FIRST BANK in Kwara State. Data were obtained randomly from Patigi and Edu Local Government Areas, with the use of questionnaires from 180 respondents. The data collected were analyzed using the Statistical Package for Social Sciences. The results showed that respondents were predominantly male, married, educated, with mean age of 43 years. The result indicated that farmers in the study received incentives ranging from loan to farm inputs, nevertheless, farmers still desire other incentives namely; tractor services, irrigation facilities, planters, sprayers and storage facilities. Moreover, the findings showed that the mean ratings of the motivational factors scored friendship factor first with mean of (2.711) and standard deviation of (1.351) followed by self recognition, followed by market availability, equipment acquisition and profitability. Additional test using Pearson Correlation matrix revealed that , improving the standard of living of farmers, adding to their knowledge, profitability of their farming activities, meeting their personal needs, market availability for their produce, giving them loans, and providing them equipment were the most important and significant factors when organizing training for farmers. It is recommended that programme planner and trainer should recognize the importance of all these factors during planning of programme. Finally, regression analysis showed that the farmers farm size, farmer ownership status, levels of awareness among farmers, extension agent contact with farmers and their sources of information may affect the motivation levels of farmer.

Key words: participation, motivation, training, programme incentives, rice production.

INTRODUCTION

Motivation can be defined as the reasons for doing things or power that make things materialize. According to Luthan (1998), motivation can be defined as, "a process that starts with a physiological deficiency or need that activates a behavior or a drive that is aimed at a goal incentive. Olatidoye (2008) asserted that it is motivations that make farmers to contribute effectively to the progress of agriculture, thereby enhancing food security. Among motivational issues raised by the researchers which are related to farmers participation and performance are creation of farmers awareness at the on-set of agricultural development programmes; credibility of

extension agent; timely supply of agricultural inputs and provision of physiological needs of farmers as motivating incentive.

Furthermore, they cited that the issue of job security in farming as a strong motivation for farmers when it is place on the same scale with civil service where job security is gradually being eroded. Also, the practice of given agricultural loan to peasant farmers is also regarded as motivating incentives. Akintoye (2000) asserted that money remains the most significant motivational strategy. According to him, he said that money possesses significant motivating power in

accomplishing a task.

Minner et al. (1995) state that in a system sense, motivation consists of three interacting and interdependent elements, that is, needs, drives, and incentives Fashola et al. (2006). Likewise, Miller (1992) asserts that knowledge of the motivations of adult learners in a specific programme may provide valuable insight into the kinds of learners the program attracts.

Training on the other hand, has been reported as one of the numerous activities that need to be carried out to sustain production of food and to enhance self-sufficiency in food production in the developing world. Training is mostly directed at improving the ability of individual to do their vocation more effectively and efficiently (Fashola et al. 2006). Nasko (1989) and Bello (2004) asserted that Nigeria has the potential to provide enough rice to meet its demand and export from local production; however food production in Nigeria mostly depended on small scale farmers who are often characterised by the use of unimproved farm implements and traditional production methods which result to low income and consequently lead to low standard of living (Dittoh,1992). The challenges in Nigeria rice sectors include high demand for the more expensive parboiled rice against cheaper milled white rice; poor competitiveness with imported rice in terms of quality and price because of high production and transaction costs; low industrial base (modern mills and organized markets) to drive the chain; the rice value chain is highly fragmented from production to marketing, making it difficult to create brands and standards (NRDS, 2013).

It is true that Nigeria is aiming to overcome the challenge of importing rice yearly. Nigeria still spends N356 billion on yearly importation of rice and recently, the country has focused her attention on rice production. Adesina (2014) asserted that for the country to be self-sufficient in rice, we need to produce 3.2 mmt of paddy to meet up with our demands. This gap in production can be filled with well motivated farmers, who are well equipped with adequate training

Since, the challenge of increasing rice production has become a national issue that needs an urgent attention; therefore there is a need for us to tackle the problems with all the resources at our disposal. This is the reason why, the training programme was organized through the joint collaboration effort of Olam, United State Agency for Infrastructural Development (*USAID),* Kwara State Agricultural Development Programme (KWADP) and First Bank of Nigeria (FBN). The main objective of this training is to improve the capacity of farmers, in order to be able to increase their yield or output.

It is against this backdrop that this study sets out to examine the factors that motivate farmers. Moreover, this study was designed to help researchers and teachers understand more about the underlying factors that influence a farmer's decision to participate in learning experiences by learning more about perceptions regarding motivation to learn, motivational factors that increase participation, and adult learners' learning preferences. This information could also assist government and non- governmental agency in developing appropriate experiences for adult learners as well as provide a guide for subsequent agricultural programmes as the finding of this study can also be used as means of securing maximum participation of farmers in the future project.

Objectives of the study

The general objective of the study was to examine factors that motivate farmers to participate in this training programme in Kwara State, Nigeria.
The specific objectives were to:

i. Identify the socio- economic characteristics of rice farmers in the study area.
ii. Examine various types of incentives given to the rice farmers by trainer.
iii. Determine motivating factors of the rice farmers in the study.

Hypothesis

i. There is no significant relationship between some socio-economic factors of the rice farmers and the motivating factors to participate in the programmes.
ii. There is no significant differences among the motivating factors that propel the farmers to participate in the training programme.

METHODOLOGY

The population for this study consisted of all participating farmers in the project. According to the records of farmers with Agricultural Development Programme, they were about 3,000. There were six communities that participated in the programme and the selection of respondent was based on the number of communities that participated, from each community 30 respondents were randomly selected, given a total sample size of 180. The instrument for collection of data was questionnaire, which was administered by trained enumerators. The instrument was designed to identify personal characteristics of rice farmers involved in the programme, examine various types of incentives given to farmers and to measure farmers motivational factors in rice production training programme.

The questions regarding motivational factors were formulated to be answered using a five-point, Likert-type scale with 5 = strongly disagree, 4 = disagree, 3 = undecided, 2 = agree, and 1 = strongly agree.

Data analysis

The data collected were analyzed using the Statistical Package for Social Sciences (SPSS, version 15) the descriptive and inferential statistics such as frequency counts, percentages, means, standard

deviation correlation and regression analysis were used to describe the personal characteristics of the rice farmers and to examine the association between independent and dependent variables.

RESULTS

Selected socio-economic characteristics of respondents

Most participants were male (93.9%) with the age category (87.8%) mode being 30-60. The mean age is 43 years. Most of the participants (93.3%) were married and had children at home. A few of the farmers that is, (38.3%) attained tertiary education with a majority (56.7%) having cultivated land between (1- 2 ha) with large number (72.2%) using an inherited land for production. Just 40% of them have farming experience average of 1to 10 years, while. (42.2%) were having an average family size of 8 in a household.

Motivating incentives in the programme

Table 2 revealed that majority (80.6%) of the respondents collected loan as incentive while 19.4% did not take loan, but 100% of the respondents were given improved seeds, chemical and fertilizer. However, Table 3 showed that all (100%) of the respondents indicated interest in tractors services while majority (95%) indicated planter and 79% asked for storage facility, with above average (66%) showed interest for sprayer. That means that farmers still want other incentives such as, tractor services, irrigation facility, planter, sprayer and storage facility to be given to them.

The mean ratings of the motivational factors with friendship factors ranked first with mean score of (2.711) and standard deviation of (1.351) and increase yield factors ranked last with mean score of (1.322) and standard deviation of (0.524) was showed in Table 4.

Hypothesis testing

i. There is no significant relationship between some socio-economic factors of the rice farmers and the motivating factors to participate in the programmes.
Table 5 showed that there is a significant relationship between some socio-economic factors of the famers and the motivational factors that influence their participation. Therefore, the null hypothesis is rejected.
ii. There is no significant differences among the motivating factors that propel the farmers to participate in the training programme.

Also, Table 5 showed that there is a significant difference among the motivating factors that influence their participation, since the improving the standard of living of farmers is the one that has the highest coefficient (r =0.971, P<0.01) followed by knowledge (r =0. 969, p<0.01) and profitability factor (r =0.921 ,P<0.01) and which is later followed by the other motivational factors.

Regression analysis showed that there were positive significant relationships between improved standard of living motivational factors and farm size (β=0.416), landownership (β= 0.090), level of awareness (β =0.276), extension contact (β= 0.401), and source of information (β= 0.124) while other motivational factors were not significant except years of farm experience (β=0.-172) which was negatively significant.

DISCUSSION

Table 1 showed that majority are married which showed that they are matured and responsible individual. The mean age is 43 years. This implies that the respondents were still in active production ages which mean that they can still be motivated to fully participate in a programme that will boost their output. The finding also showed that majority (99%) had one form of education or the other. This implies that majority can read and write and this make communication very easy and the use of questionnaire as a research instrument acceptable. This also implies that farmers can understand better the training module given to them. The result of this study was corroborated by the findings of Alarima et al. (2011) who worked on knowledge and training needs of rice farmers in Nigeria.

Table 2 revealed the major incentives given to farmers and they were improved seeds, chemical, fertilizer and loan. However, Table 3 revealed the incentives still interested in by the rice farmers in the area, and they are tractor services, irrigation facility, planter, sprayer and storage facility.

This implies that these incentives can be used to motivate farmers to participate in any subsequent programme in the area. The finding is in agreement with Olatidoye (2008) who reported loan to be one of the incentives given to farmers to motivate them and Benyamin (2011) who supported that the most motivational incentive is financial incentives.

Table 4 showed the mean ratings of the motivational factors with friendship factors coming first with mean score of (2.711) and standard deviation of (1.351) followed by self recognition, followed by market availability, equipment acquisition, profitability, up till the last option which is to increase yield with mean score of (1.322) and standard deviation of (0.524).

The findings of this study indicated that respondents were mostly in agreement with the perception statements regarding motivation to learn. The farmers in this study

Table 1. Distribution of respondents according to their demographic information.

Variable	Frequency	Percentages
Age		
Below 30 years	22	12.2
30-60	158	87.8
Total	180	100
Marital status		
Single	12	6.7
Married	168	93.3
Total	180	100
Gender		
Male	169	93.9
Female	11	6.1
Total	180	100
Educational attainment		
Non formal education	20	11.1
Primary education	25	13.9
Secondary education	63	35
Tertiary education	69	38.3
Adult education	2	1.1
None	1	.6
Total	180	100
Household size (people)		
< 5	74	41.1
6-10	76	42.2
11-15	23	12.8
16-10	7	3.9
Total	180	100

Source: Field survey (2010)

Table 1 contd. Distribution of respondents according to their demographic information.

Farm size(ha)	Frequency	Percentage
1-2	102	56.7
3-4	49	27.2
=>5	29	16.1
Total	180	100
Land ownership		
Inherited	130	72.2
Gift	14	7.8
Purchased	12	6.7
Relation	14	7.8
Community	4	2.2
Others	6	3.3
Total	180	100

Source: Field survey (2010)

Table 1 contd. Distribution of respondents according to their demographic information.

Farm size(ha)	Frequency	Percentage
Farming experience		
1-10 years	72	40
11-20 years	54	30
21-30years	54	30
Total	180	100
Primary & secondary occupation		
Artisan	8	4.4
Trading	43	23.9
Civil servant	48	26.7
Fish farming	49	27.2
Other	32	17.8
Total	180	100

Source: Field survey (2010)

Table 2. Distributions of respondents according to incentives collected.

Incentives types	Frequency	Percentage
Improved seeds	180	100
Chemical	180	100
Fertilizer	180	100
Loan	145	80.6
Total	180	100

Source: Field survey (2010)

Table 3. Distribution of respondents according to the incentive still needed.

Incentives required	Frequency	Percentage
Tractor services	180	100
Irrigation facility	180	100
Planter	153	85
Sprayer	119	66
Storage facility	142	79
Total	180	100

Source: Field survey (2010)

Table 4. Means and Standard Deviations of Motivation Indicators by Factors (n=180) Participation motivation indicator.

Motivating factors	Mean	Rank	Std. Deviation
Friendship	2.7111	1st	1.35155
Self recognition	2.3056	2nd	1.21489
Mkt availability	2.2056	3rd	0.85022
Equipment acquisition	2.1667	4th	1.23497
Profitability	2.1111	5th	0.83156
Personal needs	2.0722	6th	0.79826
Loan	1.9278	7th	1.01953
Gaining Knowledge	1.8444	8th	0.83111
Household Need	1.8278	9th	0.98497

Table 4 contd. Means and Standard Deviations of Motivation Indicators by Factors (n=180) Participation motivation indicator.

Motivating factors	Mean	Rank	Std. Deviation
Self reliance	1.7611	10th	0.82803
Easy work.	1.6000	11th	0.80223
Technical skill	1.5889	12th	0.58652
Improve standard of living	1.5778	13th	0.76921
Increase income	1.5500	14th	0.91098
Agricultural input	1.5167	15th	0.58353
Increasing yield	1.3222	16th	0.52486

5 = strongly disagree, 4 = disagree, 3 = undecided, 2 = agree, and 1 = strongly agree. Source: Field survey (2010).

Table 5. Pearson correlation test of relationship between selected socio-economic characteristic of rice farmers and the motivational factors.

Study variables	Correlation matrix (r)	Significant
Age and Personal need factor	0.324	0.01
Marital Status and Market Availability factor	0.380	0.01
Educational levels & Profitability factor	0.907	0.01
Household Size and Loan factor	0.927	0.01
Farm size and improve standard of living factor	0.971	0.01
Land Ownership and Equipment factor	0.912	0.01
Year of experience and knowledge factor	0.969	0.01
Primary and secondary occupation and profitability factor	0.921	0.01

perceived that motivation to participate in the programme is related to ambition to make friendship, self recognition, market availability, profitability, loan, personal needs, improve standard of living, increase yield etc. This finding is in agreement with Olatidoye (2008) who reports improving the standard of living as a motivational factors for participating in a programme.

Warren (1973) stated that human motivation is not unitary, but rather it is a configuration of many factors. There is no limit to the number of reasons why adults might want to learn something, as long as adults feel a sense of choice (Knowles, 1980).

Table 5 showed the correlation analysis result and the positive significant of those variables that motivate farmers to participate in the programme. All the motivational factors are significant at (P<0.01). The findings showed among other factors that motivate farmers that, improving their standard of living, profitability of their farming activities, meeting the personal needs of farmers, market availability for their produce, giving farmers loan, adding to their knowledge and providing them equipment were the most important and significant factors when organizing training for farmers. This implies that if the organizer can carry out investigation about the individual need of the farmers before embarking in the programme, this will motivate farmers the more. Similarly, farmers were also motivated because there is already made market for their produce because OLAM had made agreement with them that their produce will be bought by them that means; the problem of looking for market to dispose their produce is solved. Therefore it important to solve the problem of marketing before embarking on large production, so that glut will not occur. Moreover, a planner must make sure that whatsoever technology they are communicating to farmers, it must be profitable to them, otherwise they will not be motivated to participate. Furthermore, any programme that must involve farmers should be able to improve their standard of living rather than living them the way they are.

Regression analysis result showed in Table 6 further identified the positive significant relationships between improved standard of living motivational factor and farm size (β=0.416), landownership (β= 0.090), level of awareness (β =0.276), extension contact (β= 0.401), and source of information (β= 0.124) while other socio-economic factors were not significant except years of farm experience (β=0.-172) which was negatively significant to motivational factor. This implies that an increase in those factors will lead to an increase in motivation of farmers except years of farm experience whose increase may lead to less motivation in farmers.

Finally, the finding showed that levels of awareness, extension contact and source of information are very important factors in motivating farmers.

CONCLUSION

The findings showed among other factors that motivate

Table 6. Regression analysis showing the relationship between variables.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	-0.176	0.149		-1.183	0.239
	Age	0.000	0.001	-0.002	-0.135	0.893
	Marital status	-0.027	0.164	-0.009	-0.168	0.867
	Gender	-0.044	0.169	-0.014	-0.262	0.794
	Educational attainment	0.006	0.033	0.007	0.171	0.865
	Household size	0.040	0.085	0.041	0.470	0.639
	Farmsize	0.416	0.089	0.407	4.683	0.000
	Landownership	0.090	0.035	0.155	2.598	0.010
	Farm experience(yr)	-0.172	0.091	-0.186	-1.894	0.060
	Secondary and primary occupation	0.058	0.043	0.086	1.365	0.174
	Awareness	0.276	0.127	0.164	2.175	0.031
	Extension contact	0.401	0.087	0.258	4.589	0.000
	Source of information	0.124	0.057	0.120	2.161	0.032

R= 0.980, R^2=.960 Adjusted R^2 F= 337.9, Standard error of estimate = 0.158.

farmers that, improving their standard of living, profitability of their farming activities, meeting the personal needs of farmers, market availability for their produce, giving farmers loan, adding to their knowledge and providing them equipment were the most important and significant factors when organizing training for farmers.

It was also concluded that farmers, farm sizes, their ownership status and levels of awareness among farmers, extension agent contact with farmers and their sources of information may affect the motivational levels of farmer.

RECOMMENDATION

It is recommended that, the organizer of training programmes should strategize an increase in the levels of awareness among farmers, increase extension agent contact with farmers and also widening their sources of information to farmers.

Moreover, programme planners should take into consideration when planning programmes for farmers their farmers personal needs and they should also ask themselves the following questions: is this programme profitable to farmers before embarking on it? Will it improve their standard of living? Will there be any avenue of empowering them to initiate the new technologies by giving them loan? Will it add to their knowledge?

Finally, it is recommended that all the incentives needed by farmers should be provided and should be in time.

REFERENCES

Adesina AA (2014). We've unleashed revolution in rice production in Nigeria. retrieved from http://pointblanknews.com/pbn/exclusive/weve-unleashed-revolution-in-rice-production-in-nigeria-dr-adesina/ on 18/2/14

Akintoye IR (2000). The place of financial management in personnel psychology. A Paper Presented as Part of Personnel Psychology Guest Lecture Series. Department of Guidance and Counselling, University of Ibadan, Nigeria.

Alarima CI, Kolawole A, Fabusoro A, Ajulo AA, Masunaga T, Wakatsuki T (2011). Knowledge and training needs of farmers adopting sawah rice production technology in Nigeria. J. Food Agric. Environ. **9**(3&4):183-188. 201

Bello A (2004). Nigeria imported $ US700 million rice in 2003-Federal Minister of Agriculture and Rural Development Mallam Adamu Bello in Nigeria Tribune newspaper, Monday, 7th July, 2004.

Benyamin L (2011). Motivating RI Farmers to Increase Rice Production. Bertenaga by KerSip Open Source.

Dittoh SA (1992). "Priorities for Nigerian Agriculture in the 5th National Development Plan 1986-1990" paper presented at the Conference on strategies for the 5th National Development, at the Nigeria institute for Social Economic Research(NISER),Ibadan.

Fashola OO, Oladele OI, Aliyu J, Wakatsuki T (2006). Dissemination of sawah rice technology to farmers cultivating inland valleys in Nigeria. Proceedings of the Asian Pacific Extension Network, 6-8th March 2006, Australia

Knowles MS (1980). The modern practice of adult education: from pedaaogv to andranogy. Chicago: Follett Pub. Co.

Luthans F (1998). *Organisational Behaviour*. 8th ed. Boston: Irwin McGraw-Hill.

Miller BE (1992). Participant Motivation in Off-Campus Agricultural Credit Programs. J. Agric. Edu., pp 1-8

Miner JB, Ebrahimi B, Wachtel JM (1995). How deficiency in management contributes to the United States' competiveness problem and what can be done about it? Human Resource Management. Fall, pp. 363.

Nasko G. (1989). Food Self-Sufficiency in Nigeria, A review of Federal Government Programme (Federal Civil Service Forum, N.I.I.A. Victoria-Island, Lagos.

NRDS (2013) Status of NRDS Implementation in Nigeria: Presentation at the fifth general meeting of Card, 5-6 february 2013, dakar, Senegal

Olatidoye GB (2008). Resource mobilization and motivation of rural farmers for agricultural production: Agricultural Extension A comprehensive Treatise with Model Questions and Glossary pp. 117-119.

Warren ET (1973). The implications of A. H. Maslow s Hierarchv of Needs Theory for Adult Education. University Microfilms, Michigan, U.S.A.