Innovations

Evaluation of the training situation preference of small-scale Cassava farmers in Delta south agricultural zone of Delta state, Nigeria

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Abstract

The study evaluated the training situation preference of small scale cassava farmers in Delta South Agricultural Zone of Delta State, Nigeria. A multistage sampling technique was used to obtain data from 120 farmers using structured questionnaire and interview schedule. Data collected were analysed using frequency counts, percentages and mean score. The study revealed that the mean farming experience was 24 years and mean farm size 1.8 hectares. Farmers' preferred to be trained on their farms ($\bar{x}$ = 2.95) using pidgin english ($\bar{x}$ = 3.44) and the local language ($\bar{x}$ = 3.18) especially in the morning ($\bar{x}$ = 2.73) and the evening ($\bar{x}$ = 2.80). The study concluded that farmers training situation varies and as such understanding farmers' preference is vital as it will improve participation and acceptance of training programmes.

***Keywords**: 1.Evaluation, 2.Training Situation, 3.Preference, 4.Small - Scale, 5.Cassava farmers*

Introduction.

Cassava (*Manihot esculenta*), is one of the main staple foods in sub - Saharan Africa and one of the two most important stable in Nigeria, providing at least one - third of the calorie intake and a much larger share among the poor (De Souza, Massenburg, Jaiswal, Cheng, Shekar . and Long 2016). It is very prolific, draught resistant and could adapt to wide range of agro - climatic conditions. Cassava's popularity stems from the ease of cultivation and the availability of a wide variety of products such as *garri, fufu,* chips, flours with small holders accounting for 80% of cassava production in Nigeria (Oyebanji and Akwashiki2003). Furthermore, Nweke (1994) reported that the great importance attached to cassava is as a result of its adaptability to a wide range of agro-ecologies including marginal lands and erratic rainfall condition.

In addition, cassava which is a major staple in Nigeria is eaten either as processed or in processed form and form a very cheap source of human calories for human consumption hence it plays a major role in the country's food security (Olatinwo, Fawole, Adekunle and Oduwaiye, 2020). Comparatively, cassava has lower production risk and offers the possibility of all year round food supply. Nigeria grows more cassava than any other country in the world with the concentration in the hands of numerous small holder farmers located primarily in the South and Central region of Nigeria (Echebiri and Edaba, 2008). Current production figures shows that Nigeria is the largest producer of cassava with other top producers being Indonesia, Thailand, Democratic Republic of Congo with an estimated output of 54 million metric tons and cultivated land area of 3,850,000 hectares in 2012 (FAOSTAT, 2013).

In spite of the numerous challenges faced by major producers especially in the Niger Delta Region of Nigeria, cassava have the potential of becoming an economic export crop (Anyanwu and Iyagba, 2012). Improving productivity will require that cassava farmers understand and apply good cultural practices. Training farmers on diverse aspect of farming is important to improving crop yield and better management of their farms. Training programmes in agriculture are designed to develop farmers so as to make them better entrepreneurs and decision makers and help them organize themselves into effective associations and institutions (Famuyiwa, Adesoji and Lawal, 2012). While training is vital for overall improvement in farming, it is vital that training preference and peculiarities of farmers be considered. Understanding the most effective means of communication in farmers training enhances learning experience and brings about the optimal achievement of training objectives. Considering, the peculiarities of farmer's, it is expected that their there will be differences in farming situation. It becomes imperative therefore, to assess the training preference of Cassava farmers in Delta South Agricultural Zone of Delta State, Nigeria. The specific objective is to describe the personal characteristics of the respondent's and to ascertain preferred training situation.

Methodology

The study area is Delta South Agricultural Zone of Delta State, Nigeria which comprises of eight Local Government Areas that are mainly agrarian. Major crops grown include Cassava, Yam, Maize, Rubber and Oil Palm.The study population comprises all cassava farmers in the study area. The list of these farmers which constitute the sampling frame were obtained from the Delta State Rural Agricultural Development Agency (DARDA).A multi-stage sampling procedure was used for the study. The first stage involve the purposive selection of 6 LGAs because they ranked high in cassava production in the zone. From the 6 LGAs, 2 communities each were purposively selected based on the intensity of cassava production. Fromthe sampling frame which is the list of all cassava farmers in the 6 selected Local Government Areas, tenfarmers each were randomly selected from the 12 communities resulting in a total of 120 respondents for the study.

Data were collected with the aid of structured questionnaire and interview schedule on farmers socioeconomic characteristics and their training situation preferences. List of training situations were presented and respondents asked to rank them on a 4-point Likert type scale on their preferred training situation. Most preferred = 4, More Preferred = 3, Somewhat preferred = 2 and Not preferred at all = 1. A mean cut off of 2.5 was calculated and used to determine the preferred options. Thus, options less than 2.5 were not preferred

Results and Discussions

Socioeconomic Characteristics

The result in Table 1.0 shows that the mean age was 48.4 years. The mean age shows that the farming population is relatively agile and this will have implication for productivity. Only 24.8% of respondents had no form of education at all as shown in Table 1.0. The result indicates a high level of literacy among respondents and can therefore engender better understanding of agricultural information and training, and result-oriented decision making by farmers. This finding agrees with Oduntan, Amos. and Oseni(2012) in their study on small scale cassava production in Ondo state where a huge proportion of respondents were found to possess one form of formal education or the other. They opined that this could impact on farmers' level of efficiency and risk taking. The mean farming experience was approximately 24 years which is a relatively long time in farming and therefore should equip them with better knowledge of cassava farming.

Table 1.0: Distribution of Farmer's according to their Socioeconomic Characteristics

Variable	Frequency	(%)	Mean
Sex			
Male	67	55.9	
Female	53	44.1	
Marital Status			
Single	12	10.0	
Married	100	83.3	
Divorced	2	1.7	
Widowed	6	5.0	
Age			
30 and less	7	5.8	
31 – 50	57	47.5	**48.4**
>50	56	46.7	
Level of Education			
No formal education	30	25.0	
Attended Primary School	20	16.7	
Completed Primary School	31	25.8	
Attended Secondary School	10	8.3	
Completed Secondary School	14	11.7	
Attended Tertiary School	15	12.5	
Farming Experience			
1 – 10	15	12.2	
11 – 20	44	37.0	
21 – 30	24	20.0	**23.6**
31 – 40	23	18.9	
>40	14	11.9	
Farm Size			
Less than 2 ha	92	77.0	
2 – 5 ha	28	23.0	**1.8**

Farmers' training situation preference

Farmers' training situation preference in the context of this study refers to the preferred places of training, time of the day, days of the week and language of training.

Preferred Venue or Place of Training

The results in Table 2.0 show respondents' training venue or places preference based on 2.50 discriminating index or mean out of seven training situation. Most farmers preferred trainings in the field ($\overline{x}$ = 3.29), their farm ($\overline{x}$ = 2.95) and group meetings in farm ($\overline{x}$ = 2.99). Similarly, preference for workshop and seminar had a mean value of ($\overline{x}$ = 2.87). Respondents' did not prefer training in the extension office ($\overline{x}$ = 2.30), their homes ($\overline{x}$ = 1.46) and having group meetings in extension office ($\overline{x}$ = 2.18). The preference for having trainings in their farm could be as a result of the ease with which farmers can learn under practical conditions. The aversion towards holding trainings at farmers' home could be as a result of the need to maintain some level of privacy.

Table 2.0: Preferred Training Venue.

Venue	Most Preferred f (%)	More Preferred f (%)	Somewhat Preferred f(%)	Not Preferred at all f(%)	Mean	S.D.
Farm	68 (56.7)	14 (11.5)	19 (15.9)	19 (15.9)	**2.95**	1.17
Extension Office	21 (17.8)	28 (23.7)	37 (30.4)	34 (28.1)	2.30	1.07
Farmers Home	4 (3.3)	8 (6.7)	27 (22.5)	81 (67.5)	1.46	0.74
Field Training/ Demonstration by Extension Agent	69 (57.8)	31 (25.9)	6 (4.8)	14 (11.5)	**3.29**	0.99
Group Meetings in the Farm	55 (45.9)	21 (17.8)	32 (26.7)	12 (9.6)	**2.99**	1.06
Group Meetings in Extension Office	20 (16.7)	18 (14.8)	46 (38.9)	36 (29.6)	2.18	1.04
Workshops and Seminars	46 (38.1)	39 (32.2)	8 (6.7)	27 (23.0)	**2.87**	1.16

Figures in parenthesis = Percentages

Preferred Period of the Day for Training

Farmers' preferred trainings to be conducted in the morning ($\bar{x}$ = 2.73) and evening ($\bar{x}$ = 2.80) as shown in Table 3.0. In their study of cocoa farmers, Akinmolafe and Ajayi (2022) opined that, farmers prefered training in the evening. The non-preference for afternoon ($\bar{x}$ = 1.53) could be as a result of farmers being engaged in farming activities during the afternoon. The implication is that in scheduling training time tables, the period of the day should be critically considered as it has direct impact on the level of availability and participation of farmers.

Table 3.0: Preferred Period of the day for Training

Period of Day	Most Preferred f (%)	More Preferred f (%)	Somewhat Preferred f (%)	Not Preferred at all f (%)	Mean	S.D.
Morning	63 (52.6)	5 (4.4)	8 (6.7)	44 (36.3)	**2.73**	1.41
Afternoon	15 (13.0)	1 (0.7)	16 (13.3)	88 (73.0)	1.53	1.02
Evening	47 (38.8)	20 (16.7)	35 (29.3)	18 (15.2)	**2.80**	1.11

Preferred Language of Training

Table 4.0 shows that, even though the level of literacy among respondents was high, they still prefer trainings be done in Pidgin English ($\bar{x}$ = 3.44) and the local language ($\bar{x}$ = 3.18) as against English language ($\bar{x}$ = 2.33) and a combination of all languages ($\bar{x}$ = 2.33). Iwuchukwu, Udoyeand Onwubuya(2013) reported in their research on training needs of pineapple farmers in Enugu, Nigeria that 78.8% of the respondents preferred the local language (Igbo) for training. Sometimes farmers get bored with highly technical language and as such will prefer training is presented in the simplest and most understandable manners hence the preference for Pidgin and Local Language that they can relate to easily. On the other hand, the absence of subject matter specialist who can speak and communicate in the local language might be a major constraint in interacting with farmers.

Table 4.0: Preferred Language of Training

Language	Most Preferred f (%)	More Preferred f (%)	Somewhat Preferred f (%)	Not Preferred at all f (%)	Mean	S.D.
English	22 (17.8)	28 (23.3)	37 (31.1)	33 (27.8)	2.33	1.06
Pidgin	75 (62.6)	31 (26.3)	6 (4.8)	8 (6.3)	**3.44**	0.85
Local Language	69 (57.4)	13 (11.1)	29 (24.1)	9 (7.4)	**3.18**	1.04
Combination of all	34 (28.2)	5 (4.4)	47 (39.3)	34 (28.1)	2.33	1.16

Figures in parenthesis = Percentages

Farmers' Preferred Day of the Week for Training

Farmers' preferred Wednesday ($\bar{x}$ = 2.71) and Thursday ($\bar{x}$ = 2.65) for their trainings as can be seen in Table 5.0. The other days of the week Sunday (= 1.59), Monday (x = 2.32), Tuesday (= 2.28), Friday (= 2.19) and Saturday (= 1.70) were not preferred by respondents'. The religious inclination of the people could be a strong reason for not preferring either Friday or Sunday as training days as Muslim faithfuls worship predominantly on Fridays and Christians on Sundays. In addition, Monday and Tuesday being the early part of the week after the weekend may be seen as interference with time for farming activities. Careful consideration should be given to farmers' time preference in scheduling training and other agricultural activities to get the desired result.

Table 5.0: Farmers' Preferred Day of the Week for Training

Day	**Most Preferred** f (%)	**More Preferred** f (%)	**Somewhat Preferred** f (%)	**Not Preferred at all** f (%)	**Mean**	**S.D.**
Sunday	14 (11.9)	4 (3.3)	21 (17.0)	81 (67.8)	1.59	1.01
Monday	21 (17.8)	20 (17.0)	55 (44.8)	24 (20.4)	2.32	0.99
Tuesday	3 (2.5)	50 (41.7)	44 (36.7)	23 (19.1)	2.28	0.76
Wednesday	26 (21.5)	37 (30.4)	53 (44.4)	4 (3.7)	**2.71**	0.85
Thursday	28 (23.0)	29 (24.1)	56 (47.0)	7 (5.9)	**2.65**	0.90
Friday	28 (23.3)	22 (18.3)	15 (12.5)	55 (45.9)	2.19	1.24
Saturday	17 (14.2)	8 (6.6)	17 (14.2)	78 (65.0)	1.70	1.09

Figures in parenthesis = Percentages

Conclusion and Recommendation

Farmers' preferred to be trained on their farms using pidgin english and the local language especially in the morning and the evening. The study recommends that since farmers training situation varies, there is the need to evaluate farmers preferences and as it will improve participation and acceptance of training programmes that can eventually lead to change in skill, attitude and knowledge for improved productivity.

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