



Evaluation of Extension Service Programming Preconditions for Strategic Improvement of Women Involvement in Agro-preneurial Organizations

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Authors' contributions

This work was carried out in collaboration between both authors. Authors DPO and EBI designed the study and wrote the protocol and author EBI wrote the first draft of the manuscript. Authors DPO and EBI reviewed the study design and all drafts of the manuscript. Author DPO managed the data collection of the study. Author EBI performed the statistical analysis. Both authors read and approved the final manuscript.

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ABSTRACT

The study was an expo-facto research type that adopted cross sectional survey approach to explore the extension service programming needs as preconditions towards strategic improvement of women involvement in agro-preneurial organizations in Akwa Ibom State. Specifically, the socio-economic characteristics of respondents were identified and the dimensions of preconditions for strategic improvement of women involvement in agro-preneurial organizations were ascertained. The study adopted multi-stage sampling procedure to select 288 women for the administration of questionnaire. The data were subjected to descriptive statistics, factor analysis and relative rank order of severity incidence analysis. Based on the outcome of the descriptive analyses the study revealed that respondents within the age bracket of 37-43 were majority (33.3%) and most of them were married (46.9%). At least 38.2% were able to obtain basic formal education spending between 6-12 years, majority have a family size of 1-5 persons, while 30.2% engage in crop farming and 47% were not involved in cooperative activities. Result of the factor analysis

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highlighted three major factors that constraints women involvement in agro entrepreneurial cooperative and these were; low human capital in loans management efficiency, high interest rate and unethical practises, the identified preconditions for strategic improvement of women in agro-preneurial organisation showed various likely magnitude of change that would likely occur should extension theory change be applied in addressing the dysfunctional involvement of women in agro-preneurial organisation. Therefore, the study outcomes provide insights for evidence based theory of change programming for likely sustainable strategic enhancement of women involvement in agro-preneurial organisation by the State agricultural extension agency. Policy towards increasing educational attainment and knowledge in financial literacy should be implemented, as this will impact positively on their managerial competency.

Keywords: Agro; entrepreneurship; organization; cooperative; participation; women; involvement; extension; services.

1. INTRODUCTION

Poor standards of living have remained a stench demeaning human dignity most especially in the developing countries. Collaborative efforts from government, international donor agencies are geared towards reducing this plague through the promotion of cooperative activities among the low resource households. The agricultural sector offers enormous prospects in reducing the household insecurity status and improving economic welfare of its dependants. Based on observation in a south-east region of Nigeria, women constitute majority of labour force, yet without much significant improvement in their socio-economic wellbeing status. For cooperative as group empowerment approach towards assisting the attainment of this goal would require diagnostic evaluation of the health functional cooperative in the study area. Of course, cooperation is predicated on shared aims. As aims varies between groups, some specific kinds of cooperation is envisaged and its virility is so much desired. Shared aims by groups portend the need that is peculiar, which must be satisfied. The most prominent need of the society is to attain a satisfactory level of socio-economic wellbeing, in actualizing this common position necessitate a cooperative effort hence the emergence of a cooperative organization comes to mind. A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise [1]. It has gain prominence in the society with regards to the economic facilitating role it assumes. The cooperative is regarded as one of the main institutional machineries for empowering the economically weak members of the society [2]. Conspicuously this assertion refers to the women based on the context of this

study, they constitute the majority of labour force in the rural area and are involved at all stages of agricultural enterprises, responsible for about 80% of all food items produced [3,4] and [5] and 70% of food production and 50% of the domestic food storage in the country [6]. Also they contribute meaningfully to the growth and sustenance of small and medium scale enterprises in Nigeria but they are among most vulnerable group to poor socioeconomic well-beings [7] and [8]. Their vulnerability status becomes glaring because they have rare opportunity to own means of production. However it is argued that the panacea for this vulnerable group lies in Agricultural cooperative participation, which offers opportunity for collective ownership of productive resources deployed for commercial purposes, the earned profits proportionally distributed among members as dividend income, decision-making powers (democratic right) with regards to who leads the organization, creation of jobs, education, training and information, with these prospects one would expect an upsurge in agro-cooperative participation by women. Rather, there is a prevalent of apathy among this group towards agro-cooperative participation which is an indication of some constraining factors perhaps inherent in the established cooperatives or in the society. Cooperative participation inhibitors identified by researchers are many and can be categorized and analyzed from certain dimensions: such as the socio-cultural, organizational and socio-economic [9,10] and [11]. As observed by [12] that lack of social, economic and legal rights explains women's low participation in cooperative decision-making and leadership position. The cultural dimensions inhibiting women's participation is embedded in traditional practises and beliefs that restrict women from conducting business independently without their husband's consent, the non-

property or land inheritance status-quo of women and the conservative ideology about women as procreators, while the organizational dimensions is seen in the marginalization of women in terms of representation, leadership position and decision-making in cooperative organizations, misappropriation and embezzlement of funds etc., [9] and [11] and the socio-economic perspective relates to low income status of women, since financial obligation response is a prerequisite norm in a cooperative organization. But the improvement of women's participation remains a paramount issue toward achieving the socio-economic well-being objectives as it concerns this vulnerable group. Therefore this study was designed to identify strategic ways of improving women's participation in agro-preneurial organizations, thus the socioeconomics characteristics of the respondent were identified and the dimensions for strategic improvement of women involvement in agro-preneurial organizations were ascertained.

1.1 Theoretical Framework

1.1.1 Expectancy theory of motivation

The study is based on Vroom's expectancy theory of motivation of 1960s by American born V. H. Vroom. This theory stipulates that an individual's behaviour is formed not on objectives reality but on subjective perception of that reality, and relates to how a person perceives the relationships between three things- effort, performance and rewards. And that the basis of motivation is influenced by three factors and these are: Expectancy; the extent of the individual's perception or belief that a particular act will produce outcome, Instrumentality; either the extent to which the individual perceives that effective performance will lead to desired rewards, Valence; either the strength of the belief that attractive rewards are potentially available. Vroom distinguishes valence from value, defines valence as anticipated satisfaction the individual hopes to obtain from an outcome while value is the actual satisfaction obtained by an individual. These three factors according to [13] expectancy, instrumentality and valence are combine together to create a driving force, which motivates an individual to put in effort, achieve a level of performance and obtain rewards at the end. Relating this theory to the involvement of women in agro-entrepreneurial organization implies that the level of women participation in cooperative depends on the extent of motivation and expectation she is likely to gain if the

resources are appropriated to the shared aims. Ideally, the positive expectations of entrepreneurial cooperation are lofty and attractive but when resultant outcomes over time are less than the expectations, suboptimal involvement become pronounced and demoralisation set in. This behaviour is natural and could be driven by various factors which proper understanding can provide the path towards mitigation the apathy in women involvement in agro-preneurial organisation.

2. METHODOLOGY

Uyo senatorial district was chosen as the study area; it is located along latitude 5.05⁰N and longitude 80⁰E. the area is within the equatorial rain forest zone that has vegetation of green foliage of trees, shrubs and oil palm trees, etc. it has a land mass of about 1680km² (6580 square meter). The population of the study comprises of all women across the study area between the ages of 18 years and above. The study was an expo-facto research type using cross-sectional survey approach. A multi-stage sampling technique was used to generate primary data using structured questionnaires. At first stage, simple random sampling technique was adopted to select three: Ibesikpo Asutan, Uyo and Nsit-Atai out of nine local Government Areas (LGAs), at second stage, simple random sampling technique was used to select a village from each LGAs and at the third stage, simple random sampling technique was used to select hundred households each from three LGAs for questionnaire administration. Out of 300 administered questionnaires, 288 was completed questionnaire were returned. Both descriptive and inferential statistics were used for the study.

3. RESULTS AND DISCUSSION

3.1 The Socioeconomics Characteristics

The study focused on six (6) selected items as basis for assessing the respondents socio-economic background. These were age, marital status, years of formal education, family size, primary occupation and type of agricultural service cooperative. With respect to Table 1, Item 1 shows that majority (33.3%) of respondents were within the age range of 37-43 years, closely followed by 30-36 years which constitute 31.6%. Based on the age distribution, there is dominance of relatively young people between 36-43 years old in cooperative organisations and this composition appears to

Table 1. Distribution of respondents based on socioeconomic characteristics

Item	Socioeconomics characteristics	Frequency (N=288)	Percent
1	Age range		
	30-36	91	31.6
	37-43	96	33.3
	44-50	63	21.9
	51-57	34	11.8
	59-64	4	1.4
2	Marital status		
	Single	72	25.0
	Married	135	46.9
	Divorced/separated	41	14.2
	Widowed	40	13.9
3	Years in formal education		
	Less than 6	75	26.0
	6-12	110	38.2
	13-18	91	31.6
	19-24	12	4.2
4	Household size		
	1-5	159	55.2
	6-10	108	37.5
	11-15	12	4.2
	16 and above	9	3.1
5	Primary occupation		
	Housewife	40	13.9
	Crop farming	87	30.2
	Livestock farming	41	14.2
	Trading	58	20.1
	Civil servant	62	21.5

cut across most developing regions. Obviously, membership in economically rewarding organisation is embraced by the expected target population in any given society. Their quest for financial security is a major driver for consolidation of improved quality of life. The age distribution pattern is similar to the study outcome of the agricultural cooperatives in other regions of sub-Saharan Africa and that these age brackets suggest the most active age of involvement in any entrepreneurial endeavour, [14] and [15]. In other words, the pattern depicts vast decline in active participation agro-preneurial organisations as age increases. Item 2 shows that majority (46.9%) of respondents were married. This showed that marriage is regarded as an important institution in the study area. Aside, the strong cultural ties for marriage in the study area, the high proportion of women co-operators with marital experiences is not less expected considering the essentiality of emotional and socioeconomic wellbeing security that family relationship offers its members. Based on the strategic supports that women give to family upkeep, the benefits of involvements in agro-preneurial organisations cannot be overlooked but is considered as crucial factors in this regards.

Majority (38.2%) in item 3 spent 1- 6 years in school to obtain basic primary education, closely followed by 31.6% of respondents that spent 7-12 years in formal schooling process to acquire secondary education. This shows that there is increasing improvement in women education as a means to attained economic and social development. Unarguably, educational attainment is very essential to the effectiveness of any programme and can predict to a large extent, the direction of achievements in terms of advancement in special capacities and otherwise [16,17] and [18]. The educational attainment composition thus portrays the relatively low literacy level of the women in the community and the likely less leadership efficiency that may result thereafter in organised entrepreneurship. The distribution of educational attainment of women in the study area, even within the agro-preneurial organisations does not show convincing prospect for its sustainability unless training and capacity building of relatively the less literate member composition is given adequate and prioritized action. With more than 90 percent of the members without higher or tertiary education experience, negative response to debatable issues may usually be common and can be a threat to viability of most

agro-preneurial organisations. Also, [19] revealed that participation reoccurrence necessarily does not positively correlate with active involvement since higher education opens more economic opportunities earnings for such women.

With reference to Item 4, more than 50 percent of the households had a size of 1-5persons, making up the majority (55.2%). It is obvious that most families are sensitive to the current economic realities of managing large household size thus opting for a moderate family size is increasingly becoming most preferred panacea. Though there are diverse perspectives on the resultant effects to family wellbeing, household size depending on composition portends a lot of influence towards making economic decisions. The harsh economic realities has re-oriented most young adult to maintain household size within five persons including the parents but where household size exceed five persons hardly do they go beyond 10 persons in household. This feature is not only peculiar to the study area but across sub-Saharan Africa, [15]. Furthermore, [19] posited that family size is not a significant driver of involvement in agro-preneurial organisation despite declining standard of living among the rural dwellers. This suggests that matured members of household can be a source of economic respite for the members especially where understanding and supports are culturally treasured within family system. With regards to the adoption of primary income sources as presented in Item 5, crop farming was the dominant primary occupation engaging 30.2% of respondents while 14.2 % engage in livestock sector. Interestingly, virtually 44.4% of the women practically depended on agro-business for sustainable livelihood. The forms of primary occupation orientation in the study area suggest that most of the respondents were not primarily inclined to agro-livelihood except 44.4 percent. Of-course, most persons are engaged in multiple livelihood activities for alternative income earning either as complementary or supplementary jobs, [20].

3.2 Dimensions of Preconditions for Strategic Improvement of Women Involvement in Agro-preneurial Organizations

Seeking the array of strategic pathways towards improvement of women involvement in agro-preneurial organisations need assessing arrays of constraints that could hampers the anticipated extent of women's involvement in agro-preneurial

organization, identifying the major constraints will aid in adopting approaches towards improving involvement. In achieving this; factor analysis procedure was relied upon, using the principal component approach. This approach reduces the items to major and sizeable significant number of items using Eigen-value criterion of >1 to select the underlying dimensions of the original 11 items [21]. The result of Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy ascertained that the item matrix was meaningfully related with underlying possible factorable components. The KMO coefficient of 0.786 affirmed the factor analysis was sufficiently meritorious. Barlett Test of Sphericity affirmed the items were able to sufficiently explain a communality of interest. The Communality Extraction Index (CEI) in Table 2 showed that all the listed items accounted for more than 53% variability of among the items in the matrix implying that they were quite tenable.

Table 2. Showing the tenability of the elements of agro-preneurial organizations involvement demoralizer

KMO and Bartlett's test		
Kaiser-Meyer-Olkin measure of sampling adequacy.		0.786
Bartlett's test of Sphericity	Approx. Chi-square	1460.899
	Df	55
	Sig.	0.000

Furthermore, group or corporate entrepreneurial actions have desirable economic prospects that can stimulate individuals within the disadvantaged and low resource group or vulnerable households to participate in its processes. The trends of involvement despite government promotional policies and facilitation of funding sources do not portray successful development of the sub-sector of the economy. Farmers involvement is not massive and cooperative performance are quite sub-optimal compared to the Asian experience, [22,23] and [24]. Thus, seeking to understand why the active agro-preneurial cooperatives appear virtually abandoned after a period of time become expedient, particularly on why there is declining motivation to join the groups by non-members. Factor analysis of the demoralizing elements to effective involvement of women in agro-preneurial organisations in the study area revealed that out of ten elements; three mutually exclusive and major or prominent components crystallized as strategic planning preconditions dimensions towards systematic improvement

of women involvement in agro-preneurial organisations by agricultural extension agency in the study area. The 3 mutually exclusive and major patterns generated by principal component approach of the factor analysis are named as follows;

Component 1. Low human capacity in loans management efficiency.

Component 2. High interest rate.

Component 3. Unethical practises.

After the orthogonal rotation phase, the first Component accounted for 38.845% of variance, the second Component accounted for 16.949% of variance and the third Component accounted for 12.565% of variance. Component loading on Component 1 (low human capacity in loans management efficiency) included; low level of education (0.854), difficulty in collecting loan from defaulting members (0.880), and lack of long term loans (0.875). Component that loaded high in Component 2 (high interest rate) included; high interest rate (0.827), conservation of ideas (0.548), recurrent internal crises (0.815), inexperience leaders (0.771) and the third Component that loaded high in factor 3 (unethical practises) included; falsification of account (0.679), falling ethics (0.769) and poor asset base (0.690).

Low human capacity in loans management efficiency, identified as one of the major factors

affecting women involvement in agro-preneurial organization can be ascribed to low level of education. Low educational attainment among women signals knowledge deficiency in financial risk diagnosis technique, in evaluating the cost implication and loan management and repayment possibility within the stipulated payback period. This knowledge gap can be fixed through special or tailored made extension educational programming. At this height of education, the human learning capacity is believed to be more enhanced, as the curriculum design at this stage of learning exposes the learner to acquire knowledge beyond his major discipline and conditioning the learner to become versatile in managerial competence. According to [25], education and literacy is strategic to innovativeness and adoption of innovation. Lack of managerial competence regarding loans can hinder credit accessibility and managerial discipline irrespective of the loan duration. High interest rate often displays an inverse relationship with investment. This is a major disincentive for entrepreneur engaging in agro small and medium enterprises, therefore reducing the motivation for group to access funds from their organisation for business. This situation often result in declining participation in group activities especially where the individual does not have a good socioeconomic background status and the family focal decision making lead is not favourably disposed to pattern of credit administration procedure of the organisation [26] and [27]. Also abandonment of

Table 3. Principal component analysis of the dimensions of preconditions for strategic improvement of women involvement in agro-preneurial organizations

Item	Components of the elements of agro-preneurial organizations involvement demoralizer	CEI	Component loadings		
			Com 1	Com 2	Com 3
1	Members low level of education	0.784	0.854		
2	Difficulty in collecting loan from defaulting members	0.845	0.880		
3	Lack of long term loans	0.838	0.875		
4	High interest rate	0.741		0.827	
5	Conservation of ideas	0.588		0.548	
6	Recurrent internal crises	0.676		0.815	
7	Inexperience leaders	0.680		0.771	
8	Falsification of account	0.536			0.679
9	Falling ethics	0.658			0.769
10	Poor asset base	0.737			0.690
Diagnostic statistics					
Initial Eigen values			4.273	1.864	1.382
% of variance			38.845	16.949	12.565
Cumulative %			38.845	55.793	68.359

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

the organisations and or increase of prospective new members decline due to the uncertainty about level of prudence in fund management and rise in cost of financing the organisations' businesses. The component 3: Unethical practises thus refers to inability of administrative leadership to keep to the generally expected operational roles or conditions during execution of collective understandings or agreed decisions including midway changes in policies for some members. These constitute bends in the progress of most of the organisations, which do manifest in deliberate poor documentations capacity, asset mobilization and management and also improper of records keeping. Of course, resulting in reducing confidence and trust of members, which indirectly influence their perception on a looming, liquidation or insolvency possibility of the organization's asset health performance.

4. CONCLUSION

This study acknowledges the fact that cooperatives societies play the role of facilitating economic empowerment to the vulnerable segment of the society including women. As the community driven approach create avenues for cooperation towards entrepreneurship, the resultant positive and multiplier expectations are difficult to measure due to declining active participation already established members. The study also admitted that there are inherent inhibitors within the society and even within the already established cooperative that are influencing the extent of women's involvement in cooperatives organization (agro-preneurial cooperative organization). Consequently, the study evaluated these constraints, in order to generate preconditions dimensions to aid extension services programming effectiveness towards improving women's involvement in agro-preneurial cooperatives organization. The major constraints affecting women's involvement in agro-cooperatives as revealed by the study were; low human capacity in loans management efficiency, high interest rate and unethical practices. Based on the findings of this study, it is recommended that policy towards increasing women's level of education and financial literacy programme should be implemented, as this will impact positively on their managerial competency.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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