

Full Length Research Paper

Assessment of the role of gender in cooperative development in Awka-North Local Government Area (LGA) of Anambra State Nigeria

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This study had the objective of assessing the role of gender in cooperative development, analyzing the socio-economic profile of the cooperators on the basis of gender, assessing gender contributions to cooperative development in terms of membership, organizational and leadership structures as well as examining technical efficiency and factors hindering the implementation of gender sensitive program and activities in Awka North Local Government Area of Anambra State. Field survey was conducted to collect data from one hundred and fifty (150) respondents. The study employed descriptive statistics, stochastic cobb Douglas frontier function as well as ranking method in the analysis of data collected. The result of the study indicated that female cooperators, who are within the active age, are reasonably literate and dominate the leadership role in cooperatives. The result also showed that farm size and fertilizer use led to increase in technical or productive efficiency among cooperators. The major constraint is gender imbalance or inequality, conflicting interest, low level of participation, wrong timing of meetings and long distance to meeting venue. The estimation of technical efficiency of the cooperators was done using cobb-Douglas functional form of stochastic frontier model. The coefficients of farm size and fertilizer possess a positive sign, while gender possessed a negative coefficient and highly significant. Although, it does not confirm with a priori expectation, it shows that female cooperators contribute more to technical or productive efficiency of their enterprises than their male counterparts. It was recommended that cooperatives should address equality issues and make a firm commitment in their mandate to correct imbalances where they exist and to attain equitable and sustainable development with both men and women in decision-making and leadership position.

Keywords: Gender, cooperative development, assessment.

INTRODUCTION

Background of the study

Gender refers to the socially constructed roles, behaviours, activities, and attributes that a given society considers appropriate for men and women. Gender concept simply refers to the socially-determined and culturally specific differences between women and men

as opposed to the biological determined differences. Oxford Advanced Learners Dictionary 6th edition sees gender as the fact of being male or female; gender specific issue is connected with women only or with men only.

Reeves and Baden (2000) sees gender as the "socially determined ideas and practices of what it is to be female or male; these ideas and practices are sanctioned and reinforced by a host of cultural, political

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and economic institutions including household, legal and governance structure, markets and religion. Furthermore, gender could also be seen as socio-economic variables which aid the analysis of roles, responsibilities, constraints and opportunities of both men and women. Gender which is commonly used interchangeably with 'sex' within the academic fields of cultural studies, gender studies and the social sciences in general; often refers to purely social rather than biological differences, this means that 'gender roles' are formed through socialization. Meanwhile, the concept gender is an important analytical tool in the planning management, monitoring and evaluation of development programs or cooperative projects which requires that women are considered in relation to men in a socio-cultural setting and not as an isolated group.

Gender roles focus on household and community roles because gender roles are different in any society. This is because in each society there are functions of what women and men of that society are expected to do in their adult life. Since gender roles are formed through socialization, children are socialized to internalize these roles; girls and boys are prepared for their different but specific roles. Gender roles can be defined as the roles that are played by both women and men which are not determined by biological factors but by the socio-economic and cultural environment or situation. Men and women are also characterized by different roles which mean that men take the lead in productive activities, and women in reproductive activities, where the latter include the reproduction of the family and even of society itself. Obviously, women and men's roles and responsibilities are separate but they complement one another.

UNDP (1995) opined that gender is an economic issue as well as a social issue, in fact more so in Africa than in any other Region and that both men and women play substantial economic roles, notably in Agriculture and in the informal sector, but they are not evenly distributed across the sectors of the economy.

World Bank (2000) on economic roles of men and women in Africa made the argument that Africa has enormous unexploited potentials with hidden growth reserves in its people, including the potential of its women, who now provide more than half the Region's labour but lack equal access to education and factors of production. It concluded that gender equality can be a potent force for accelerated poverty reduction in Africa and Nigeria in particular.

Although 'gender' and 'women' are often used interchangeably, they are not the same. However, most gender analyses usually find that women are disproportionately disadvantaged, that is why the majority of gendered interventions target women. As a result of this, the discussions on gender roles at household and community level revealed that women do all the reproductive work as well as most of the productive work. Women have a bigger share of communities roles.

Women are continuously taking up roles that were traditionally considered the role of the men, (building).

Finally, both men and women agreed that some men are not taking sufficient responsibility in the homes and that this is one of the reasons why women take up such responsibilities for the well being of their families. In other words, if a man does not care about building or repairing the family house, the woman has to do so because she cannot continue living under a leaking house which is unsafe for the family. This implies that most of the economic activities are in the hands of women. However, women's activities are often constrained by household and community management activities like child care, food preparation, subsistence agriculture, etc. This is why Moser (1993) refers to women as assuming a triple role, that is, they are responsible for reproductive, productive and community management activities, and receive little recognition for their unpaid work. Therefore, women, the poor, religious or ethnic minorities may face significant constraints in their attempt to participate in collective action. Women's exclusion from participation may be a direct result of gender norms, and from other factors that are determined by such norms. In a study of mixed-sex agricultural cooperatives in Nicaragua, Mayoux found women's participation limited to involvement as day labourers; when women attempt to make their voices heard or gain management positions, they were perceived by others (men and women) as attempting to step out of their appropriate social role.

Agarwal et al. (2001) stated that gender roles vary among cultures and overtime, and crosscut by a multitude of identities like ethnicity and class, the gender division of labour usually find men and women relegated to the public and private spheres.

Gender roles at household and community level have contributed immensely towards genuine equality of men and women, boys and girls, in economic development. The goal of the youth development services is to develop the youth to their fullest to be creative, innovative, smart, hopeful, result oriented and dynamic. This is because when we are talking of children and youth, we need to consider their different languages, culture and socialization in the economy. More so, irrespective of gender, all children and young people are regarded as youth, and the youth constitute the largest segment in community and agricultural development.

According to ICA (1995) the "principle of democratic member control" entails that cooperatives are democratic organizations controlled by their members who actively participate in setting their policies and making decisions. Men and women serving as elected representatives are accountable to the membership.

Statement of the Problem

Gender imbalance in employment, in job status, in

poverty status, and in earnings over time constitute the major problems affecting the development of cooperative industries (Nicita and Razzaz, 2002). Gender inequality in access to and control of a wide range of economic, human, and social capital assets and resources remains pervasive in Nigeria, and is a core dimension of poverty in this region. Understanding the nature of these disparities, and acting forcefully to remove them, is one of the key tasks of country poverty reduction strategies (PRS). These strategies could be successful enhancing the by technical efficiency of the cooperatives in reducing poverty and supporting the achievement of the Millennium Development Goals (MDGs) which targets to promote gender equality. This was adopted by the United Nations Millennium Development Goals in September (2000). Gender inequality directly or indirectly limits economic growth in Anambra State and imposes substantial development costs. (World Bank, 2000). Another problem that needs to be addressed is the unequal relations of power between men and women on the socio-economic level. This results in the unequal distribution of the benefits of development and hinders women participation in the development process (ICA-ILO Gender Package, 2001).

Gender disparity in leadership, education, management and employment seems to lower the economic growth of our societies. Although cooperative organizations and governments have policies of equity and equal opportunity, cooperative societies will ensure that women are afforded equal treatment in regard to employment opportunities, promotion, and wages etc. Democratic participation in cooperatives means that men, women and youths should participate equally in cooperatives and that both men's, women's and youths' needs and concerns must be addressed equally.

Technical inefficiency (productive inefficiency) is due to inadequate working capital for the cooperators, lack of education, poor management, and low level of participation among members mainly the male cooperators, lack of extension education and service, wrong timing of meetings, conflicting interest, gender inequality, and long distance to meeting venues. Obviously, women all over the world especially in Nigeria form a significant percentage of the world today and despite their contribution to the national economy, cooperatives and rural development, they are often neglected. This means that women occupy a central position in economic production especially in agriculture and in the informal sector but they are not equally distributed across the productive sectors; that is women are being marginalized in mainstream activities (Elson and Evers, 1997).

Study Objectives

The broad objective of this study is to assess the roles

played by gender in cooperative development in Anambra State of Nigeria. The specific objectives were to:

1. analyze the socio-economic profile of the cooperators on the basis of gender;
2. assess gender contributions to cooperative development in terms of membership, organizational and leadership structures;
3. examine the technical efficiency of cooperators;
4. compare the technical efficiency of the cooperators along gender lines;
5. examine factors hindering the implementation of gender sensitive programmes and activities in the societies; and
6. make recommendations based on the findings.

RESEARCH METHODOLOGY

Study Area

The study was conducted in Awka-North LGA of Anambra State. The State was created in 1991, along side other states that were created, with 21 LGAs. Awka-North LGA is one of the twenty one (21) LGAs, which make up Anambra State. Awka-North LGA is bounded by Awka-South, Njikoka, and Oji-River LGA of Enugu State. The LGA has a total land area of 320 sq km and an estimated population of 7,000 persons comprising 4,500 females and 2,500 males (NPC 2006). Agriculture is the major occupation of the people of Awka-North LGA and economic activities center largely on food production, processing, marketing and distributive trade.

Methods of Data Collection

Data were collected from basically primary sources. The primary data employed pre-tested and structured questionnaire sets for recording information and data elicited from the cooperators who were the respondents for the study. However, relevant secondary information were elicited from texts, journals, learned articles, and websites of reputable institutions.

The primary data collected were on age (in years), education (in years), farm size (in hectares), household size (in numbers), farming experience (in years), extension contact (in number), farm income (in Naira), labour input (in man days), planting materials (in kg), and fertilizer (in kg) etc.

Data Analysis

The study employed descriptive statistics, stochastic frontier function and ranking method in the analysis of data. Descriptive statistics such as tables, percentages,

Table 1. Socio-economic profile of cooperators by gender

Factors	N	Minimum	Maximum	Mean	Std. Deviation
Age (yrs)	M37	27.00	81.00	47.12	14.06
	F113	22.00	81.00	50.09	15.49
Education (yrs)	M37	0.00	16.00	10.51	5.07
	F113	0.00	16.00	10.48	5.35
Farm size (ha)	M37	0.50	5.00	1.66	1.01
	F113	0.10	3.54	1.54	0.80
Household size (No)	M37	2.00	10.00	4.00	1.68
	F113	1.00	11.00	4.59	1.92
Farming exp (yes)	M37	1.00	31.00	8.49	7.82
	F113	0.00	40.00	13.12	9.73
Extension visit (No)	M37	1.00	10.00	5.68	2.74
	F113	1.00	10.00	4.92	2.88
Farm income (N)	M37	4,000	5,0000	16,513.51	12,621.35
	F113	3,500	6,0000	15,412.39	13,928.38

Source: Field Survey, 2009.

mean and frequency were used in analyzing objectives one, two and four. Objective three which examined the technical efficiency of cooperators applied stochastic Cobb-Douglas frontier function while objective five adopted a ranking method in assessing constraints to implementation of gender related activities.

RESULTS AND DISCUSSION

Socio-Economic Characteristics of Cooperators

The socio-economic characteristics of the cooperators in Awka North Local Government Area were analyzed under the following: age, farm size, education, farming experience, extension visit, household size and farm income. The summary of the results on socio-economic characteristics are presented in table 1 above.

The male age of the cooperators ranged from 27 to 81 years with a mean of 47 years while the female age ranged from 22 to 81 years with a mean of 49 years. Both categories have majority of the cooperators in the active age bracket (41-50 years) and this increases their capacity to participate and contribute to cooperative development. According to Yinusa (1999), this age bracket is characterized by innovative, motivated and adaptable individuals. In terms of educational acquisition, the minimum for both sexes was zero showing that there are no cooperators without formal education while the maximum for males and females was 16 years. With a mean of about 10 years, it indicates high literacy level across the cooperatives. Gordon and Graig (2001)

asserted that education increases skill and enhances productivity. Farm and household sizes for both sexes differ slightly. The mean farm sizes for males and females were 1.66 ha and 1.54 ha respectively. Household sizes posited an average of 4 and 5 persons for male and female cooperators respectively. This confirms that small holding capacity with attendant large households that characterize Nigerian rural environment where farming is a major occupation.

Farming experience spanned 30 years from the least to the most experienced male farmers while the female cooperators had maximum experience of 40 years. The gap between average years of experience between the cooperators implies that the female cooperators have higher wealth of experience than male cooperators. Generally, increased wealth of experience has the capacity of maximizing their output and profit at minimum cost.

Extension visit was appreciable for both sexes. From table 1, the least had contact with an extension agent only once while the highest met with an agent up to 10 times. On the average, only an insignificant difference exists between them. Generally, increased extension contact enhances participation and contribution to cooperative development.

The mean farm income of the cooperators differs by about N1, 000 per month with the male cooperators earning higher than their female counterparts. Although the farm income is relatively low, rural dwellers engage in off farm activities to boost their farm returns. Summarily, the study area is grossly dominated by female cooperators that are within active age, reasonably lite-

Table 2. Gender contribution to cooperative development

Gender	Membership	%	Organizational/Leadership Structures							
			Chairman	%	Secretary	%	Treasurer	%	Others	%
Male	37	24.67	6	60	3	30	1	10	26	17.33
Female	113	75.33	4	40	7	70	9	90	94	62.67
Total	150	100	10	100	10	100	10	100	120	100

Source: Field Survey, 2009.

Table 3. Estimation of Technical Efficiency among Cooperators

Production factors	Parameter	Coefficient	Standard error	t-value
Constant term	X ₀	7.840	0.622	12.64***
Farm size	X ₁	20.823	2.974	7.002***
Labour input	X ₂	0.051	0.112	0.452
Planting material	X ₃	-0.214	0.028	-0.778
Fertilizer	X ₄	3.230	0.065	49.919***
Depreciation	X ₅	-0.031	0.011	-2.809***
Efficiency factors				
Constant term	Z ₀	-0.179	0.549	-0.326
Age	Z ₁	-0.018	0.006	-2.980***
Education	Z ₂	0.017	0.021	-0.813
Farming experience	Z ₃	0.028	0.012	2.411***
Farm size	Z ₄	0.420	0.139	3.027***
Education visit	Z ₅	-0.107	0.221	-0.483
Credit Access	Z ₆	0.107	0.201	0.519
Household size	Z ₇	4.851	0.058	8.381***
Gender	Z ₈	-2.045	0.263	-7.777***
Diagnostic statistics				
Total variance	r ²	0.162	0.162	3.775***
Variance Ratio	r	0.999	0.16E.06	0.60E07***
LR Test		44.257		
Log-likelihood function		-119.364		

Source: Computed from survey data, 2009.

Note that**, ** and * denote significance levels at 0.01, 0.05 and 0.10 probability respectively.

rate, experienced and are smallholders with bloated household sizes.

Gender Contribution to Cooperative Development

In assessing gender contribution to cooperative development, analysis of membership and organizational/leadership structures was performed and presented in table 2 above.

From the table 2, it could be observed that cooperatives in the area are female dominated, accounting for 75.33% of the membership. In terms of organizational/leadership structure, chairmanship positions were occupied by mostly male cooperators representing 60% while the positions of the secretary were mostly taken by the female cooperators. The same

trend of female dominance was observed in other categories with a representative percentage of about 63%.

Overall, female cooperators could be seen to contribute to cooperative development more than their male counterparts.

Estimation of Technical Efficiency of Cooperators

This technical efficiency of the cooperators was estimated using cobb-Douglas functional form of stochastic frontier model. The results are presented in table 3 above.

As shown in the table 3, out of five production variables are statistically significant at 87% probability level. Among the efficiency factors, five variables are

Table 4. Gender Distribution of Technical Efficiency Indices

Technical Efficiency Index		Male		Female	
		Frequency	Percentage	Frequency	Percentage
Male	female				
0.10	0.19	8	21.62	28	24.78
0.20	0.29	2	5.41	12	10.62
0.30	0.39	5	13.51	10	8.85
0.40	0.49	8	21.62	18	15.93
0.50	0.59	5	13.51	18	15.93
0.60	0.69	2	5.41	4	3.54
0.07	0.79	0	0.00	3	2.65
0.80	0.89	5	13.51	9	7.97
0.90	0.99	2	5.41	11	9.73
Total		37	100	113	100
Minimum Tech. Eff,		0.11		0.12	
Maximum Tech. Eff. Mean		0.91		0.99	
Tech. Eff.		0.45		0.46	

Source: Computed from survey data, 2009.

significant at varied probability levels. The coefficients of farm size and fertilizer possess positive signs, indicating that increased farm size and fertilizer use would lead to increase in technical efficiency among cooperators. In line with a priori expectation, the coefficient of depreciation had a negative sign. By implication, it has an inverse relationship with technical efficiency; this indicates that technical efficiency increases as depreciation cost decreases. This finding corroborates the research outcome of Onyenweaku and Nwaru (2005) that had the same sign identified for depreciation in their research. Among the determinants of efficiency, age, farming experience, farm size, household size had the expected sign. Only gender coefficient contradicted a *priori* expectation. With a negative coefficient increasing age engenders reduction in the technical efficiency of cooperators. This consolidates Okike (2000) and Ono et al. (2000) who also found that increasing age declines efficiency. The coefficients of farming experience, farm and household sizes have the expected positive signs.

Any 1% increase in technical efficiency is triggered by a corresponding 0.028%, 0.42% and 4.85% increase in farming experience, farm and household sizes respectively. This is consistent with Nwachukwu and Onyenweaku (2009). Gender possessed a negative coefficient and highly significant. Although it does not conform with a *priori* expectation, it shows that female cooperators contribute more to technical efficiency of their enterprises than their male counterparts. The total variance was 0.612 and statistically significant at 1% probability level. This parameter estimates goodness of fit and the counters of the specified distributional assumption of the composite error term. The variance

ratio of 0.999 implies that 99.9% of the disturbance in the system is due to inefficiency, one-sided error and therefore 0.10% is due to stochastic disturbance with two-sided error, supported by a high - + value. This agreed with Flemming et al. (2004).

Comparison of Technical Efficiency Scores along Gender Lines

The distribution of technical efficiency scores along gender lines as shown in table 4 above indicates that technical efficiency ranged from 11% to 91% for the male cooperators and 12% to 99% for the female cooperators. On the average, female cooperators are more technically efficient than their male counterparts.

The implication of the result is that an average male cooperator requires a cost saving of about 50.55% (10045/0.91) 100 to attain the status of the most efficient male cooperator. On the part of the female cooperators, female cooperator will need a cost saving of about 53.53% (10046/0.99) 100 to become the most efficient female cooperator.

Factors Hindering the Implementation of Gender Sensitive Programmes

In analyzing constraints that hinder implementation of gender sensitive programmes, a ranking method was employed and the result presented in table 5 below.

From table 5, it could be observed that among the perceived constraints to implementation of gender sensi-

Table 5. Constraints to Implementation of Gender Sensitive Programmes

Factors	Frequency	Percentage	Rank
Gender imbalance	58	38.67	1
Low level of participation	29	19.33	3
Wrong timing of meetings	13	8.67	4
Conflicting interests	41	27.33	2
Long distance to meeting venue	9	6.00	5
Total	150	100	-

N=150

Source: Field survey data, 2009.

tive programmes and activities, gender imbalance ranked highest and as such, stood out as a major problem in the study area. Following closely was conflicting interests among cooperators with a representative percentage of 27, 33%. The least perceived problem was long distance to meeting venue.

CONCLUSION

In conclusion, this research work was aimed at assessing the, basic roles of gender in co-operative development in Awka-North LGA of Anambra State. The study observed that more females are involved in farmers multi-purpose co-operative societies, and they are reasonably within the active age as well experienced and are small holders with bloated household size

RECOMMENDATIONS

In order to promote the implementation of gender sensitive programmes among cooperators, the following recommendations are necessary:

1. Given the fact that farm size had a positive influence on efficiency, the proposed land reform agenda of the present administration should be critically addressed to increase and facilitate access to agricultural land by farmers, cooperators and others that are interested in agriculture.
2. To ensure that large household sizes have their desired effects on agriculture in terms of supply of farm labour, relevant policies should be formulated to increase availability of farm labour such as ban of motor cycles as a means of transport. Such policies have the tendency of reducing rural – urban migration among the youth who are supposed to provide the bulk of labour services to farmers in the rural areas.
3. Extension education and service should be intensified to ensure that the capacity of the experienced farmers and cooperators are enhanced for greater productivity Intensified sensitization programme should

be undertaken by the ADP, with a view to encouraging participation in cooperative activities among existing and prospective male cooperators. This is necessary because of the declining participation of male cooperators in cooperative activities and the increasing problem of gender imbalance therein.

4. In cooperative sector, it is pertinent to analyze the role and position of men and women in their socio-economic environment in order to identify and address their different needs, develop their strengths and potentials and to ensure an equitable distribution of the benefits of cooperative development in Anambra State, Nigeria.

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