GENDER ATTITUDE ON ACCESS TO FARM PRODUCTIVE RESOURCES AMONG WOMEN FARMERS IN AWKA NORTH COMMUNITIES OF SOUTH EASTERN NIGERIA

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Abstract- There seems to be a tendency to discriminate against women with regard to access to and use of farm productive resources owing to gender-related attitudes, dispositions, norms, values or practices. Hence, this research was carried out to ascertain what the situation is in Awka North communities which are rural communities with farming as the mainstay of the economy. Data was collected using a questionnaire which has two parts; the first part consisting of nine question items on the socio-economic characteristic of the respondents who are drawn from the farmers' cooperatives in the concerned communities, while the second part is made up of seven major question items. The cooperatives have a total of 1002 members, this size was reduced to 286 using Taro Yamane's sampling formula with e = 0.05. The response options were weighted using the four-point Likert scale (4,3,2,1) with cut off point 2.5. The six hypotheses developed were tested using the normal distribution Z test statistic at a 5% significance level.. The following results were obtained: gender attitude has a very significant influence on ownership of farmlands by women farmers in the said Awka North communities but has no significant influence on access to credit facilities, agricultural extension services, value adding agricultural inputs and modern agricultural technologies by the women farmers. Moreover, gender attitude (deriving from traditional norms and values) has significant influence on freedom to produce any type of crops by women farmers in the said communities.

Keywords- Gender Attitude, Access, Agriculture, Farm Productive Resources.

I. INTRODUCTION

Women tend to have lower access to agricultural productive resources than men owing to gender-specific constraints (FAO, 2011). Access to productive resources in agriculture is multi dimensional and includes ownership of land; livestock, crop and other agricultural resources; management of agricultural resources; access to and use of credit facilities, financial services and other inputs for agriculture; access to extension services, education, knowledge and skills related to agriculture; and participation in agricultural labour activities. Women tend to be disadvantaged with regard to all these dimensions (FAO, 2011). In most countries, fewer women than men own agricultural land, livestock, crop and other agricultural resources. Mostly the resources owned by women tend to be of smaller size. Furthermore, women tend to have less control and decision-making power over productive resources in agriculture than men. The share of female agricultural resource holdings is lower than that of male. Moreover, women use fewer inputs such as fertilizers, improved seeds and mechanical equipment. They also tend to have lower access to credit and extension services than their male counterparts. Lastly, women are more likely than men to be involved in agriculture in part-time, seasonal and low-paying jobs and to receive lower wages for the same type of work, even if they have similar experience.

These inequalities not only limit women's opportunities, but also imply high costs for the agricultural sector, food security and economic growth. It is estimated that closing the gender gap in agriculture would generate increased yields on women's farms, raise the total agricultural output, especially in developing countries, and reduce significantly the number of people suffering from hunger in the world (FAO, 2011, 2013).

In Nigeria, as well most African countries, cultural and traditional practices exclude women from inheriting farmlands from their fathers like their male counterparts. Though widows are generally expected to take charge of their deceased husband's property until the male children are of age to take charge, cultural practices permit the brothers (in some cases even the kinsmen) of the deceased man to intervene in the management and use of his farmlands without the permission or consent of the widow. In several cases they even take the farmlands away from the widow and her family under the guise of protecting the family's inheritance.

Achieving food security is a prerequisite to realizing the multiple goals of reducing the proportion of people who suffer from hunger, promoting gender equality and empowering women (UN, 2005). In Africa's agricultural sector, women are responsible for producing 80% of the food, as opposed to men who tend to engage more in income-generating

activities such as cash crop production, perhaps because of their responsibility of availing food for the family (FAO, 1998; Doss, 2001). Despite this essential contribution to household food production and provision, access to resources such as appropriate technologies, modern farming methods, markets, credit and extension services for women is limited (Ibnouf, 2011).

Several studies have shown that access to information is vital for improving agricultural production (Adejo et al, 2013; Oladele, 2006) especially in rural areas where agriculture is the main source of livelihood. Gender-biased access to agricultural information, extension services or credit have been observed in Nigeria and most other African countries (Ibnouf, 2011; Okwu and Umoru, 2009; Obinne, 1995; Fischer, 2012). The fact that women are often involved in household chores gives them little time to receive extension services, unlike their male counterparts.

1.1 Statement of the Problem

Inequalities persist between women and men in terms of access to and control over social, political and economic resources and opportunities for participation (ILO, 2009). Gender specific constraints severely limit the access to productive agricultural resources by women farmers (FAO, 2011). This disparity negatively affects overall productivity of farmers because findings have shown that women are as efficient as men in and contribute significantly to agricultural productivity (Deere and Doss, 2006; FAO, 2010; World Bank, 2008).

In Awka North communities, men and women are involved in agricultural productive activities especially crop production and small scale livestock holdings. Crop production is predominant with yam and cassava as the leading crops. Other crops (legumes and vegetables) grown in Awka North include maize, cocoyam, melon, groundnuts, castor seeds, native beans, pepper, tomato, okro, etc. Agricultural activities are at the subsistence level with little or no mechanisation. Livestock farming is mainly small scale fishing (in the river). Yam, considered the king of crops, is mainly cultivated by men while cassava is mainly cultivated by women. Cultural practices do not favour ownership of land by women; female children do not normally inherit land from their fathers. Thus, women farmers either buy or hire plots of land for agricultural purposes.

Gender disparity in access to and control over agricultural productive resources such as ownership of farm land, access to credit , access to extension services, access to value adding Agricultural inputs and access to Agricultural technologies have been observed as practically a global phenomenon. However, the extent or degree of this disparity varies among countries, regions, ethnic groups, races, places etc. It is therefore germane to carry out a study to determine the influence of gender attitude on access and control over agricultural productive resources in Awka North. The issues therein therefore border on determining the influence of gender attitude on ownership of farmlands, access to credit facilities, freedom to produce or harvest any types of crops livestock or fish, access to agricultural extension services, access to modern agricultural technologies, access to value adding agricultural inputs among women farmers in Awka North communities.

1.2 Objectives of the Study

The broad objective of this study is to ascertain the gender attitude on access to farm productive resources amongst women farmers in Awka North (South Eastern Nigeria). Specifically the paper is designed to

1. Ascertain attitude to the ownership of farm land among women farmers in Awka North communities.
2. Find out the attitude to the production of crop and livestock types among women farmers in Awka North communities.
3. Examine the opportunities to access credit among women farmers in Awka North communities.
4. Examine the ease of acquisition and quantum of agricultural inputs used among women farmers in Awka North communities.
5. Assess the ease of access to agricultural extension services among women farmers in Awka North communities.
6. Examine the ease of access to Agricultural technologies among women farmers in Awka North communities.

1.3 Research Questions

1. How does gender attitude influence ownership of land amongst women farmers in Awka North communities?
2. How does gender attitude influence the types of crops, livestock or fish produced and/or harvested by women farmers in Awka North communities?
3. How does gender attitude influence access to credit (loan) facilities amongst women farmers in Awka North communities?
4. How does gender attitude influence access to Extension services amongst women farmers in Awka North communities?
5. How does gender attitude influence access to value adding Agricultural inputs such as fertilizers, improved seedlings amongst women farmers in Awka North communities?
6. How does gender attitude influence access to Agricultural technologies amongst women farmers in Awka North communities?

1.4 Research Hypotheses

Ho_1: Gender attitude has no significant influence on ownership of farmlands by women farmers in Awka North communities.

Ho_2: Gender attitude has no significant influence on the freedom to produce any types of crops and livestock by women farmers in Awka North communities.

Ho_3: Gender attitude has no significant influence on access to credit by women farmers in Awka North communities.

Ho_4: Gender attitude has no significant influence on the ease of acquisition and quantum of agricultural input used by women farmers in Awka North communities.

Ho_5: Gender attitude has no significant influence on access to agricultural extension services by women farmers in Awka North communities.

Ho_6: Gender attitude has no significant influence on access to agricultural technologies by women farmers in Awka North communities.

1.5 Significance of the study

Theoretically, the study is significant because it will contribute to knowledge by supplementing existing literature that emphasizes the need to bridge an observed gender gap in access to and control of agricultural productive resources to the disadvantage of women farmers.

Empirically, the study was carried out to widen the scope of information available to relevant groups, policy makers in the government as well as professionals in Agricultural economics and extension seeking guidance and methods for the development of Agriculture.

1.6 Scope of the study

This study focuses on the influence of gender attitude on access to farm productive resources which include; land, agricultural credit and financial resources, agricultural extension services, farm mechanization, value adding agricultural inputs (improved seedlings, fertilizers), agricultural technologies and innovations. It involves women farmers in Awka North communities (Anambra State) which is in South Eastern Nigeria.

II. REVIEW OF RELEVANT LITERATURE

2.1 Gender Concept

Gender is the range of characteristics pertaining to, and differentiating between, masculinity and femininity. Depending on the context, these characteristics may include biological sex: that is the state of being male, female or intersex; sex-based social structures; that is gender roles and other social roles or gender identity

Gender refers to the attitudes, feelings, and behaviors that a given culture associates with a person's biological sex. Behavior that is compatible with cultural expectations is referred to as gender-normative; while behaviors that are viewed as incompatible with these expectations constitute gender non-conformity.(APA, 2011). Gender is defined by the Food and Agricultural Organization (FAO) as the relations between men and women, both perceptual and material. Continuing they stated that gender is not determined biologically, as a result of sexual characteristics of either women or men, but is constructed socially. It is a central organizing principle of societies, that often governs the processes of production and reproduction, consumption and distribution (FAO, 1997).

Despite the aforementioned conceptions, gender is often misunderstood as being the promotion of women only. However, as we see from the FAO definition, gender issues focus on women and on the relationship between men and women; their roles, access to and control over resources, division of labour, interests and needs. Gender relations affect household security, family well-being, planning, production and many other aspects of life (Bravo-Baumann, 2000). Both men and women farmers play an important role as decision-makers in agrobiodiversity management. They decide when to plant, harvest and process their crops. They decide how much of each crop variety to plant each year, how much seed to save from their own production and what to buy or exchange. All these decisions affect the total amount of genetic diversity that is conserved and used. In most farming systems, there is a division of labour. This determines the different tasks for which men and women are responsible. Generally, women have an important role in the production, processing, preservation, preparation and sale of staple crops. Men tend to focus on market-oriented or cash crop production. Often we find a division in crop and livestock management practices. Weeding is often a women's task, while spraying or fertilizer application is mainly carried out by men. Women and children often look after the smaller livestock species and men are often in charge of cattle. Women are often involved in the selection, improvement and adaptation of plant varieties. They often have more specialized knowledge of wild plants used for food, fodder and medicine than men. Men and women may be responsible for different crops, or varieties, or be responsible for different tasks related to one crop. These are only a few examples, which are not generally applicable, but will depend on the specific situations and cultures we are working.

According to FAO(2015), recent decades have witnessed substantial gains in agricultural productivity and rapid advances in agricultural technology. These advances have often bypassed

women farmers and reduced their productivity. Frequently the changes were linked to credit requirements that were either inaccessible to women, or were not tailored to their needs and demands. Therefore, women face a variety of gender-based constraints as farmers and managers of natural resources. In order to meet the challenges of food production for the increasing population, countries must find ways to overcome this gap in productivity.

2.2 Attitudes , Gender-Roles and Discriminations

An attitude is "a relatively enduring organization of beliefs, feelings, and behavioral tendencies towards socially significant objects, groups, events or symbols" McLeod (2014). Gender-role attitudes reflect beliefs about the roles of men and women. These attitudes define the kinds of things that are acceptable or appropriate for men to engage in but not women, and vice versa. For example, people vary in the degree to which they endorse the idea that "women should be just as able to work as equals with men in all businesses and professions," or that "decisions about what is best for a community should largely be in the hands of men."

Gender discrimination can be defined as the systematic, unfavourable treatment of indiviuduals on the basis of their gender which denies them rights, opportunities and resources. Generally, women are treated unequally and less value is placed on them on the basis of their gender. Women's differential access to and control of productive resources is at the core of this gender discrimination (DFID, 2000). Therefore, for women farmers, differential (and unfavourable) access to and control of agricultural productive resources is a powerful indicator of gender discrimination.

2.3 Review of Related Empirical Studies

There seems to be differences between women and men, especially as reflected in social, political, intellectual, cultural, or economic attainments or attitude. Adamu et.al (2014) xrayed the inequality gap existing in small holder farming in Nigeria. The exclusion of women in most agricultural development schemes is due to lack of access to land, technology, credit and many other challenges. This article reviewed from secondary data the unequal relationship in the agriculture sector. At both the national and geopolitical zones of the country, low education and cultural biases prevent women's participation in decision making.

Okonya et.al (2014) while sudying gender differences in access and use of selected productive resources among sweet potato farmers in Uganda both male- and female-headed households were found to have relatively equal but very low access to both agricultural information and credit. There is a need to develop and disseminate integrated sweet potato management messages for better understanding and efficient use, preferably in local languages and through mass media. There is evidence of anti-female household heads' bias in membership to farmer organizations. It is recommended that men receive training on gender issues mainstreaming and awareness, so as to appreciate the role women play in the potato value chain.

III. RESEARCH METHODOLOGY

Data for the research consisted of primary data collected through questionnaire administered on women and men farmers in the communities used for the study and secondary data obtained from previous related research works. The research instrument is in two parts; part one contains nine (9) question items which elicit information on the socio-economic characteristics of the respondents while part two contains seven (7) major question items (comprising 27 question items) which elicit information on gender attitude issues on access to farm productive resources among women farmers in Awka North communities. The instrument was validated by submitting it to experts in the field (a professor of agricultural science, a professor of cooperatives economics and a senior cooperative officer in the Ministry of Agriculture) whose criticisms and advice were taken due cognisance of in producing the final form of the instrument.

There are a total of 71 agricultural cooperative societies in Awka North (see the list as obtained from the supervising Ministry of Agriculture). The total membership of these cooperatives is 1,002 giving us a population of 1,002 for the study. Using Taro Yamane's sample size formula $n = N/(1 + Ne^2)$ with N = 1,002 (the population size) and e = 0.05 (allowable error) a sample size of n = 286 was obtained. This sample was distributed over all the cooperative societies pro-rata and the resulting sub-sample randomly selected from each cooperative society which resulted in a sample of 114 men and 172 women farmers in Awka North communities used for the study.

Awka North is one of the 21 local government areas (LGAs) making up Anambra State (in South Eastern Nigeria). It is bounded on the east by Enugu State (South East), on the north west by Ayamelum LGA, on the west by Anambra East and Oyi LGAs, on the south by Awka South, Dunukofia and Njikoka LGAs. It is basically a group of ten (10) rural agricultural communities – Achalla (headquarter), Amansea (Amanasaa), Amanuke, Awba Ofemmili, Ebenebe, Mgbakwu, Isu Aniocha, Ugbene, Ugbenu, and Urum of which Amansea, Awba Ofemili, Ebenebe, Ugbene and Ugbenu are riverine communities. It lies around longitude $6^o15'$N and latitude $7^o10'$E and has a total population of 140,632 (projected at 2.5% from

112,608 according to 2006 population census figures). The LGA is noted for such agricultural products as rice, maize, yam, cassava, fruits, vegetables, melon, pepper, tomatoes, potatoes (sweet), fish and livestock.

Descriptive and inferential statistics are used in analysing the data obtained from the questionnaire. The responses are weighted using the four-point Likert scale:- Strongly Agreed (SA) – 4, Agreed (A) – 3, Disagreed – 2 and Strongly Disagreed – 1. Using this weighting system, the mean responses m of the respondents to each question sub-item are computed and compared with the ideal mean 2.50 which is also the cut-off point. In fact, the following decision criteria are used:- Strongly Disagreed if $1.00 \leq m < 1.75$; Disagreed if $1.75 \leq m < 2.50$; Agreed if $2.50 \leq m < 3.25$ and Strongly Agreed if $3.25 \leq m \leq 4.00$. The hypotheses are tested using the Z test statistic. Since the hypotheses are on the influence of gender attitude on access to farm productive resources by women farmers we use a one tailed test with the rejection region (of size 0.05 or 5%) to the left (the lower part) of the normal curve. Thus the tests are carried out at a 5% level of significance or 95% confidence level.

IV. DATA PRESENTATION AND ANALYSIS

Table 4.1: Trends in ownership of Land in Awka North

S/No		SA(4)	A(3)	D(2)	SD(1)	Mean	Remark
a.Women farmers own as much farm lands as men farmers	M	6	18	50	40	1.91	Disagreed
	F	10	23	71	68	1.85	Disagreed
	Both	16	41	121	108	1.88	Disgreed
b.Women inherit farm lands from their fatthers equally as men.	M	2	15	41	56	1.68	Strongly Disagreed
	F	5	18	52	97	1.60	Strongly Disagreed
	Both	7	35	94	153	1.63	Strongly Disagreed
c.Women farmers are allocated plots of farm lands for farming from the kindred land holding just as the men farmters.	M	2	15	41	56	1.68	Strongly Disagreed
	F	5	18	52	97	1.60	Strongly Disagreed
	Both	7	33	93	153	1.63	Strongly Disagreed
d.Women farmers buy farm lands as freely as men farmers	M	21	25	55	13	2.47	Disagreed
	F	33	41	78	20	2.51	Agreed
	Both	54	66	133	33	2.49	Disagreed
e.Women and men buy farmlands of equal size.	M	21	55	25	13	2.74	Agreed
	F	41	78	33	20	2.81	Agreed
	Both	62	133	58	33	2.78	Agreed
f.There are no socio-cultural or traditional norms, values or practices which discriminate between men and women in terms of inheritance and ownership of farm lands.	M	5	17	32	60	1.71	Strongly Disagreed
	F	11	23	47	91	1.73	Strongly Disagreed
	Both	16	40	79	151	1.72	Strongly Disagreed
Total	M	57	145	244	238	2.03	Disagreed
	F	105	201	333	393	2.02	Disagreed
	Both	162	346	577	631	2.02	Disagreed

Thus, in Awka North communities, women farmers do not own as much farmlands as men farmers (m = 1.88); women do not inherit farmlands from their fathers equally as men (m = 1.63); women farmers are not allocated plots of farmlands for farming from the kindred land holding as their men counterparts (m = 1.63); women farmers buy farmlands of equal sizes as the men farmers (m = 2.78); women farmers do not buy farmlands as freely as men farmers (m = 2.49); the women respondents affirm that women farmers buy farmlands as freely as men farmers (m = 2.51) while the men respondents affirm otherwise (m = 2.47). The respondents strongly assert (m = 1.72) that there are socio-cultural or traditional norms, values or practices which discriminate between men and women in terms of inheritance and ownership of farmlands.

Table 4.2: Trends in access to credit (loan) facilities in Awka North

S/No.		SA (4)	A (3)	D (2)	SD (1)	Mean	Remarks
a.Women farmers have equal access to credit (loan) facilities as the men farmers	M	38	54	17	5	3.10	Agreed
	F	44	97	20	11	3.01	Agreed
	Both	82	151	37	16	3.05	Agreed
b.Women farmers can initiate and obtain credit (loan) on their own	M	38	54	17	5	3.10	Agreed
	F	44	97	20	11	3.01	Agreed
	Both	82	151	37	16	3.05	Agreed
c.Women farmers can only obtain credit (loan) in collaboration with their men counterparts, husbands and/or male relations	M	10	21	29	54	1.88	Disagreed
	F	21	34	39	78	1.97	Disagreed
	Both	31	55	68	132	1.95	Disagreed
d.There are no socio-cultural or traditional norms, values and practices which discriminate between women and men in terms of access to credit facilities.	M	27	60	21	6	2.95	Agreed
	F	54	82	25	11	3.04	Agreed
	Both	81	142	46	17	3.00	Agreed
Total (Note that c has an opposite direction from a, b and d)	M	157	197	76	26	3.06	Agreed
	F	220	315	99	54	3.02	Agreed
	Both	377	512	175	80	3.04	Agreed

In Awka North communities therefore, women farmers have equal access to credit facilities as the men farmers (m = 3.05), women farmers can initiate and obtain credit facilities on their own (m = 3.05) without needing the collaboration of their men counterparts, husbands or men relations (m = 1.95). Hence, there are no socio-cultural or traditional norms, values or practices which discriminate between men and women farmers in terms of access to credit facilities (m = 3.00).

Table 4.3: Trends in access to and use of agricultural extension services.

S/No.		SA (4)	A (3)	D (2)	SD (1)	Mean	Remarks
a.Women farmers have equal access to extension services as the men farmers	M	38	54	15	7	3.08	Agreed
	F	43	95	23	11	2.99	Agreed
	Both	81	149	38	18	3.02	Agreed
b.Women farmers make use of extension services as frequently as the men farmers	M	36	56	15	7	3.06	Agreed
	F	43	95	23	11	2.99	Agreed
	Both	79	151	38	18	3.02	Agreed
c.There are no socio-cultural or traditional norms, vslues or practices which hamper women farmers from accessing and using extension services as much as their men counterparts	M	27	60	21	6	2.95	Agreed
	F	51	82	25	14	2.99	Agreed
	Both	78	142	46	20	2.97	Agreed
Total	M	101	170	51	20	3.03	Agreed
	F	137	272	71	36	2.99	Agreed
	Both	238	442	122	56	3.00	Agreed

In Awka North communities, women farmers have equal access to extension services as the men farmers (m = 3.02), women farmers make use of extension services as frequently as the men farmers (m = 3.02) and there are no socio-cultural or traditional norms, values or practices which hamper women farmers from accessing and using extension services as much as the men farmers (m = 2.97).

Table 4.4: Trends in access to and use of value adding agricultural inputs.

S/No.		SA (4)	A (3)	D (2)	SD (1)	Mean	Remarks
a.Women farmers have equal access to fertilizers as the men farmers	M	38	54	15	7	3.08	Agreed
	F	43	95	23	11	2.99	Agreed
	Both	81	149	38	18	3.02	Agreed
b.Women farmers have equal access to improved seedlings as the men farmers	M	38	54	15	7	3.08	Agreed
	F	43	95	23	11	2.99	Agreed
	Both	81	149	38	18	3.02	Agreed
c.Women farmers have equal access to the same quantum of agricultural inputs as the men farmers	M	38	50	15	11	3.01	Agreed
	F	43	95	23	11	2.99	Agreed
	Both	81	145	38	22	3.00	Agreed
d. There are no socio-cultural or traditional norms, vslues or practices which hamper women farmers' access to and quantum of agricultural inputs needed.	M	38	50	15	11	3.01	Agreed
	F	43	95	23	11	2.99	Agreed
	Both	81	145	38	22	3.00	Agreed
Total	M	152	208	60	36	3.04	Agreed
	F	172	380	92	44	2.99	Agreed
	Both	324	588	152	80	3.01	Agreed

Thus, in Awka North communities, women farmers have equal access to fertilizers (m = 3.02), improved seedlings (m = 3.02), and the same quantum of agricultural inputs (m = 3.00) as the men farmers. Furthermore, there are no socio-cultural or traditional norms, values or practices which hamper access to and quantum of agricultural inputs needed by women farmers (m = 3.00).

Table 4.5: Trends in access to and use of modern agricultural technologies.

S/No.		SA (4)	A (3)	D (2)	SD (1)	Mean	Remarks
a.Women farmers have equal access to modern agricultural technologies as the men farmers	M	38	50	15	11	3.01	Agreed
	F	43	95	23	11	2.99	Agreed
	Both	81	145	38	22	3.00	Agreed
b.Women farmers make use of modern agricultural technologies as frequently as the men farmers	M	38	50	15	11	3.01	Agreed
	F	43	95	23	11	2.99	Agreed
	Both	81	145	38	22	3.00	Agreed
c. There are no socio-cultural or traditional norms, vslues or practices which hamper access to and use of modern agricultural technologies by women farmers.	M	38	50	15	11	3.01	Agreed
	F	43	95	23	11	2.99	Agreed
	Both	81	145	38	22	3.00	Agreed
Total	M	114	150	45	33	3.01	Agreed
	F	129	285	69	33	2.99	Agreed
	Both	243	435	114	66	3.00	Agreed

Women farmers have equal access to (m = 2.98) and with equal frequency make use of (m = 2.98) modern agricultural technologies as the men farmers in Awka North communities. Access to and frequency of use of such modern technologies by women farmers are not hampered by any socio-cultural or traditional norms, values or practices (m = 2.98).

Table 4.6: Trends on freedom to produce any type of crops, livestock or fishery.

S/No.		SA (4)	A (3)	D (2)	SD (1)	Mean	Remarks
a.Women farmers have equal freedom to produce any type of crops as the tmen farmers	M	8	29	52	25	2.18	Disagreed
	F	11	52	71	38	2.21	Disagreed
	Both	19	81	123	63	2.20	Disagreed
b.Women farmers have equal freedom to produce any type of livestock as the men farmers	M	15	57	30	12	2.66	Agreed
	F	33	82	48	9	2.81	Agreed
	Both	48	139	78	21	2.75	Agreed
c.Women farmers have equal freedom to go into any type of fishery as the men farmers	M	36	44	29	5	2.97	Agreed
	F	40	75	46	11	2.84	Agreed
	Both	76	119	75	16	2.89	Agreed
d. There are no socio-cultural or traditional norms, vslues or practices which hamper women farmers from producing any type of crops, livestock or fishery	M	11	22	57	24	2.18	Disagreed
	F	16	27	88	41	2.10	Disagreed
	Both	27	49	145	65	2.13	Disagreed
Total	M	70	152	168	66	2.50	Agreed
	F	100	236	253	99	2.49	Disagreed
	Both	170	388	421	165	2.49	Disagreed

In Awka North communities, there are socio-cultural or traditional norms, values or practices that impinge on the freedom of women farmers to produce any type of crop, livestock or fishery (m = 2.13); while women farmers have equal freedom as the men farmers to go into any type of fishery (m = 2.89), produce any type of livestock (m = 2.75) they are not equally free to produce any type of crops (m = 2.20). As seen from the table below, traditional norms, values and practices do not allow women farmers equal freedom as the men farmers to produce yam and cola-nuts. In these communities (as well in most of Igbo land, South Eastern Nigeria) yam is regarded as the king of crops by farmers hence the beginning of the harvest season is marked by the new yam festival and the cola-nut is used by the elders for prayers and invoking blessings. These were the reasons advanced for the restriction, as per traditional norms and practices, of the production of these crops to men farmers. However, the force of this traditional restriction is fast waning.

Table 4.7:- Trend on freedom to produce any type of crop, livestock or fishery by women farmers

Questions	Option	Male	Female	% Male	% Female	Total	%
7.1. Indicate the type of crops, if any, women are not allowed to produce in your community.	a (Yam)	38	55	33	32	93	33
	f (Cola-nut)	41	64	36	37	105	37
	i (None)	47	73	41	42	120	42
7.2. Indicate the type of livestock, if any, women are not allowed to rear in your community	a (Cow)	32	27	28	16	59	21
	j (None)	82	145	72	84	227	79
7.3. Indicate the types of fish, if any, women are not allowed to produce or harvest in your community.	r (None)	114	172	100	100	286	100

Table 4.8:- Test of Hypotheses (using the totals from Tables 4.1 – 4.6)

Ques. No.	N	Category	Strongly Agreed (4)	Agreed (3)	Disagreed (2)	Strongly Disagreed (1)	Mean	Standard Deviation	Z_{cal}	Z_{table}	Remark
1.	684	M	57	145	244	238	2.03	0.95	-12.93	--1.96	Significant Influence
	1032	F	105	201	333	393	2.02	0.99	-15.58	--1.96	Significant Influence
	1716	Both	162	346	577	631	2.02	0.97	-20.50	--1.96	Significant Influence
2	456	M	157	197	76	26	3.06	0.86	13.89	--1.96	No Significant Influence
	688	F	220	315	99	54	3.02	0.88	15.49	--1.96	No Significant Influence
	1144	Both	377	512	175	80	3.04	0.87	20.98	--1.96	No Significant Influence
3	342	M	101	170	51	20	3.03	0.82	11.94	--1.96	No Significant Influence
	516	F	137	272	71	36	2.99	0.83	13.40	--1.96	No Significant Influence
	858	Both	238	442	122	56	3.00	0.83	17.64	--1.96	No Significant Influence
4	456	M	152	208	60	36	3.04	0.88	13.09	--1.96	No Significant Influence
	688	F	172	380	92	44	2.99	0.80	16.05	--1.96	No Significant Influence
	1144	Both	324	588	152	80	3.01	0.83	20.77	--1.96	No Significant Influence
5.	342	M	114	150	45	33	3.01	0.92	10.24	--1.96	No Significant Influence
	516	F	129	285	69	33	2.99	0.80	13.90	--1.96	No Significant Influence
	858	Both	243	435	114	66	3.00	0.85	17.22	--1.96	No Significant Influence
6	456	M	70	152	168	66	2.50	0.92	0.00	--1.96	No significant Influence
	688	F	100	236	253	99	2.49	0.91	--0.29	--1.96	No Significant Influence
	1144	Both	170	388	421	165	2.49	0.91	--0.37	--1.96	No Significant Influence

Question No.1 in Table 4.8 is used to test hypothesis H_{01}. The calculated values of Z are far below the critical value thus concluding that gender attitude has a very significant influence on ownership of

farmlands by women farmers in Awka North communities.

Question No.2 in Table 4.8 is used to test hypothesis H_{03}. Since the calculated Z-values are greater than the critical Z-value, we conclude that gender attitude has no significant influence on access to credit by women farmers in Awka North communities.

Question No.3 in Table 4.8 is used to test hypothesis H_{05} on access to and use of extension services. Again we conclude that gender attitude has no significant influence on access to and frequency of use of agricultural extension services by women farmers in Awka North communities since the calculated Z-value for each category (Male, Female, Both) is higher than the critical Z-value at a 5% level of significance.

Question No. 4 in Table 4.8 addresses the issue of access to and quantum of use of value adding agricultural inputs and is thus used to test hypothesis H_{04}. From the relevant Z-values (13.09, 16.05, 20.77) we conclude that gender attitude has no significant influence on access to and quantum used of agricultural inputs by women farmers in Awka North communities at a 5% level of significance.

Question No.5 in Table 4.8 is used to test hypothesis H_{06} on access to modern agricultural technologies. With Z-calculated values of 10.24, 13.90 and 17.22, we easily conclude, at a 95% confidence level, that gender attitude has no significant influence on access to modern agricultural technologies by women farmers in Awka North communities.

Question No.6 in Table 4.8 is used to test hypothesis H_{02} on the freedom to produce any type of crop, livestock or fish. From the computed Z-values we conclude that, all told, gender attitude has no significant influence on the freedom to produce any type of crops, livestock of fishery by wolmen farmers in Awka North communities. However, the composite nature of the question, the computed values beg further analysis. We consider the constituent sub-questions

Table 4.9:

S/No.		Strongly Agree (4)	Agree (3)	Disagree (2)	Strongly Disagree (1)	Mean	Standard Deviation	Z_{cal}	Z_{table}	Remarks
a.	M	8	29	52	25	2.18	0.85	-4.00	-1.96	Significant Influence
	F	11	52	71	38	2.21	0.86	-4.41	-1.96	Significant Influence
	Both	19	81	123	63	2.20	0.86	-5.89	-1.96	Significant Influence
b.	M	15	57	30	12	2.66	0.84	2.02	-1.96	No Significant Influence
	F	33	82	48	9	2.81	0.80	5.07	-1.96	No Significant Influence
	Both	48	139	78	21	2.75	0.82	5.15	-1.96	No Significant Influence
c.	M	36	44	29	5	2.97	0.87	5.74	-1.96	No Significant Influence
	F	40	75	46	11	2.84	0.86	5.17	-1.96	No Significant Influence
	Both	76	119	75	16	2.89	0.86	7.66	-1.96	No Significant Influence
d.	M	11	22	57	24	2.18	0.87	-3.91	-1.96	Significant Influence
	F	16	27	88	41	2.10	0.87	-6.01	-1.96	Significant Influence
	Both	27	49	145	65	2.13	0.87	-7.18	-1.96	Significant Influence

Thus, gender attitude has a significant influence on the types of crops produced by women farmers in Awka North communities and this significant influence is due to socio-cultural or traditional norms, values or practices. As already mentioned above, in the strict traditional parlance, yam production is the exclusive preserve of men farmers; the women only come in to assist but the man is the acknowledged yam farmer. The restriction with regard to cola-nut is even more stringent. However, traditional values, norms and practices are fast changing even in the rural communities and as such the potency of these norms as drivers of attitude is waning very fast. Even with livestock, the local breed of the cow is usually reared only by men; these days the breed is hard to come by and the restriction is virtually forgotten.

V. DISCUSSION OF RESULTS

From the analysis it follows that gender attitude has a very significant influence on ownership of farmlands by women farmers in Awka North communities because women do not normally inherit farmlands from their families (fathers) neither are they allocated plots of land for farming from the family's or kindred's land holdings. Though there are no extant resrictions on women buying plots of land most women find it more convenient (perhaps a subsisting attitude influenced by the traditional norm that land ownership is a man-thing) to enlist the services of their male relatives for such an undertaking. Though the scenario is fast changing, traditionally women do not own farmlands, they do not inherit from their fathers, neither do they get sizeable plots from the

kindred's land holdings. Hence, there have been cases where widows are dispossessed of their husbands' farmlands by their brothers-in-law.

Access to credit facilities, extension services, agricultural inputs, modern technologies by women farmers received a great boost with the introduction of the electronic wallet and sundry government initiatives which gave each registered farmer direct access to relevant information, services and inputs.

RECOMMENDATIONS AND CONCLUSION

It is a settled fact that access to and use of agricultural productive resources has a direct effective on agricultural productivity. It is also a trite fact that women play very significant and crucial roles in the agricultural production process. It therefore becomes imperative to ensure and enhance access to agricultural productive resources by women farmers . Therefore, a major recommendation of this paper is that necessary steps be taken to enhance the access of women farmers to agricultural productive resources especially with regard to ownership of farmlands. Efforts should also be made to remove the vestiges of traditional norms and values which drive discriminatory gender attitude. More enlightenment campaigns should be mounted to promote the rights of the girl child and hence the rights of women including the rights to inherit plots of land from their parents, the family and kindred land holdings. The success achieved in eliminating gender bias in access to credit facilities, extension services, value adding agricultural inputs, etc gives assurance that such a campaign as envisaged will succeed.

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S/No.	Community	Cooperative Society Name	Population	Sample
1.	Achalla	Ujakwu Farmers Multi-purpose	20	6
2.		Igwebuike Farmers Multi-purpose	9	3
3.		Aluonanwu Poultry Farmers	15	4
4.		Ezinauno Poultry Farmers	12	4
5.		Udodinma Farmers Multi-purpose	12	4
			68	**21**
6.	Amansea (Amanasaa)	Anyibuofu Multi-purpose	12	4
7.		Ifedimma Cassava Farmers	7	2
8.		Ifunanyaka Cassava Farmers	8	2
9.		Chukwubuikem Cassava Farmers	8	2
			35	**10**
10.	Amanuke	Eziama Rice Farmers	9	3
11.		Amagu Amanuke Cassava Farmers	8	2
12.	332	Chinemelu Ifite Multi-purpose	8	3
13.		Anala Amanuke Multi-purpose	16	5
14.		Favour Cassava Farmers	11	3
			52	**16**
15.	Awba Ofemmili	Obinwanne Multi-purpose	8	2
16.		Udokamma Multi-purpose	8	2
17.		Otomiri Multi-purpose	8	2
18.		Umunwafor Rice Farmers	11	3
			35	**9**

58.		Chukwuemeka Multi-purpose	20	6
59.		Obioma Industry Multi-purpose	20	6
60.		Nnacheta Multi-purpose	19	5
61.		Kingdom People Multi-purpose	18	5
62.		Ugbenu Cassava Farmers Multi-purpose	19	5
63.		Oluchukwu Multi-purpose	19	5
64.		Chibueze Multi-purpose	19	5
65.		Eziokwubundu Multi-purpose	22	6
66.		Chinedu Multi-purpose	22	6
			410	**113**
67	Urum	Obinwanne Farmers	12	4
68.		Onyinyechukwuka Cassava Farmers	8	2
69.		Chukwudimma Cassava Farmers	8	2
70.		Udodimma Cassava Farmers	11	3
71.		Ifeadigo Cassava Farmers	9	3
			48	**14**
			1,002	**286**
19.	Ebenebe	Aku Rice Farmers	9	3
20.		Anulika Cassava Farmers	8	2
21.		Obioma Rice Farmers	8	2
22.		Ifeoma Rice Farmers	8	2
23.		Chukwuemeka Rice Farmers	8	3
24.		Ezinwanneamaka Poultry Farmers	8	2
			49	**14**
25.	Isu Aniocha	Oluchukwu Poultry Farmers	12	4
26.		Jideofuobi Cassava Farmers	12	4
27.		Obinwanne Poultry Farmers	12	4
28.		Udodinma Cassava Farmers	8	2
			44	**14**
29.	Mgbakwu/Ukwulu	Eziokwubundu Cassava Farmers	18	5
30.		Ifeabata Farmers Multi-purpose	19	5
31.		Ifemelumma Poultry Farmers	19	5
32.		Onwan'etieti Cassava Farmers	19	5
33.		Kenechukwu Poultry farmers	15	4
34.		Udo Cassava Farmers	15	4
35.		Ifeadigo Cassava Farmers	15	4
36.		Ndiolu ugbo Farmers	19	5
37.		Ofuobi Poultry Farmers	19	5
38.		Ikpoaku Cassava Farmers	19	5
			177	**47**
39.	Ugbene	Ndiuno Cassava Farmers	12	4
40.		Eziokwubundu Cassava Farmers	8	3
41.		Chibugo Cassava Farmers	10	3
42.		Chibueze Rice Farmers	9	3
43.		Chigozie Rice Farmers	10	3
44.		Chibuzo Rice Farmers	11	3
45.		Udokamma Rice Farmers	12	4
46.		Ugo Rice Farmers	12	4
			84	**27**
47.	Ugbenu	Chibuzo Multi-purpose	39	12
48.		Oganiru Multi-purpose	19	5
49.		Nwanneka Multi-purpose	19	5
50.		Obinwanne Multi-purpose	19	5
51.		Udokamma Multi-purpose	21	6
52.		Ifechukwu Multi-purpose	19	5
53.		Uzoma Multi-purpose	19	5
54.		Chigozie Multi-purpose	19	5
55.		Somadina Multi-purpose	19	5
56.		Obioma Multi-purpose	20	6
57.		Udoka Multi-purpose	19	5

★★★